



# COMPETITION CHALLENGES IN AFRICAN CONSTRUCTION MARKETS



*A study across East and Southern Africa*

**Contributors:**



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# FOREWORD



## **Tembinkosi Bonakele**

*Chairperson of African Competition Forum and Commissioner of Competition Commission, South Africa.*

As the chairperson of the African Competition Forum (ACF), I am very pleased to present this book on competition challenges in Africa's construction markets. This book is part of a growing record of knowledge gathered by competition agencies across the continent. Its production is in line with the ACF's objective to build the capacity of African competition agencies and practitioners; provide home grown resources for researchers; and to advocate for healthy competition in Africa's markets. The ACF believes that fostering healthy competition in markets will assist in increasing investment, productivity, innovation and entrepreneurship. Importantly, this book also demonstrates the successful collaborative efforts of the competition agencies within the ACF to develop a shared knowledge base on competition in Africa. In this regard my gratitude goes to the competition agencies of Namibia, South Africa, Mauritius, Swaziland, Malawi and Kenya whose dedicated staff poured hours of research and analysis into drawing invaluable learnings from their respective construction markets.

The chapters examine the competition challenges within construction industries across East and Southern Africa, specifically the countries mentioned above. The ACF targeted construction as an area for in-depth research because of its importance to the economic growth and development of all member countries within the ACF. In modern economies the construction sector builds and maintains the infrastructure on which almost every other industry depends. As such, this resource identifies the challenges

that inhibit competitive construction markets and explores ways in which competition can be unleashed to aid more effective industrial policy.

It is important to emphasise that the studies which formed the basis of this book were research exercises and not investigations conducted into construction industries or against any of the firms mentioned in the studies. Moreover, as mentioned, the content is of academic interest to competition agencies and other stakeholders wishing to study Africa's construction markets from a competition perspective.

If Africa is to achieve its growth and development goals, we must foster more competitive markets. These are markets that encourage ease of entry and that deliver competitive prices and product choices to consumers. Competition law and policy plays a pivotal role in bringing these outcomes to bear. Through this book the ACF is privileged to contribute to the development of competition law and policy for all its members and for emerging markets as a whole.

The image features a complex industrial steel framework under construction, with a prominent vertical chimney in the background. The scene is overlaid with a dense network of white technical drawings, including floor plans, elevations, and structural details, set against a blue-tinted background. The overall aesthetic is technical and architectural.

# CHAPTER 1

## INTRODUCTION

## ABOUT THE AFRICAN COMPETITION FORUM

This study into the competition challenges in Africa's construction markets is conducted under the auspices of the African Competition Forum (ACF).

The ACF was established in Nairobi in March 2011. It is a network of African national and multi-national competition authorities whose main objective is to promote competition across the African continent. The importance and relevance of an African-based network of this kind is not in any doubt and has been emphasised by agencies, experts and partners of the ACF alike.

The principal objective of the ACF is to promote the adoption of competition principles in the implementation of national and regional economic policies of African countries, in order to alleviate poverty and enhance inclusive economic growth, development and consumer welfare. It recognises that fostering competition in markets will assist in increasing investment, productivity, innovation and entrepreneurship.

To realise its mission, the ACF engages in the following activities:

- advocacy, by increasing awareness of the benefits of implementing competition laws among governments, the general public and stakeholders as well as encouraging and assisting African countries that do not have a competition law to adopt one;
- helping to build the capacity of existing and future African competition agencies: this includes through training, research, staff exchanges and funding, and
- research, particularly on cross-border competition challenges and a comparative review of markets and

concentration in key sectors in ACF member states.

The ACF's activities take place on a voluntary basis and rely on a high level of goodwill and co-operation among members and other role players including national and regional governmental authorities, research and educational institutions, relevant NGOs, organised business, professional associations and the judiciary. The ACF is not intended to replace or co-ordinate the work of other organisations, nor does it exercise any rule-making function.

Articulating and responding to the demands of such a diverse network poses a number of complex challenges. The member countries are grappling with different kinds of competition issues, have different needs, belong to different jurisdictions, and are at different stages in their development. Some are well-established while others are much younger. Many belong to supra-national bodies such as the Common Market for Eastern and Southern Africa (COMESA), the West African Economic Monetary Union (WAEMU) and the Southern African Development Community (SADC) – which are also at various levels of integration and implementation of their regional competition laws. This is important when designing a programme for the ACF.

For purposes of compiling this publication on the competition challenges arising in construction industries across eastern and southern African markets, ACF members have set these constraints aside in order to successfully complete this project and contribute to the growing body of knowledge concerning competition issues in developing countries. Accordingly the ACF wishes to thank all contributors who made this work possible.

## WHY CONSTRUCTION?

Construction is a critical sector in economies because it builds and maintains the infrastructure on which almost every other industry depends<sup>1</sup>. The contribution of the sector is significant across the eastern and southern African countries that participated in this study.

In Mauritius, for instance, the sector makes a significant contribution to economic growth, employment creation and income generation. Its contribution to gross domestic product (GDP) was estimated at around 7.5% for the year 2017. It is expected to grow to 9.5% in 2018. In terms of employment, the construction sector currently provides some 56,500 jobs or around 10% of total employment in the country.

The Namibian construction industry is also of strategic importance to the economy, currently contributing about 4% to the GDP. The Namibian construction sector, as one of the most vibrant sectors in Namibia, recorded massive growth in recent years driven by the development of new mines, the expansion of the Walvis Bay port, the construction of the Neckertal dam, and construction of shopping malls, roads, hotels and residential buildings. The growth of the sector has lured prospective investors to the industry.

Although construction currently contributes about 3% to Swaziland's GDP, the importance of the sector is set to grow in the years to come due to of the country's vision of becoming a first world country by the year 2022. 'Vision 2022' has shifted the focus to improving infrastructure.

Similarly in South Africa construction is key to achieving the country's development goals. South African statistics record that the construction industry's share of income

in South Africa was R268 100 million in 2011 as compared to R169 249 million in 2007. This total income represents an annual increase of 12.2% per annum between 2007 and 2011. This annual increase in the construction industry's share of income demonstrates the important role played by the construction industry in realising the development goals of the country. Furthermore, the building and construction industry had a share of approximately 40% of total gross fixed investment in South Africa and contributed about 4% to nominal GDP in the second quarter of 2015. Research indicates that in 2017 construction contributed 3.9% to South Africa's GDP<sup>2</sup>. The construction industry is very labour intensive providing about 1 million jobs nationwide, of which 400,000 were in the formal sector. In addition, the construction industry added about R138.9 billion in 2014 to South Africa's GDP. By the second quarter of 2017 the sector employed around 965 000 people in the formal sector and a further 430 000 in the informal sector (i.e. total employment of 1 395 000 people).<sup>3</sup>

In Kenya the construction industry plays an equally significant role. The Kenya Vision 2030 is the national long-term development policy that aims to transform Kenya into a newly industrialised, middle-income country providing a high quality of life to all its citizens by 2030, in a clean and secure environment. The vision comprises three key pillars: economic, social and political. Kenya Vision 2030's overall goal for the construction sector is to increase its contribution to GDP by at least 10%

per annum and propel Kenya towards becoming Africa's industrial hub. The construction sector has a high potential of employment creation, provides stimulus for growth of other sectors and offers significant opportunities for export expansion. The Kenyan government has planned a complete overhaul of road, rail and port transport infrastructure.

The large value of construction projects as well as the lumpy or infrequent nature of demand leaves construction sectors around the world vulnerable to corruption and anti-competitive conduct. This is true for both developed and emerging economies, as demonstrated by the country studies discussed herein but, partly due to the small size of local economies, the effects are perhaps more keenly felt in developing countries. The construction industry is consistently ranked as one of the most corrupt industries worldwide. The impact of corruption goes beyond bribe payments to poor-quality construction of transport infrastructure with low-economic returns alongside low funding for maintenance.<sup>4</sup>

Evidence from cross-country research suggests that, in general, corruption lowers investment and growth, lowers foreign direct investment and leads to an underinvestment in education and over-investment in public infrastructure. Data from the Global Competitiveness Report (of the World Economic Forum) suggests that the frequency with which firms have to make undocumented extra payments or bribes to gain public contracts is, on average,

negatively correlated with the income of the countries. These responses suggest that the poorer a country is, the bigger the corruption problem in infrastructure.

Given the opportunities for corruption in the sector, it is not uncommon for corrupt officials to direct resources towards large capital-intensive infrastructure projects rather than operations and maintenance. Corruption can also create the incentive to build sub-standard infrastructure in the wrong place and to operate it poorly.

Corruption in the construction sector typically results in:

- unnecessary, unsuitable, defective or dangerous infrastructure;
- lower access rates and quality of public service delivery;
- higher than expected costs;
- corruption as an obstacle to doing business; and reduced effectiveness of social spending (particularly in developing countries)<sup>5</sup>

Due to the importance of the construction sector to economic growth and its seeming susceptibility to collusion and corruption, the ACF sought to study selected African construction markets with a view to identifying the features of markets which make them susceptible to anti-competitive conduct. In this way the ACF aims to contribute knowledge and to enhance the capacity of competition agencies to detect and assess possible anti-competitive conduct within their respective construction markets.

## Endnotes

- 1 OECD policy roundtables: Construction industry 2008 DAF/COMP(2008)36
- 2 SA construction 3rd edition (2017), report by PriceWaterhouseCoopers
- 3 CIDB Construction Monitor - Employment; October 2017
- 4 Transport Construction, Corruption and Developing Countries by C Kenny (2008)
- 5 Does Corruption Affect Construction? M. Sohail and S. Cavill, WEDC, Loughborough University, Leicestershire, LE11 3TU, UK.





# CHAPTER 2

LESSONS FROM CONSTRUCTION  
CASES AROUND THE WORLD



## INTRODUCTION

The Dutch construction cartel is discussed at some length below because it is a useful test case which shows why construction is prone to cartel conduct and the factors that support and sustain cartel conduct. Similar discussions follow regarding cartels that were uncovered in Japan and in the United Kingdom. Each of these cartels reveal different *modus operandi* and varying market features that enabled the establishment of the cartels or sustained the existence of the cartels discovered in these markets. The case studies that follow thus provide interesting context for the African country studies contained in chapters 3 to 8.

## THE NETHERLANDS

South Africa's own investigation into cartel conduct in the construction industry owes its origins, in part, to a 50 minute Dutch television programme that aired in November 2001. *Sjoemelen met miljoenen (Fiddling with millions)*, a documentary that exposed widespread cartel conduct in the Netherlands construction industry, caused a political outcry in the country.<sup>1</sup> Two employees interviewed for the programme produced a copy of elaborate accounts spanning over 250, A3 sized, pages and covering some 3 500 construction projects which detailed the amounts that winning contractors had paid "unsuccessful" contractors as compensation for losing a construction bid. Of course the outcome of the bids was inevitable as the construction firms had pre-determined the winners and losers by prior agreement.

Other sections of the media subsequently took up the issues raised in the television documentary and suggested that the malpractices in the construction industry robbed the taxpayer of about half a billion Euro each year. In the wake of these claims, several organisations launched major

investigations into the workings of the Dutch construction industry. These included the Dutch Cabinet, the Department of Justice and the Netherlands Competition Authority (then referred to as NMa however in 2013 it changed its name to the Netherlands Authority for Consumers and Markets or ACM).

## NMA INVESTIGATION REVEALS SYSTEMIC COLLUSION THROUGHOUT CONSTRUCTION INDUSTRY

After a lengthy and exhaustive inquiry, in 2002 the NMa adopted a decision against 28 construction associations in the Netherlands and their joint federation, the Association of cooperating price-regulating organisations in the construction industry or SPO, for operating a cartel in the Dutch building and construction industry. The authority concluded that the decisions made and implemented by the cartel aimed to coordinate the competitive conduct of building and construction firms in the process of awarding contracts for projects put out to competitive or successive single tender, whether by public authorities or private individuals.

The authority found the operation of the cartel to be in breach of Article 85 (1) of the Treaty of Rome, and imposed a fine of 22.5 million European Currency Units (ECU), to be spread out among the 28 associations.

The 28 building and civil engineering associations were members of the *Vereniging van Samenwerkende Prijsregelende Organisaties in de Bouwnijverheid* or SPO. The 28 members of the SPO represented over 4000 Dutch builders, including all of the large and most of the medium-sized firms. The SPO's regulations were binding on these firms, whilst an additional 3000 companies participated on a case-by-case basis. About

150 of the latter were established in other states within the European Union.

In 1988, the Dutch construction industry had a turnover of some 14 billion ECU, of which 5.2 billion ECU (the total value of some 30 000 contracts) was believed by the authority to have been the subject of the SPO's cartel activities.

The NMa's inquiry focused on the period after 1980, in which the SPO adopted uniform regulations on prices and competition, replacing those of its members. These uniform regulations included:

- a code of honour, laying down penalties for breaches of the regulations and providing for a quasi-judicial procedure to examine such breaches; and
- *Uniforme Prijsregelende Reglementen* (uniform price regulating rules), established at the end of 1986. These aimed primarily to pre-designate, to a certain extent, one of the builders competing in competitive or successive single tendering procedures and to arrange for the client to pay for the tendering costs incurred by all contractors competing for a particular bid.

The Dutch construction cartel managed to operate successfully for almost 40 years. Perhaps recognising the common internal threats to the operation of a cartel – such as the threat of cheating or retaliation – the Dutch construction cartel established a set of rules for engaging in the cartel enforced by credible sanctions for member firms that deviated from the rules.

The Dutch construction cartel operated in the following way:

Each member of the cartel was obliged to notify the SPO of its intention to submit a bid

to a client for a particular contract. All those construction firms interested in competing for a particular bid would be summoned to a meeting by the SPO. These meetings would occur whenever multiple firms were interested in the same contract.

Clients were therefore unable to enjoy full confidentiality when they approached several contractors. During these meetings the participants would:

- collectively decide whether or not to designate a so-called “entitled bidder” from among the participants, granting him the exclusive right to negotiate the terms of the contract with the client after the bids have been submitted;
- compare the costs of the contract, exchanging information on the technical and economic data to be taken into account in preparing a bid;
- submit to the chairman of the meeting their respective proposed price tenders (“*blankcijfer*”) which would be communicated to all the participants.

Each participant at the meeting could ask for his bid to be given preference. Participants could also withdraw their offers during the meeting.

The rules of the cartel effectively prohibited any one bidder from undercutting his competitors. Competition was therefore severely restricted.

In order to cover the costs of calculating their bids, as well as the operating costs of the cartel, the participants could decide during the meeting to multiply the estimated costs by the number of bids to be submitted (up to a maximum of 20), adding this figure to each of the offers. This meant that offers could be increased collectively without the knowledge of the client.

Once chosen, the entitled bidder was protected from any attempt by the client to negotiate or bargain on the terms of the contract with other competitors. Competitors of the entitled bidder were prohibited from all contact with the client over the contract after the bids were submitted. If the participants considered the risk of outside competition to be sufficiently serious, they could refrain from appointing an entitled bidder or increasing the tender figures.

Since 1980, the Code of Honour had enabled penalties to be imposed if SPO rules were breached. These ranged from a warning to fines of up to 15% of the estimated value of the construction project in question.

### MITIGATING CIRCUMSTANCES

Given the scale of the cartel, being the number of participants and duration of the cartel, the NMa embarked on what it termed ‘fast lane procedures’ to settle the cases with individual respondents. Under this sanctions regime, the NMa imposed joint fines on undertakings in the construction industry.

Despite the serious and prolonged nature of the infringements, the authority took note of certain mitigating factors, as reflected in the level of the fine. Specifically that:

- the cartel was not of a clandestine nature;
- the member associations of the SPO had adopted a relatively cooperative attitude since the opening of the Commission’s inquiry;
- this was the first time the Commission had condemned cartel activities in the construction industry in the European community;
- the Dutch government had adopted certain measures and rules which could lead cartel members to believe

that their activities were condoned by the State.

### FACTORS ENABLING THE DUTCH CONSTRUCTION CARTEL TO SURVIVE AND THRIVE

The Dutch construction cartel had both internal and external factors that kept it alive and successful for years. It evolved over time eventually becoming a fully organised, self-regulatory organisation until the Netherlands competition authority declared it unlawful and disbanded it. Since the early 1950’s a number of Dutch associations of firms active in the construction business had drawn up self-imposed rules and codes of conduct with a view to organising competition in the industry. In 1963, those associations established a common organisation, the SPO, with the purpose of designing a system of uniform price-regulating rules binding on all the members. In 1986, the SPO adopted rules on the procedural framework for tendering for building works. The system had the effect of distorting competition as the members exchanged detailed information prior to submitting tenders and systematically colluded on the bids in order to ensure that the ‘entitled’ bidder would win a particular contract. A sophisticated rotation system ensured that contracts up for tender would be allocated to each participant in equal proportions.<sup>2</sup>

The various internal and external factors that enabled the Dutch construction cartel to thrive are examined below with a view to detecting their presence or absence in the African construction markets selected for this study.

## EXTERNAL FACTORS ENABLING THE DUTCH CONSTRUCTION CARTEL

### Enabling regulatory environment

When government regulates, it may either intentionally or unintentionally generate restraints that reduce competition (“public restraints”). Public restraints allow a business to cloak its action in government authority and to immunise it from antitrust scrutiny. Private businesses may misuse the government’s grant of antitrust immunity to facilitate behaviour that benefits businesses at consumers’ expense.<sup>3</sup>

Several jurisdictions, particularly those with recently established competition laws, may encounter industries openly conducting themselves in an anti-competitive manner. These industries may even feel justified to conduct themselves as such, given their history and the lack of government intervention in the past. A South African example of this took place in the healthcare industry, shortly after the Competition Act of 1998 was enacted. In 2003 the Competition Commission of South Africa (CCSA) concluded its investigations into the activities of three health care associations that met periodically to agree on tariffs for doctors and hospitals and to agree on a scale of benefits for health care plans. The three associations conducted their affairs fairly openly and made no attempt to seek exemption from the application of the Competition Act, believing their conduct was fully justifiable and necessary. Each of these associations functioned under regulatory bodies that essentially condoned their conduct for years before the Competition Act was enacted. However, the Commission concluded that the associations’ conduct contravened the Competition Act and referred them to the Competition Tribunal of South Africa (CTSA) for adjudication.

In mitigation of the monetary penalty the Netherlands competition authority meted out to the members of the Dutch construction cartel, the authority stated that Dutch regulators had adopted certain measures and rules which could lead cartel members to believe that their activities were condoned by the State. This statement suggests that the Netherlands authorities inadvertently enabled the cartel to form and to continue.

There is some support for the idea that the Netherlands regulatory environment enabled collusion up until their Competition Act of 1998 was introduced into law. According to a 1999 OECD report the old Competition Act in the Netherlands was based on the so-called “abuse system”. *“The Netherlands tolerated so many anti-competitive agreements that the country became known in the 1980’s as a “cartel paradise”*”. Moreover a 1992 article claimed that 40% of the important cartel cases in EC competition enforcement were Dutch. Regarding the Dutch construction cartel specifically, it has been reported that *“these cartel offences were encouraged in part by authorities that were extremely accommodating to construction companies.”*<sup>4</sup>

On a more active level, the parliamentary inquiry that followed the exposure of the Dutch construction cartel revealed that some government officials were complicit in the collusion, even when they understood their involvement to be illegal. According to Van Den Heuvel *“the authorities helped to perpetuate the system”* either by receiving bribes or by intentionally ignoring increased prices and other red flags.

### Transparent bid processes

The general public often has access to bid openings for construction projects, at least in auctions for public procurement. Procurement laws and administrative regulations tend to require a certain amount

of transparency so as to discourage corruption. Procurement officials may be required to disclose information such as the identity of bidders and the terms and conditions offered in each bid.<sup>5</sup>

In the example of the Dutch construction cartel, however, we know that some clients tried to maintain a level of confidentiality in approaching individual contractors to bid for construction work. However the code of honour among the members of the cartel required that each member of the cartel had to notify the SPO of its intention to submit a bid to a client for a particular contract. The specifications and pricing details of the bid would then be discussed at a meeting set specifically for this purpose. Therefore, while the bid processes themselves may not always have been transparent, the workings of the SPO created the transparency that the cartel needed in order to determine which contractor would ultimately submit the “winning” bid.

### Cyclical demand

The construction sector is subject to substantial demand swings. In the Netherlands, around the time the Dutch construction cartel was operating, 12% of all bankruptcies were filed by construction firms. This fact reflected the construction sector’s relatively high vulnerability and sensitivity to the economic cycle<sup>6</sup>. This extreme vulnerability of construction businesses, though not a stand-alone factor, could lead firms to seek the kind of protection, stability and predictability that a well organised cartel could bring. According to at least one report, the cartel seems to have been highly profitable for its members. Cases of failed tenders show that Belgian construction companies often worked 30% less than the prices quoted by Dutch companies and still made a profit.<sup>7</sup>

## Market concentration

Market concentration, as a factor enabling cartel formation, requires special mention here. This is because competition literature suggests that cartel formation is more likely to take place in markets with few participants where it is easier to communicate with participants and easier to monitor cartel members' adherence to the agreements set. However the Dutch

construction cartel is an example of a cartel which had over 7000 firms participating in it and it maintained its stability for more than 40 years. For this reason, early studies that tried to detect cartels amongst the sectors of the Dutch economy overlooked the construction industry as a sector that might be prone to anti-competitive behaviour.<sup>8</sup>

However, a closer examination of the characteristics of the market reveals why the

Dutch construction cartel was indeed able to operate.

- The construction industry consists of a wide variety of firms that specialise in a certain fields of activity. See Table 1 below. Firms in these submarkets typically do not compete with firms in other submarkets (e.g. a road building firm does not compete with a dredging firm);

**Table 1: Fields of activity within construction**

Subsector	Number of firms (1/1/2007)*
Building sector	
Site preparation (SBI 451)	2 505
Building of complete constructions or parts thereof	42 465
Civil engineering (SBI 452)	
- general construction of buildings and civil engineering works	29 585
- erection of roof coverings and frames	1 960
- erection of highways, roads, airfields and sports facilities	3 650
- construction of water projects	155
- other construction work involving special trades	925
Building installation (SBI 453)	11 195
Building completion (SBI 454)	28 835
Renting of construction or demolition equipment with operator (SBI 455)	910

\*Most recent data available

- The construction market is a bidding market, where the relevant market can be defined by the number of firms that are invited or take part in the bidding. For large, complex projects only a limited number of large, often vertically integrated construction firms can meet the demands set in the procurement procedure (e.g. a certain track record in the specific market). In many cases, smaller firms cannot meet these criteria by themselves. In that case, they can only compete by forming a consortium with other firms (which also limits the number of competitors on the

market for a given project) or they can act as subcontractors;

- Procurers can also decide to limit the number of bidders in non-public procurement procedures;
- In many submarkets, firms have to meet certain quality, safety and environmental standards or have that are set by the government. In some cases, this creates a barrier to entry for new firms and also makes it more difficult for foreign firms to enter the national market. High transport costs

and limited time-to-use for certain building materials (such as ready-mix concrete) decrease the geographical size of a market and therefore the number of competitors that can supply to this market. This is the result of the fact that production in the construction industry takes place on location.

This list of characteristics indicates that several sub-markets in the construction sector are oligopolistic in nature (particularly in the building materials industry, in the case of large or specialised projects and in the case of non-public procurement).

Under certain conditions, extensively described in the Industrial Organisation (IO) literature, firms in an oligopoly have a tendency to collude (either actively or in the form of 'tacit collusion'). Firms can raise their profits by participating in a cartel. However, cartels are also inherently unstable because individual members can undercut the price set by the cartel and thereby attract more demand and increase his profits. Defecting is less attractive if a market is very transparent in the sense that cartel members can check easily if they are cheated upon and then punish the defecting firm (for example by starting a price war). Oligopolistic markets that are transparent in this sense tend to produce more stable cartels.<sup>9</sup>

## INTERNAL FACTORS ENABLING THE DUTCH CONSTRUCTION CARTEL

### Sub-contracting and the formation of joint ventures

Many construction projects could not be efficiently completed without some degree of sub-contracting. Even large contractors have to rely on smaller, more specialised firms for some aspects of their projects. But sometimes a winning bidder will subcontract part of a project to a firm that would ordinarily be its rival. In fact, firms in the construction sector often consider talking to and partnering with each other to be a normal way of doing business. Whereas in one project companies might truly behave like independent competitors, in another project they might form a joint venture or have a contractor/sub-contractor agreement.<sup>10</sup>

The tendency to sub-contract or to form joint ventures was not specifically highlighted amongst the factors that enabled the Dutch construction cartel however it is a feature common to construction markets

around the world, given the varying product and geographic specialties construction firms may have and the sheer size of large scale construction projects. The complex relationships that are formed between competitors and/or customers in this scenario creates a platform for the discussion and exchange of competitively sensitive information.

### Communication

According to C.R Leslie<sup>11</sup> *people who communicate frequently are more likely to perceive mutual trust.* Face-to-face meetings and coordination facilitates the perception of trustworthiness, thus promoting cooperative behaviour.<sup>12</sup> The Dutch construction cartel would call a meeting whenever more than one firm was interested in the same project. By obligation each member would notify the SPO of its intention to submit a bid to a client for a particular contract. All those construction firms interested in competing for a particular bid would be summoned to a meeting by the SPO. These meetings would occur whenever multiple firms were interested in the same contract. Thus the Dutch construction cartel most likely fostered a mutual trust as a result of frequent communication between the member firms.

Moreover the collusive discussion took place within the forum of a trade association. By forming trade associations, the cartel members created structured, organised fora for continuous communication over construction industry matters. The following extract from a competition policy discussion of the OECD emphasises the point.

*Trade associations play valuable, fundamental roles as forums for the discussion and exchange of views on issues of common interest for the industry sectors which they represent. Many trade association activities are*

*supported and encouraged, because they promote the efficient functioning of the market. For this reason, many trade association activities benefit from statutory and non-statutory exemptions or immunities from the application of competition rules.*

*Participation in trade associations' activities however may provide ample opportunities for competitors to meet regularly and to discuss business matters of common interest. Such meetings and discussions, even if meant to pursue legitimate association objectives, bring together direct competitors and provide them with regular opportunities for exchange of views on the market, which could easily spill over into illegal coordination. Casual discussions of prices, quantities and future business strategies can lead to agreements or information understanding in clear violation of antitrust rules. It is for this reason that trade associations and their activities are subject to close scrutiny by competition authorities around the world.*

### Reciprocity

In the operation of cartels, firms will build upon mutual rights and obligations because of the coordination of agreements and the compensation in light of them. This enables norms of generalised reciprocity to develop within the cartel. Being in debt to others and having others indebted to you affects one's actions. It is expected that this creates mutual dependencies between firms, which in turn promotes peaceful arbitration and discourages cheating, thus ultimately stabilising the cartel.<sup>13</sup>

The history of the Dutch construction cartel reveals that it was precisely due to a breakdown in the firms reciprocal duties

towards each other that the cartel collapsed. Former director of the Koop Tjuchem construction company, Ad Bos, kept handwritten records of the years 1988–1998, in which all kinds of setoffs with other companies had been entered. These setoffs related to market sharing, price fixing and mutual compensation. Project by project, it was recorded who participated, who was given the work, and how much other bidders were owed or would expect.<sup>14</sup> It was this former director who, when he failed in his attempts to get money that was owed to him, exposed the cartel in an explosive television programme.<sup>15</sup> Until that time it is plausible to assume that the cartel was held together, at least in part, by the reciprocal obligations the cartel participants had towards one another.

### Credible punishment for deviations

Realising that cartels are “inherently unstable” - given the cartelists ability to undercut fellow competitors – the Dutch construction cartel devised a range of sanctions designed to keep member firms loyal to the cartel. The cartel’s Code of Honour, lay down penalties for breaches of the regulations and provided for a quasi-judicial procedure to examine such breaches. Since 1980, the Code of Honour also enabled penalties to be imposed if SPO rules were breached. These ranged from a warning to fines of up to 15% of the estimated value of the construction project in question.

### Behavioural and legislative reforms since the Dutch construction cartel

According to a survey conducted by the NMa in 2008, seven years after the Dutch construction cartel was exposed, the NMa’s investigation had a notable impact on the behaviour of companies in the industry. The survey results indicated that there was support for the cartel prohibition and

that a majority of the respondents agreed with the manner in which the NMa tackled construction fraud. However, a quarter of respondents also signaled they knew of businesses who operated in ways that were less than fair, and 4% indicated they were still approached with offers of price-fixing. Almost half of the respondents indicated they had weighed the risks of breaking government regulations. These results signaled to the NMa that, though the industry had made some strides towards a collusion-free construction industry, there was still work to be done.

The exposure of the Dutch construction cartel also led to legislative reforms. The Public Procurement Act was promulgated in 2012 and it stipulated a number of rules to be followed during the procurement process, these being: non-discrimination, equal treatment of businesses, transparency and proportionality. This Act was amended in 2016 to stipulate how governments should be responsible corporate citizens and take sustainability into account when designing tender processes. A new tender process was also introduced for buying new innovative products. The law also requires businesses to sign the European Single Procurement Document, which declares the businesses’ financial status, capability and suitability for a public procurement. Finally, from 2017 onwards, governments were required to digitally publicise their tenders.

Other notable reforms in the industry include the following:

- The conclusion of a code of conduct by Bouwend Nederland, a Dutch employers’ organisation representing most of Netherland’s construction and infrastructure companies. The code encourages corporate social responsibility, integrity and fair competition among members;
- The Netherlands International Chamber

of Commerce (ICC), which offers education on competition regulations for businesses, has published its *ICC guide for doing business honestly without corruption*. The guideline offers tips and checklists for identifying anti-competitive behavior.

The NMa extended its interventions into related sectors such as the ready-mix concrete sector. In this sector the NMa determined that the culture of competitors operating through sub-contracts and loose joint venture agreements was risky and harmful to competition. This close cooperation enabled the sharing of competition-sensitive information. For this reason the NMa issued a directive stipulating that plants with a market share of 40% or more in a particular region were to cease all collaborations. These commitments were entirely aimed at structurally improving competition in the sector. According to the NMa’s research, this directive has brought transparency and improved competitiveness to the sector.

## CONCLUSION

It is not possible to isolate any one factor that led to the formation, survival and success of the Dutch construction cartel. Arguably the favourable regulatory environment enabled its formation in the 1950’s however the bid-rotation system created by the cartel may have encouraged firms to stay on as members since it offered stable profits in an industry characterised by cyclical demand. Moreover the sanctions imposed by the cartel, together with the mutual obligations between the firms, may have discouraged any one firm from betraying the cartel. Indeed it was precisely a breakdown in the reciprocal duty owed by one company director to another that ultimately led to the exposure of the cartel, bringing an old established empire of collusion to its knees.

## BOX 1: LESSONS FROM THE NETHERLANDS

### FAST FACTS:

- More than 7000 Dutch firms implicated
- 22.5 million ECU in penalties imposed
- Behavioural and legislative reforms since the conclusion of the investigation

### FACTORS THAT POSSIBLY ENABLED COLLUSION:

#### External factors

- Enabling regulatory environment
- Transparent bid processes
- Cyclical demand
- Market concentration

#### Internal factors

- Sub-contracting and the formation of joint ventures
- Communication
- Reciprocity
- Credible punishment for deviations

## JAPAN

While the Netherlands experienced something of a “big bang” when the workings of the Dutch construction cartel were revealed in a television programme, for years Japan has simmered in the gradual evolution of its construction cartels as various arms of the State tried to stay one step ahead of the pervasive network of government officials and construction bosses engaging in bid rigging.

Although Japan remains one of the worlds least corrupt countries<sup>16</sup> there have been numerous cases of *kansei dango* – a government-assisted form of bid rigging – reported to and investigated by Japan’s Fair Trade Commission (JFTC). One particular case of *kansei dango* led to such widespread public condemnation that the Japanese government promulgated a law specifically drafted to prevent government officials from engaging in or supporting bid rigging. The 2003 law specifically targeting the role of State officials in bid rigging

came after an early 2000 investigation by JFTC into bid rigging led to the sanction of a company but not the State official who facilitated the collusion. At the time, firms involved in collusion could be sanctioned under the Act on Prohibition of Private Monopolisation and Maintenance of Fair Trade (Act No. 54 of April 14, 1947) but there were no laws applicable to State officials involved in collusion. This imbalance was considered unfair by contractors and the public at large.<sup>17</sup> Thus the 2003 *Act Concerning Elimination and Prevention of Involvement in Bid rigging* provided more stringent measures to prevent bid rigging in public procurement, with a specific focus on the role of State officials.

The 2003 law included (i) measures to eliminate involvement in bid rigging by State officials; (ii) mechanisms to claim damages over bid rigging cases involving State officials; (iii) provisions enabling action to be taken against State officials involved in bid rigging; (iv) provisions enabling coordination among administrative institutions; and (v) measures to punish state officials engaging

in collusion which harmfully distorted the fairness of the public tendering process.

Japanese media report that *kansei dango* is most prevalent in the construction industry.<sup>18</sup>

## WHAT IS KANSEI DANGO?

*Kansei dango* is normally carried out by means of a State official unlawfully revealing the confidential bid price ceiling which is determined by the State, in a given public auction, to a potential bidder by prior agreement. By simply adjusting its price in line with the confidential bid price ceiling, a construction firm is virtually guaranteed to be the winning bidder if the competing bids exceed the confidential bid price ceiling or the price submitted by the “designated” winner. This outcome is made all the more likely in construction because the quality of the work to be undertaken can only be determined once the construction work is completed. Thus *kansei dango* is made possible through networks of cooperation amongst competing construction firms coupled with support from State officials.

Other reported examples of *kansei dango* include the issue of explicit directions for rigging from officials to bidders and the open disclosure, by officials, of their preferred bid winners. In this form of bid rigging, the rigged price is very close to the expected price and, consequently, the realisation of a lower price which would have resulted under fair and free competition is hindered. Bid rigging is also harmful to public welfare because it forces taxpayers to bear the burden of high construction costs.<sup>19</sup>

*Kansei dango* is also made possible by the reigning “designated bidder” system. In this system politicians and bureaucrats from the construction ministry have enormous power over the awarding of public contracts. When public works are put out for tender to

building companies, the ministry decides in advance on a limited number of companies that are to be allowed to enter a bid. The official reason for this is to keep out companies associated with gangsters and to maintain high standards of workmanship. But in practice it means that building companies are incentivised to keep good lines of communication with bureaucrats from the ministry and politicians who can put in a good word for them, which creates fertile ground for bribery.<sup>20</sup>

According to a Japanese construction ministry survey that covered public works

contracts signed by 28 prefectures or regions, eight major cities and 205 smaller municipalities in the 1998 financial year, the average winning bid price was equivalent to 95.4 percent of the upper limit set by the local governments. This remarkably high correlation between the winning bid and the “confidential” bid price ceiling suggested to the ministry that public works bureaucrats routinely leaked the bid price ceiling to bidders.

Woodall (1996) concluded that “*the dango system is entwined in the mechanisms of political power in Japan’s economy.*”

*Construction contractors reap inflated profits, government officials glean administrative power and post-retirement security and legislators harvest political contributions and campaign support. The losers of course are the taxpayers: by various estimates big rigging and political pay offs inflate the cost of public construction in Japan by 30 to 50 per cent.”*

A snapshot of JFTC’s *kansei dango* cases in 2015 reveals the manner in which the conduct was carried out by the officials involved.

**Table 2: Kansei-Dango cases prosecuted by the JFTC**

Kansei-Dango Cases Prosecuted by JFTC				
	Action			
Good and/or Services procured	1	2	3	4
Public Works (Construction works)	y	y	y	-
Public Works (Construction works)			y	-
Public Works (Bridge Superstructure Construction))	y		y	-
Public Works (Construction and engineering works)		y		-
Public Works (Equipment Installation)	y	y		y
Investigation, Measuring and Design for Forestry Road	y	y		
Public Works (Equipment Installation)	y	y		
Rolling Stock Management			y	
Office Supplies	y	y		
Public Works (Engineering Works)				y
Public Works (Engineering and Pavement Construction Works)	y	y		y
Public Works (Engineering Works)			y	
Public Works (Equipment Installation)			y	
Source: JFTC (2015. p34)				
Notes ‘Action’ in the table shows the type of illegal action as per Article 2(5) of the Act Concerning Elimination and Prevention of involvement in the bid-rigging each of the actions defined above is as follows:				
Action 1:	Instruction to engage in bid-rigging:			
Action 2:	Indication of bureaucrats’ wish for a result of tender to a specified firm:			
Action 3:	Leakage of confidential information about the tender: and			
Action 4:	Actions supporting bid-rigging			

## THE LAW CONCERNING BID RIGGING IN JAPAN

In Japan bid rigging is prohibited by the Anti-Monopoly Act (AMA) which is administered by the JFTC. If business operators are found to have participated in bid rigging, the JFTC may order them to cease the conduct and to pay monetary penalties calculated in line with a fixed formula. The AMA also provides for criminal penalties to be imposed on individuals and business operators that have engaged in bid rigging. Victims, being procurement agencies or the local residents concerned, may also demand compensation from business operators who have taken part in bid rigging.<sup>21</sup>

According to the JFTC many bid rigging activities have taken place in the competitive bidding market for public construction works and the legal actions that the JFTC has taken in response to bid rigging generally account for a high percentage of the entire number of legal actions.<sup>22</sup> As an example the JFTC took 129 legal actions during the period from FY 2002 to FY 2006. Of this total, 85 concerned bid rigging and 66 (51%) concerned bid rigging in public construction works.

In the JFTC's experience, owing to the fact that the bid price is often the most important indicator of the winning bid in public

construction procurement, bid rigging in public construction generally takes the form of a price cartel. In this regard the contractor predetermined by the cartel simply adjusts his bid prices, relative to the remaining bidders, before submitting his bid, thus ensuring that he wins the contract.

As a result of the high number of bid rigging cases found in Japan, the JFTC embarked on a multi-pronged strategy to reduce the conduct. In addition to the strict enforcement of the AMA, the JFTC published guidelines for business operators and trade associations. The JFTC also worked closely with procurement agencies in order to raise their levels of awareness around bid rigging and their ability to detect bid rigging when it occurred. To this end directors of accounting affairs and other equivalent officers in procurement agencies have been designated as liaison officers with the JFTC since 1993 and meetings among these liaison officers and the JFTC have been held annually. In addition, the JFTC has cooperated with procurement agencies by dispatching lecturers and providing training materials to their workshops for procurement officers. In order to more effectively detect bid rigging cases, the JFTC introduced a leniency policy in 2005 which offered cartel members full immunity from prosecution, or a reduced penalty, in exchange for information about the cartel. Furthermore,

the Act for Promoting Proper Tendering and Contracting for Public Works, which came into effect in April 2001, required all public procurement agencies, including national and local government entities and governmental corporations, to notify the JFTC if they had reason to believe that any firm was engaged in bid rigging. The JFTC has observed a reduction in construction prices as a direct result of its legal actions against bid rigging in public procurement.

Beyond the AMA, Japan also provides for the criminal prosecution of cartel participants in the Japanese National Penal Code. This code stipulates that any person using fraudulent means or committing an act which distorts the fairness of a public auction or bid shall be imprisoned up to two years or shall be subjected to a punitive monetary fine. When collusion is detected, the JFTC may officially ask the chief of the ministry or agency in question to find measures to deter or prevent bid rigging in the public tender process. After the investigation stage, police or a public prosecutor may pursue a criminal charge against a person engaging in *kansei dango*.

The table below shows the number of criminal cases concerning *kansei dango* brought by Japanese law enforcement between 2008 and 2015.

**Table 3: Criminal cases brought by Japanese law enforcement**

YEAR	PUBLIC PROCURER	GOODS OR SERVICES PROCURED	ACCEPTANCE OF A BRIBE
2008	Urayasu City Chiba	Lease of PC	
2008	Kasukabe City Saitama	Management of public facilities	
2009	Tenkawa Village Nara	Public works	Y
2010	National Institute of Infectious Diseases	Public works	Y
2010	Saitama/Saitama	Public works	Y
2010	Japan Pension Service	Inspection of pension documents	
2010	Otsu/Shiga	Cleaning service for hospital	
2011	Ministry of Land Infrastructure and Transport	Public works	Y
2011	Ikeda/Hokkaido	Public works	
2011	Forestry Agency	Public works	Y
2011	Takamatsu/Kagawa	Public works	
2012	Nikko/Tochigi	Public works	Y
2012	Itoshima/Hiroshima	Public works	
2012	Meiwa/Gunma	Public works	Y
2012	Kagoshima/Kagoshima	Management of roadside trees	
2012	Shizouka Prefecture	Inspection of public facilities	Y
2013	Ministry of Defense	Design of next-generation helicopter	
2013	Chiba Prefecture	Public works	
2013	Shimonoseki City University	Public works	
2013	Hirado/Nagasaki	Public works	Y
2013	Kamiita/Tokushima	Public works	
2014	Asahikawa/Hokkaido	Public works	
2014	Masuda/Shimane	Collection of transportation and garbage	
2014	Forestry Agency	Public works	
2014	Sohja/Okayama	Public works	
2014	Sapporo/Hokkaido	Public works	
2014	Utsunomiya/Tochigi	Public works	
2015	Yamaguchi/Yamaguchi	Public works	Y
2015	Nagahama/Shiga	Public works	

Source: JFTC, 2015

## UNEARTHING A COLLUSIVE WEB OF POLITICIANS AND CONSTRUCTION BOSSES

On 6 March 1993 Tokyo authorities arrested Shin Kanemaru, former vice president of the Liberal Democratic Party, on charges of tax evasion. The investigation and prosecution that followed, however, revealed much more than one man cheating on his tax returns. In what became known as the Zenecon (*general contractors*) scandal, prosecutors unearthed a web of secret political donations to Kanemaru from the bosses of some of Japan's largest construction firms at the time.

Shin Kanemaru had been one of the most influential figures in Japanese politics as leader of Keiseikai, the largest faction in the Liberal Democratic Party, until he was arrested on charges of massive tax evasion, which led to revelations of back-door donations. At the same time, Kanemaru reigned as the don of the *kensetsu zoku gi'in* (literally, 'construction Diet men'), a group of special-interest politicians closely linked to the construction industry, and received huge under-the-table donations from construction firms. In the construction industry of the Yamanashi prefecture, Kanemaru's constituency, there was intense political strife in the gubernatorial election. As a rule, the construction interests that supported the winning candidate monopolised public works contracts given by the newly elected governor. The bid-winning construction companies gave unlawful contributions to the newly elected governor on the basis of the successful bid price. The companies involved included Shimizu Corp., Kajima Corp., Taisei Corp. and Hazama.

In 1993 Shimizu Corp., which reported sales of ¥2.17 trillion, held the top spot for sales in the construction industry, while Kajima Corp. employed the largest number of workers at nearly 15,000. Together with the remaining

members of the cartel, Shimzu Corp. and Kajima Corp. formed part of the so-called "big six" of the Japanese construction industry. Each of the big six oversaw extensive overseas branch offices and subsidiaries and several held substantial interests in domestic affiliates specialising in road paving, residential land development and other construction services.

From the 1995 account of one Takehiko Mori, who worked in construction for more than twenty years, most contracts granted for public works at the time were determined through bid rigging.<sup>23</sup> In his particular region, the Kochi prefecture, "every single bid for the prefecture's projects that he participated in over the years was systematically rigged by local contractors, including his firm." According to Mori, the firms rigged the bid in order to avoid competing among themselves. They would meet regularly and take turns "winning" orders from prefectural and municipal governments.

Some politicians, including Diet members elected from the prefecture, intervened in the bid rigging process occasionally, he said. They demanded kickbacks in exchange for leaking information on the upper limit of the bid price, which was decided by bureaucrats before the bidding and was supposed to be kept confidential. Local officials were well aware that the bids were rigged but they tolerated the practice because it helped use up the budget allocated for their projects, which otherwise could be reduced the following year, Mori said.

A study carried out by the Japan Federation of Bar Associations corroborated Mori's revelations. The study revealed that, in an overwhelming majority of the cases examined by the bar federation, prices offered by the construction firm that won the bid was equivalent to between 95% to

99% of the confidential upper limit set by the authorities. This indicated that the winner secured the maximum possible profit from the deal, a situation that would not have existed had the bids been competitive. "Such a narrow margin would be too remarkable if free competition among bidders existed", the study concluded.

After Kanemaru's arrest more public sector officials as well as the chairmen and presidents of several large Japanese construction firms were implicated in bribery charges. In addition, on March 11, 1994, the special investigation section of the Tokyo District Public Prosecutor's Office arrested former Construction Minister Kishiro Nakamura on charges of "intermediary bribery," as provided for in the penal code.

After the conclusion of the Zenecon case, some municipalities overhauled their systems for public works bidding, for example, by allowing construction firms that did not operate locally to take part in the competition. According to the Japan Federation of Bar Associations, in those cities, the average winning bid fell to the equivalent of between 70% and 85% of the upper limit.

The Zenecon scandal investigation took place in the 1993 - 1994 period, after which the Japanese authorities believed they had made great strides in eradicating bid rigging from Japanese construction works. However more recently, in December 2017, Japanese media reported that shares in heavyweight Japanese construction companies Shimizu Corp and Kajima Corp fell on reports that prosecutors had raided their headquarters for alleged bid rigging linked to a ¥9tn maglev train project. Kajima Corp. and Shimizu Corp. were among four major Japanese construction companies contracted to build the \$80bn Chuo Shinkansen rail to connect Tokyo, Nagoya and Osaka with magnetically levitated trains

capable of a top speed of about 500km per hour. At the time of publication, the investigation by Japanese authorities was ongoing with reports of two of the four firms having admitted to bid rigging while the other two denied the allegations.

Other cases of *kansei dango*, since the Zenecon scandal and the legal reforms described above, include the following:

- In June 2015, MLIT sued 39 construction companies for damages allegedly resulting from *kansei dango* in relation to 59 construction bids in the Kochi prefecture;
- In February 2017, the Nagoya District Court imposed a three-year suspended sentence and a fine of 320 000 yen on a former regional employee of MLIT for leaking information related to the construction of a bridge in the Mie Prefecture. The court also imposed three-year suspended sentences on former employees of the construction company that received confidential bidding information from the former regional MLIT employee;
- In May 2017, the Nagoya District Court imposed a five-year suspended sentence and a 1.95m yen fine on a former regional employee of the MLIT for leaking information related to the construction of a tunnel in the Mie prefecture.<sup>24</sup>

## FACTORS ENABLING KANSEI DANGO IN JAPAN

It is likely that bid rigging amongst construction firms in Japan would not succeed without the participation of State officials involved in procurement for public works. This is because, in Japan, public procurement in construction is characterised by (1) a system of designated suppliers; and (2) the setting of a confidential bid price ceiling. These requirements assist the Japanese government to maintain an

acceptable quality of public works delivered at a reasonable price. Contractors that are not on the list of designated suppliers or who exceed the confidential bid price ceiling in their bids are automatically disqualified from bidding. For this reason, the traditional form of bid rigging – as a purely horizontal agreement amongst competitors – would have little or no consequence if the competitors were unaware of the confidential bid price ceiling or if some competitors did not appear on the official list of designated suppliers.

Accordingly this section considers the factors that enable this particular form of bid rigging, that is, the State supported form of bid rigging.

### Market concentration

As mentioned, public procurement in Japanese construction is characterised by (1) a system of designated suppliers; and (2) the setting of a confidential bid price ceiling. These requirements assist the Japanese government to maintain an acceptable quality of public works delivered at a reasonable price. Although intended to bring about an equitable outcome for taxpayers, from a competition perspective, these factors have crucial consequences. A list of designated suppliers limits the number of competitors available to compete on a bid, thus causing high market concentration, which makes collusion easier to facilitate.

Nevertheless the limiting of competing bids is a natural consequence of construction markets and even affects the way construction markets are defined. By their nature construction firms develop specialist expertise over time and tend to specialise in different types of projects, by size or by expertise. As seen in the example of the Dutch construction cartel, although the Netherlands has several thousand construction firms registered, fewer firms

were eligible to compete for specific building works, resulting in an effect similar to a list of designated suppliers. On its own, the system of designated suppliers could facilitate collusion because of the reduced number of suppliers and the abovementioned natural boundaries within the construction market, however coupled with the fact that, in Japan, this list is determined by the State, this creates the opportunity to influence State officials in their determination of the list. This difference greatly influenced the parties in the Zenecon scandal as construction bosses reportedly paid massive amounts of money to curry favour with the State officials who compiled the list of construction firms that were eligible to submit a tender.

### Incentives driving government official choices

A Japanese study<sup>25</sup> into the reasons for the prevalence of *kansei dango* concluded that government officials in fact have a number of incentives to facilitate and support collusion amongst suppliers, all of which ultimately point to the official's desire to ease his work load and succeed in his work. This would not be out of line with the reported motivation for collusion in other industries. For example, in ... 2014 when testifying before the Competition Tribunal of South Africa, one procurement official tasked with obtaining furniture removal services on behalf of his company stated simply that he requested one supplier to obtain furniture removal quotes from his competitors because it was easier than having to do so himself. As with the insights below, this particular official trusted the supplier he had pre-determined to win the contract because he had delivered good service in the past.

The Japanese study found the incentives below, some of which are inter-linked, played a major role in *kansei dango*:

- Secure retirement - Bureaucrats may be in favour of specific firms to be sure they are offered a new job after their retirement. This practice is referred to as “amakudari” which means ‘descent from heaven’ and is frequently cited as a major cause of *kansei dango*.<sup>26</sup>
- Secure regional growth - Bureaucrats are often interested in the growth of a regional economy. In order to attain this goal, it may be necessary to improve the ability of the suppliers located within the region. Thus, bureaucrats may need to favour them.
- Guaranteed quality - In order to maintain the quality of procured goods, bureaucrats may wish to delegate their procurement to suppliers with a good reputation.
- Satisfactory service in the past - In actual procurement, public officials may request the successful bidder to conduct extra operations, for example, in the case of the occurrence

of an unexpected phenomenon or emergency. Bureaucrats may favour the firm which has met their request satisfactorily in the past.

- Experience goods - Construction work falls within the “experience goods” category. These are products the quality of which cannot be determined until they are in use. Thus the risk of failure in construction procurement is very costly. In order to minimise this risk, procurement officials may be tempted to ensure the outcome of a bid and guarantee a win for suppliers with a good reputation.
- Information asymmetry - The information asymmetry between State officials and the suppliers bidding for construction work means that procurement official cannot independently judge the quality of a product yet to be experienced. Therefore he must rely heavily on past experience or ‘word of mouth’ to

judge the outcome of a bid correctly. This again increases the procurement official’s incentives to guarantee a specific outcome.

- Ever-changing procurement rules - In practice, the details of public procurement rules are frequently revised. In order to avoid confusion from revised rules, bureaucrats may favour the supplier with outstanding experience in public procurement activities.

### Socialist business philosophy that tolerates bid rigging

A 1995 study suggested that the Japanese approach to commercial activity supported *kansei dango* in that it promoted the retention of all players in the market, sharing its resources equally, rather than allowing market forces to purge the inefficient while rewarding the innovative and strong. The study stated that:

*“Bid rigging is rampant in Japan because there are problems with the structure of the construction industry and the system for placing orders for public works projects. Today, the construction industry comprises a menagerie of roughly 520,000 construction companies. Moreover, about 99% of them are medium and small companies with a capital of Y100 million or less. The industry employs a staggering 6.54 million workers, or roughly 9% of Japan’s work force. If construction companies were allowed to freely compete for public works contracts, it is possible that competition between small companies would escalate and thus force some of the companies to go bankrupt and some workers to lose their jobs. For this reason, construction companies generally believe that bid rigging is a rational way to evenly allocate orders received. Further, in some quarters of administrative agencies, it is viewed that the equalization of opportunities for receiving orders and the protection of local companies calls for turning a blind eye to bid rigging. Both views argue that there is no other choice but to approve bid rigging in order to prevent small companies from being weeded out of the market.”*

## BOX 2: LESSONS FROM JAPAN

### FAST FACTS:

- Big rigging normally takes the form of *kansei dango*: a State supported type of corruption
- Japanese law provides both civil and criminal sanctions for *kansei dango*
- Between 2008 and 2015 Japan criminally prosecuted at least 29 cases of *kansei dango*

### FACTORS THAT POSSIBLY ENABLE KANSEI DANGO IN JAPAN:

- Market concentration
- Business philosophy that tolerates bid rigging
- Incentives driving government official’s choices, particularly:
  - the need for job security after retirement;
  - the desire to secure regional growth;
  - the guarantee of good quality and satisfactory service when procuring experience goods;
  - information asymmetry between construction firms and procurement officials; and
  - the ease of dealing with firms that are familiar with ever changing procurement rules.

## UNITED KINGDOM

The United Kingdom (UK) has seen its share of bid rigging cartels operate in its construction industry. So notorious was the industry that Lord Borrie, former Director General of Fair Trading in the UK, once said that construction had the worst record of cartelisation of any industry.<sup>27</sup>

In the UK it is the Competition and Markets Authority (CMA) that is tasked with the primary responsibility to investigate cartels. The CMA, which was established in 2014, comprises what was previously known as the Office of Fair Trading and the UK's Competition Commission.

The UK Competition Act of 1998 prohibits anti-competitive agreements, concerted practices and decisions by associations of undertakings which have as their object or effect the prevention, restriction or distortion of competition within the UK or a part of it and which may affect trade within the UK or a part of it. Similarly, Article 101 of the Treaty on the Functioning of the European Union (TFEU) prohibits such anti-competitive agreements, concerted practices and decisions by associations of undertakings which may affect trade between EU member states.

Any business found to have infringed the UK Competition Act 1998 could be fined up to 10% of its annual worldwide group turnover. In calculating financial penalties, the CMA takes into account a number of factors including the seriousness of the infringement(s), turnover in the relevant market and any mitigating and/or aggravating factors. Bid rigging cartels are amongst the most serious and harmful forms of offence the CMA investigates.

## UNITED KINGDOMS OF CONSTRUCTION

One of the largest investigations ever undertaken by the OFT was into the activities of a construction cartel that operated between 2000 and 2006. This investigation led the OFT to fine 103 construction firms for bid rigging activities, mainly in the form of cover pricing, in September 2009.

This investigation followed on the heels of five separate OFT decisions concerning bid rigging in the roofing sector in England and Scotland between 2004 and 2006.<sup>28</sup>

In March 2007 the OFT announced that in order to proceed with its ongoing investigation into bid-rigging in the construction industry, it intended to offer reduced financial penalties to implicated companies that had not yet applied for leniency but which were prepared to admit participation in the bid-rigging cartel and to co-operate with the OFT. In conjunction with this "fast track" approach, the OFT announced that it was not intending to consider any further leniency applications made in relation to this investigation. The fast-track approach of the OFT was similar to that adopted by the NMA when investigating collusion in the Netherlands construction industry.

In April 2008 the OFT issued a statement of objections (SO), where it formally alleged that 112 firms in the construction sector in England had engaged in bid rigging activities, and in particular cover pricing. The OFT's investigation originated from a specific complaint in the East Midlands of the UK in 2004, but it quickly became clear that the practice of cover pricing was widespread.

Although the OFT eventually issued fines to 103 companies, it stated at the time that it had uncovered evidence of cover pricing

in over 4000 tenders involving over 1000 companies but had to focus its investigation on a limited number of companies and instances where the available evidence was strongest, in order to make the best use of its resources and conclude its investigation within a reasonable timeframe. The OFT could not, therefore, pursue every firm suspected of involvement in cover pricing. Moreover, the endemic nature of the practice within the industry suggested that many other companies were likely to have been involved in bid rigging, even though such activity remained undetected.

In September 2009, the OFT issued its decision which saw fines totalling £129.2 million imposed on 103 construction firms in England that were found to have engaged in illegal anti-competitive bid rigging activities (mostly cover pricing) on 199 tenders from 2000 to 2006. In 11 of these bids, the winning bidder faced virtually no genuine competition as all other bids were cover bids. The OFT also found six instances where successful bidders had paid an agreed sum of money to the unsuccessful bidder ranging from £2,500 to £60,000. This sum of money is also referred to as a "loser's fee".

However in March 2011, following an appeal by six organisations, the Competition Appeal Tribunal considered the OFT's fines to be excessive and disproportionate. The Tribunal reduced the sum imposed upon the six appellants from around £42 million to £4.4 million.

The companies under investigation were not only active in the private housing, commercial and industrial sector, but also in the public sectors, including the construction of schools, hospitals and universities.

During its investigation the OFT received 37 leniency applications in connection

with its investigation. Leniency applicants approached the OFT in a bid for total immunity from fines or reductions in fines of up to 50%. Immunity from fines is generally available to the first cartel member who provides evidence of a cartel to the OFT.

As part of its investigation the OFT conducted on-site visits at the premises of 57 construction companies. Moreover the OFT stated that it used digital evidence gathering and forensic IT to search for electronic documents stored on computers. The OFT also employed forensic techniques to discover and analyse documents where steps may have been taken to hide evidence.

What the investigation revealed was that the firms were mainly engaged in cover pricing. Cover pricing takes place when bidders colluding with one another during the tender procedure agree to submit one or more bids that are too high to win the contract. The intention of agreeing on the submission of “unrealistic” bids is to create the false impression that the winning bid won the contract by competing successfully against the unrealistic bids. The inference is that the winning bid is inflated and would have been lower had all the competing bidders engaged in genuine competition and submitted realistic bids.

In terms of the types of contracts where bid rigging was prevalent, the evidence from the OFT investigation showed that contract values varied considerably from as little as £2,215 to £8.5 million. There was evidence of bid rigging in both public and private sector contracts (approximately 57% of alleged infringements were related to public sector contracts). Just over 60% of the alleged infringements related to new building works, 34% to repair, maintenance and improvement and the remainder involved an element of each.<sup>29</sup>

## FACTORS ENABLING BID RIGGING IN THE UK CONSTRUCTION MARKET

The UK’s Chartered Institute of Building (CIOB) conducted a study<sup>30</sup> exploring, amongst other things, the reasons for the prevalence of bid rigging practices within the UK construction industry. The economic climate and embedded cultural practices were cited by respondents as the top two enablers of corruption (defined to capture more than bid rigging) within the UK construction industry. The practice of cover pricing, however, was deemed by 20% of the respondents not to be corrupt. Neither, they said, should it be regarded as bid rigging or price fixing. These respondents suggested the practice was adopted as a necessity, since it allowed contractors to remain on tender lists and ensure future work opportunities.

The other reasons cited for the prevalence of corruption in the construction sector were the (1) lack of adequate enforcement mechanisms against these practices; and (2) the lack of awareness about what constitutes corruption in the industry.

### Tough economic conditions for the construction sector

The CIOB report observed that the economic climate took a downturn for the construction industry after the 2008 global financial crisis.

According to the CIOB report construction was one of the industry’s worst affected by the recession, with construction output in the first quarter of 2013 said to be at its lowest level for nearly 15 years. The lack of a stable pipeline of work had a severe impact on the industry and the ability of construction companies to survive. Figures from accountancy firm PriceWaterhouseCoopers reflected this, indicating that there had been

5,580 construction insolvencies across the UK since the start of 2011 – a rate of 53 each week. With the increase in the number of companies folding, it could be argued that some might engage in certain practices as a necessity for survival, regardless of whether they were corrupt, ethical, or legal. For example, some self-employed workers and SMEs might engage in tax evasion or the employment of illegal labour in order to undercut competitors and make vital savings. Larger companies could collude with one another, pricing competitors out of projects to maintain market share, believing this was the only way to survive.

The respondents cited the factors below as additional reasons for the squeeze on construction firms, leading them to engage in corruption in order to survive:

- Stalled government construction projects - Although the Government had been publishing and updating its pipeline of work, research found that some 119 public sector construction projects worth over £1.1 billion in total were on hold in 2013. These stalled projects hampered the ability of construction companies to plan work and could lead to cash flow problems. These could also drain the industry of new workers entering the industry and lead to cost cutting in areas such as health and safety.
- Opaque public sector procurement process - The report also found that 58% of respondents felt SMEs were at a disadvantage in the public sector procurement process, due to preferential bidders, framework agreements and the partnering process. Research by the Federation of Master Builders (FMB) called for the implementation of a simpler procurement process to encourage more SME engagement. Given that at

least 80% of the construction industry consisted of SMEs, the creation of an open and competitive environment could benefit companies that tended to resort to corrupt practices to compete.

- Late payments by contractors - Late payment by large contractors was cited by some respondents as a serious threat to growth in the construction industry, forcing many sub-contractors out of business.

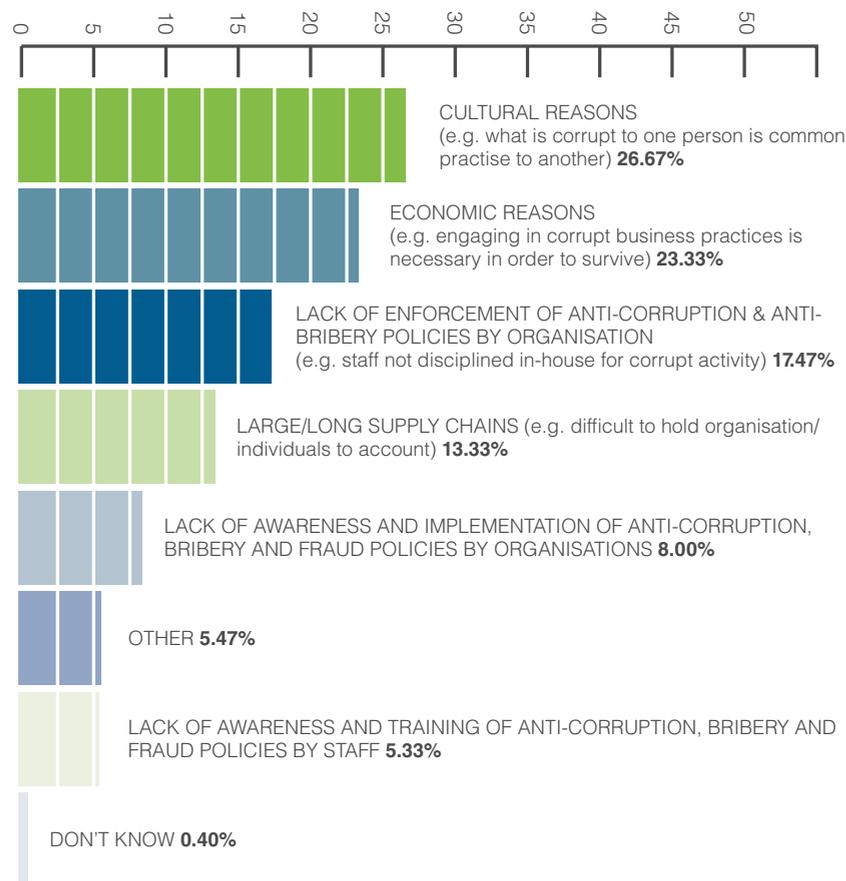
### Long standing cultural norms

27% of respondents to the COIB survey mentioned above also believed that cultural aspects were part of the reason for corruption within the industry. These could be in the form of business practices embedded over time and which had become the norm for how business was done. These cultural aspects were difficult to pinpoint, harking back to the idea that what was corrupt to one person might be common practice to another. For example

an earlier 2006 CIOB corruption survey found that 32% of respondents felt that cover pricing was not very corrupt, and 5% found it not corrupt at all. This indicated that 32% of respondents understood the practice of cover pricing to be regarded as corrupt by the majority, but chose to engage in it anyway because, culturally, business was conducted that way.

The diagram below reflects the respondent's perceptions about the factors enabling corruption in construction.

**Diagram 1: UK perceptions about factors enabling corruption in construction**



### BOX 3: LESSONS FROM THE UNITED KINGDOM

#### FAST FACTS:

- Collusion often takes the form of cover pricing in the UK
- The UK's largest bid rigging investigation led to the sanction of 103 construction companies
- 20% of respondents in a construction survey believed cover pricing was not corrupt

#### FACTORS THAT POSSIBLY ENABLED BID RIGGING IN THE UK:

- Tough economic conditions for the construction sector, made worse by:
  - stalled government construction projects;
  - a public sector procurement process which is perceived to be opaque; and
  - late payments by large contractors.
- Long standing cultural norms

## Endnotes

- 1 Collusion in the Dutch construction industry: an industrial organisation perspective by A.G. Dorée. Published by the University of Twente, Department of Construction Process Management under Building Research & Information (2004) 32(2), March–April, 146–156
- 2 OECD Policy rountable on trade associations, 2007, DAF/COMP(2007)45
- 3 D. Daniel Sokol, assistant professor at the University of Florida Levin College of Law, Limiting Anti-Competitive Government Interventions That Benefit Special Interests, The Global Competition Law Centre Working Papers Series - GCLC Working Paper 02/09
- 4 The parliamentary enquiry on fraud in the Dutch construction industry collusion as concept between corruption and state-corporate crime by Grat Van Den Heuvel in the Faculty of Law, University of Maastricht, The Netherlands. Published in Crime, Law & Social Change (2005) 44: 133–151
- 5 OECD policy rountables: Construction industry 2008 DAF/COMP(2008)36
- 6 OECD policy rountables: Construction industry 2008 DAF/COMP(2008)36
- 7 The parliamentary enquiry on fraud in the Dutch construction industry collusion as concept between corruption and state-corporate crime by Grat Van Den Heuvel in the Faculty of Law, University of Maastricht, The Netherlands. Published in Crime, Law & Social Change (2005) 44: 133–151
- 8 OECD policy rountables: Construction industry 2008 DAF/COMP(2008)36
- 9 OECD policy rountables: Construction industry 2008 DAF/COMP(2008)36
- 10 OECD policy rountables: Construction industry 2008 DAF/COMP(2008)36
- 11 Leslie, C. R. (2004). Trust, distrust, and antitrust. Texas Law Review, 82(3).
- 12 Managing Cartels: how Cartel Participants Create Stability in the Absence of law by J. D. Jaspers. Published in the European Journal on Criminal Policy and Research, September 2017, Volume 23, Issue 3, pp 319–335
- 13 Managing Cartels: how Cartel Participants Create Stability in the Absence of law by J. D. Jaspers. Published in the European Journal on Criminal Policy and Research, September 2017, Volume 23, Issue 3, pp 319–335.
- 14 The parliamentary enquiry on fraud in the Dutch construction industry collusion as concept between corruption and state-corporate crime by Grat Van Den Heuvel in the Faculty of Law, University of Maastricht, The Netherlands. Published in Crime, Law & Social Change (2005) 44: 133–151
- 15 All in the Dutch construction family: cartel building and organised crime by Petrus C. van Duyne and Maarten van Dijck of Tilburg University, Netherlands.
- 16 Transparency International, Japan (<https://www.transparency.org/country/JPN>)
- 17 KANSEI-DANGO and Antimonopoly Law in Japan – The Characteristics of Collusion in the Japan’s Public Procurement by Shuya Hayashi, Nagoya University Graduate School of Law. Published in Competition Policy International, July 2016
- 18 How Japanese tax-payers’ money is lost in bid rigging by Reiji Yoshida, 3 July 2007
- 19 Regulations on bid rigging in Japan, the United States and Europe by Naoaki Okatani. Published in 1995 by the Pacific Rim Law and Policy Association
- 20 View from Tokyo: Cosy construction cartels come under fire by Terry McCarthy. Published in The Independent on 15 May 1993.
- 21 OECD policy roundtables: Construction industry 2008 DAF/COMP(2008)36
- 22 OECD policy roundtables: Construction industry 2008 DAF/COMP(2008)36
- 23 Public works bid rigging said widespread by Reiji Yoshida. Published in The Japan Times, February 10, 2001.
- 24 Bribery and corruption in Japan, 2018. Published by Latham & Watkins and retrieved from <http://www.globallegalinsights.com>
- 25 Collusion between public procurers and suppliers in the context of Japan’s public procurement: the role and risks of “unsuccessful procurement by Satoru Tanaka and Shuya Hayashi
- 26 Bribery and corruption in Japan, 2018. Published by Latham & Watkins and retrieved from <http://www.globallegalinsights.com>.
- 27 OECD policy rountables: Construction industry 2008 DAF/COMP(2008)36
- 28 The UK construction industry under the spotlight again by Marceline Tournier and John Pheasant, Hogan & Hartson
- 29 Evaluation of the impact of the OFT’s investigation into bid rigging in the construction industry. A report by Europe Economics, on behalf of the OFT, in June 2010.
- 30 A report exploring corruption in the UK construction industry, September 2013



# CHAPTER 3

CONSTRUCTION INDUSTRY IN NAMIBIA

## INTRODUCTION

On 7th December 2016, the Board of Commissioners approved the Terms of Reference<sup>1</sup> of the construction study. The aim of the study is to review the current state competition in the Construction Industry in Namibia, identify existing impediments to its growth and to examine whether any features in the construction industry distorts competition with particular emphasis on tender rigging, tender procedures, and the role of tender exemption. It further aims to investigate the public procurement system and its potential to facilitate collusion, the role of imports and exports on construction industry and general state of competition in the construction sector. The study is also a collaborative research projects under the auspices of the African Competition Forum (ACF). The participatory countries in this study include Namibia, Mauritius, Swaziland, Senegal and Malawi.

It is beyond the scope of the study to consider private sector work, rather, emphasis is placed on infrastructure projects from the government budget and other big government projects such as construction of mass housing projects and bigger office buildings. The study also looks at the policies and rules governing the tendering process in identifying any appropriate actions the Government might adopt in order to foster the industry's development.

Based on the outcome of the study, the Commission may initiate an investigation into the construction industry, make recommendations for policy interventions and suggest the implementation of procedures to curb the occurrence of anticompetitive conduct in the industry.

## PURPOSE OF THE STUDY

The purpose of the market study is to understand the general state of competition in the industry, examine whether any features of the construction industry distorts competition with particular emphasis on tender procedures, tender rigging, the role of tender exemptions, market players and the level of concentration in the industry.

The study will also look at the policies and rules governing the tendering process in trying to identifying any appropriate actions the Government might adopt in order to foster the industry's development.

For the purpose of this market study, the construction industry refers to the industry of carrying out construction works, alterations, and repairs of buildings, structures, other real properties and the construction material suppliers.

## RATIONALE OF THE STUDY

The Namibian construction sector as one of the vibrant sectors in Namibia recorded massive growth over the years driven by the development of new mines, the expansion of the Walvis Bay port, the construction of the Neckertal dam, and building activities such as shopping Malls, roads and the construction of new hotels and residential buildings. The growth of the sector has lured prospective investors to the industry, who vied for a piece of the lucrative market.

The Namibian Construction Industry can be a strategic importance to the economy, currently contributing about 4 percent to the Gross Domestic Product and employing more than 2000 people. Based on the size of businesses, the industry consists of big international companies, big Namibian companies, medium-sized companies, small firms and micro-firms. The latter mainly operates in informal settlements and rural

areas. Big international firms are mainly from South Africa and China.

Despite the industry being perceived as lucrative, there are media allegations of barriers for local companies to establish themselves due to various forms of corruption and anti-competitive practices. In the absence of a Corporate Leniency Policy in Namibia, it is a challenge to detect anti-competitive activities, especially cartels and bid rigging, as they are considered to be the most egregious conduct that is documented by many competition authorities.

In South Africa, 15 Companies were penalized a total of ZAR 1.46 billion in 2013 for engaging in collusive tendering on construction projects. This collusive tendering took the form of allocating customers and profit margins, cover pricing, paying a loser's fee to a bidder that submitted a cover price, and subcontracting to losing bidders. Given the closeness of the Namibian and South African industries, there are possibilities that the cartels activities are present in Namibia given that some of the companies fined in South Africa operates here.

In many countries including Namibia, the public sector (government) is the main consumer of construction activities and the bulk of public procurement is done through the tendering process. The government budgeted roughly N\$14.5 billion for the fiscal year 2011/12 for expenditure through tenders that include exemptions. This represents about 40.5 percent of the total expenditure. This is an illustration that the bulk of public procurement is done through tendering.

Namibia has a free market system and an open tendering system, with the Tender Board of Namibia ("Tender Board") as its axis. The Tender Board was established through the Tender Board of Namibia

Act (Act 16 of 1996 ) to regulate the procurement of goods and services by the government and the letting or hiring or acquisition or granting of rights for or on behalf of and the disposal of property on behalf of the government. The Tender Board is required to publish all tenders and prequalification tenders in the Government Gazette and at least once in each newspaper contracted by government and on the notice board of the Secretariat. Public procurement (majority is construction projects) accounts for a large proportion of the Namibian Gross Domestic Product (GDP). Infrastructure and construction activity in Namibia has largely been underpinned by the government's development programmes. The government's spending priorities over the past few years have included infrastructure investments to support industrial development through ensuring that adequate public infrastructure is in place and as a means of creating jobs.

In 2011 the Government introduced the Targeted Intervention Programme for Employment and Economic Growth (TIPEEG) to the tune of N\$9,1 billion over three years starting in 2011, targeted for economic growth and the creation of 104 000 direct and indirect jobs. The bulk of expenditure under this programme included expenditure in the construction industry for the provision of essential infrastructures such as roads, pipelines, bulk infrastructure for water and sanitation and housing etc. The outcome of TIPEEG has successfully increased the capital expenditure to close to 7% of GDP and increased government investment thus contributed to GDP growth by increasing the growth in the construction sector. The construction sector grew by 15.3%, 7.2% and 35.2% in 2011, 2012 and 2013 respectively. This gives an average

of 19% growth for the construction sector over a three year period, and thus raised the contribution of the sector to just above 4% from 3% of the total GDP<sup>2</sup>.

In that light, it is also important to conduct a study in this area to establish if the policies and rules governing the tendering process facilitate anti-competitive practices and corruption in the industry.

## RESEARCH QUESTIONS

The study is aimed at answering the following questions:

1. What is the level of competition in the construction industry?
2. What are the factors that affect the industry's competitiveness-both local as well as regional? What are the cost structures of the industry?
3. What is the type of government support programme that could increase the development of the industry?
4. What are the major policies and market constraints facing the industry and what are the possible remedies to effect such?

## RESEARCH METHODOLOGY

The study used the descriptive design of a qualitative research framework through which information will be gathered from the participants. The purpose was to collect non numerical data, interrogate it and then make interpretations.

The target population of this study consisted of construction companies (Chinese, local and other foreign companies) that are operating in the Namibian construction industry. At the time of collecting data, there were about 360 construction companies

registered with the Construction Industries Federation of Namibia (CIF), 157 are contractors, 32 are traders, supplying to the industry, 116 are SMEs and the remaining 45 are affiliated members providing other services to the industry. The study established that the CIF represent about 70 percent of total construction companies operating in the country, thus the statistics and views obtained from CIF was generalised as a true reflection of the construction industry<sup>3</sup>.

The researcher also sourced inputs from participants of officials from the Namibia Chamber of Commerce and Industry, Ministry of Finance (Tender Board of Namibia), Construction Industries Federation of Namibia, Ministry of Works and Transport, Chinese Embassy, Namibia Engineering Council and all relevant stakeholders. Their number was limited because the population they represent covers most part of the industry. Participants in the study will be purposefully selected because of the organisations they represent.

Face to face semi structured interviews will be one of the research instruments that the researcher will employ. These interviews will be structured in the sense that the researcher can prepare some central questions that would engender answers that are aligned towards the topic. They are semi-structured, on the other hand, to open up for new ideas from the interviewees. The interview will also be administered via email for the officials who cannot be reached via face to face interviews.

Primary and secondary sources will be used for data collection. The primary data will come directly from original sources, such as the documents obtained from the

Ministries of Finance, CIF, whilst secondary data will come from the respondents' interpretation of the information. The researcher will make appointments with the respondents and informed consent will be obtained from respondents before personal interviews are conducted.

The data collected during the interview phase will be transcribed from rough notes and recordings onto paper. The information gathered will be verified and edited for inconsistencies. The data gathered from documents will be interpreted using the content and thematic analysis technique. Participants in this study will be informed about the objectives of the study and those that agree to the face-to-face interviews will be made aware that they are being quoted

## OVERVIEW OF THE CONSTRUCTION INDUSTRY IN NAMIBIA

The construction sector is responsible for building and repairing houses, factories, offices schools etc. It also builds infrastructures such as roads, bridges, ports, railroads, sewers and tunnels, among many other construction related activities. In addition, it maintains and repairs all of those structures and produces the basic materials such as concrete that are used to make them. The industry's significance is due not only to the fact that it provides the buildings and infrastructure on which virtually every other sector depends, but to the fact that it is such a sizeable sector in its own right.

The construction industry can be broadly divided into two clusters which are the actual construction of buildings and

the construction of infrastructure. The building subsector includes residential, commercial, and institutional building types. Stakeholders in the building subsector will vary depending on the value of the building being constructed, the level of specialized work involved, and the demand. The infrastructure subsector includes roads and bridges, water and sanitation, and complex civil works. Again, the level of complexity increases as the level of expertise increases. The projects in the infrastructure subsector are often undertaken by international foreign firms, due to the design complexity and skills required which is a major challenge in the local firms.

According to the International Standard Industrial Classification (ISIC) of all economic activities, the scope of industry coverage for construction is as follows:

**Table 1: International Standard Industrial Classification of the Construction Industry**

Division	Group	Class	Description
Division 41			Construction Building
	410	4100	Construction Building
Division 42			Civil engineering
	421	4210	Construction of roads and railways
	422	4220	Construction of utility projects
	429	4290	Construction of other civil engineering projects
Division 43			Specialized construction activities
	431		Demolition and site preparation
		4311	Demolition
		4312	Site preparation
	432		Electrical, plumbing and other construction installation activities
		4321	Electrical installation
		4322	Plumbing, heat and air-conditioning installation
		4329	Other construction installation
	433	4330	Building completion and finishing
	439	4390	Other specialized construction activities

Source: UNO Revision 4

Several studies have identified the construction industry as one of the main engines of growth in any economy<sup>4</sup>. It provides the infrastructure required for other sectors of the economy to flourish, provides housing as the basic human need and is instrumental in providing national communications network. The construction industry also provides significant employment opportunities at non-skilled and skilled levels.

The Namibian Construction industry consists of a wide range of companies ranging from larger multinationals to small informal one-man operations. According to IPPR, 2010, the Namibian construction industry has since independence in 1990 become an increasingly important economic sector, both in terms of investment and employment, as the country has experienced an increase in investment in

fixed assets in terms of both the state and private sectors.

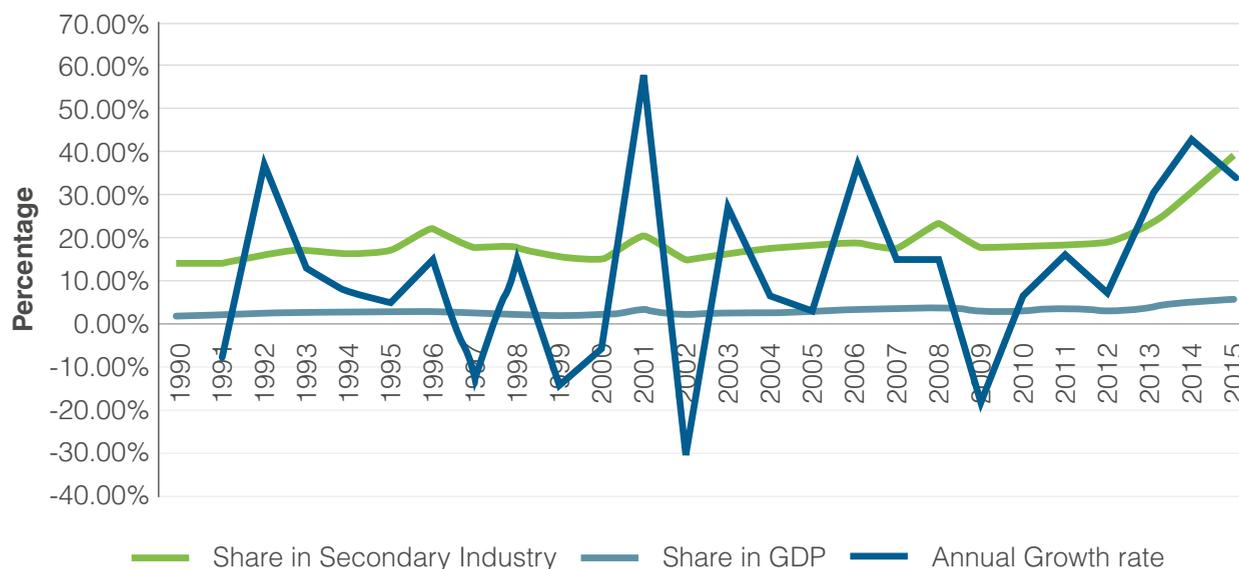
From about 2006 to 2008 the industry experienced a boom, with the value of construction and building works climbing from just over N\$5 billion in 2006 to almost N\$7 billion in 2008. Of the 2008 estimate, almost N\$3 billion accounted for infrastructure building works. In 2008 the construction industry's share of Gross Domestic Product (GDP) hovered around the four percent mark, up from about two percent in 1990 (IPPR, 2010).

Infrastructure and construction activities in Namibia have largely been underpinned by the government's development programmes. The government's spending priorities over the past few years have included infrastructure investments to support industrial development through

ensuring that adequate public infrastructure is in place and as a means of creating jobs. In 2011 the Government introduced the Targeted Intervention Programme for Employment and Economic Growth (TIPEEG) to the tune of N\$9,1 billion over three years starting in 2011, targeted for economic growth and the creation of 104 000 direct and indirect jobs. The bulk of this programme included expenditure in the construction industry for the provision of essential infrastructures such as roads, pipelines, bulk infrastructure for water and sanitation and housing etc. Growth in the industry has been volatile over the years due to the volatility in the global economic performance.

The figure below shows the growth and GDP contribution of the construction industry since 1990.

**Diagram 1: Growth and GDP contribution of the construction industry since 1990**



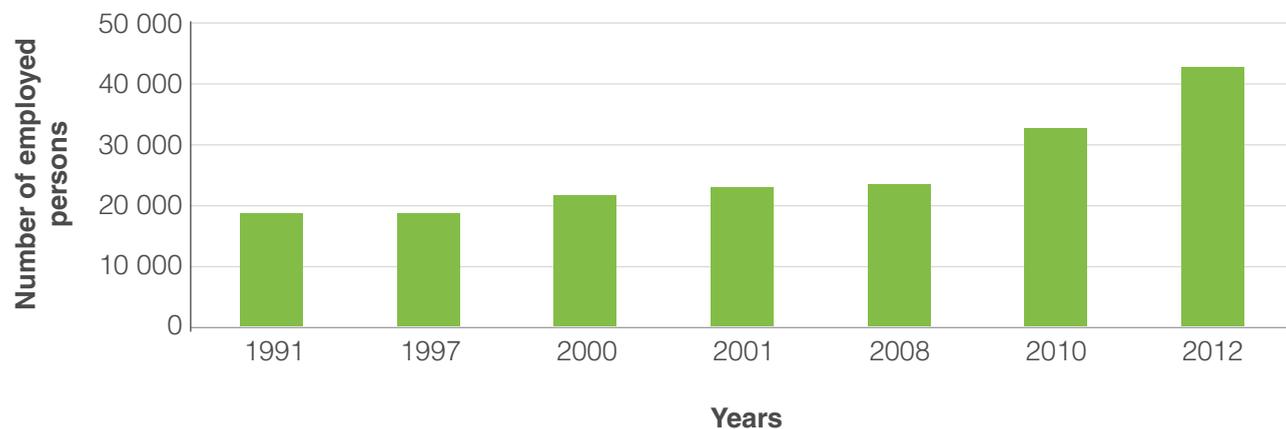
Source: National accounts 2015, Namibia Statistics Agency

In terms of employment, the construction sector is more labour intensive and plays a crucial role in generating employment. According to the Labour force survey of 2012, the construction industry employs

42 577 people, which accounts close to 7 percent in total employment by industries. This shows an improvement from 32 644 people employed in 2010 as per the National Household Income

and Expenditure Survey. Most of those employed in the sector are either unskilled or semiskilled. The following table shows the trend in employment of the construction industry since independence.

**Diagram 2: Employment in the Construction Industry**



Source: Namibia Labour Force Survey, 2014

## DEVELOPMENTS IN THE BUILDING PLANS IN 2016

According to the IJG Daily report (January 2017), the outlook for construction was relatively positive at the beginning of 2016 due to several large government projects expected to commence within the year. This view was revised down several times during 2016, as it was confirmed by the midterm budget. Government has cut both the

development and operational budgets quite aggressively. Spending on construction was cut by a material N\$1.5 billion in 2016 financial year alone and a moratorium has been placed on all government construction projects going forward. This had a negative effect on economic activity in general, but the construction sector in particular.

In December 2016, a total of 131 building plans were approved with a value of

N\$108.2 million. For the 2016 calendar year the City of Windhoek approved 1,872 building plans, well below the 2,467 plans approved in 2015. Cumulatively 2016 witnessed the approval of N\$1.95 billion worth of plans; also well below the 2015 figure of N\$2.20 billion (IJG, 2017). The following table shows the number of building plans approved and completed in Windhoek alone, during 2015 and 2016.

**Table 2: Building Plan approved and completed in Windhoek**

	31-Dec-16		Value YTD		N\$ Change	% Change
	Number	Value (Mill)	2015	2016	YTD	YTD
<b>Plans Approved</b>						
Additions	99	60,4	1,093.1	926,8	(166.3)	-15.2%
Commercial and Industrial	3	6.7	636.9	460.0	(176.9)	-27,8%
Flat and House	23	40.7	466.4	553.3	86.6	-18.6%
Total	131	108.2	2,196.4	1,945.1	(251.2)	-11.4%
<b>Plans Completed</b>						
Additions	-	-	115.6	142.8	27.1	23.5%
Commercial and Industrial	-	-	93.5	128.1	34.6	37.0%
Flat and House	-	-	249.0	316.1	67.1	26.9%
Total	-	-	458.2	587.0	128.8	28.1%

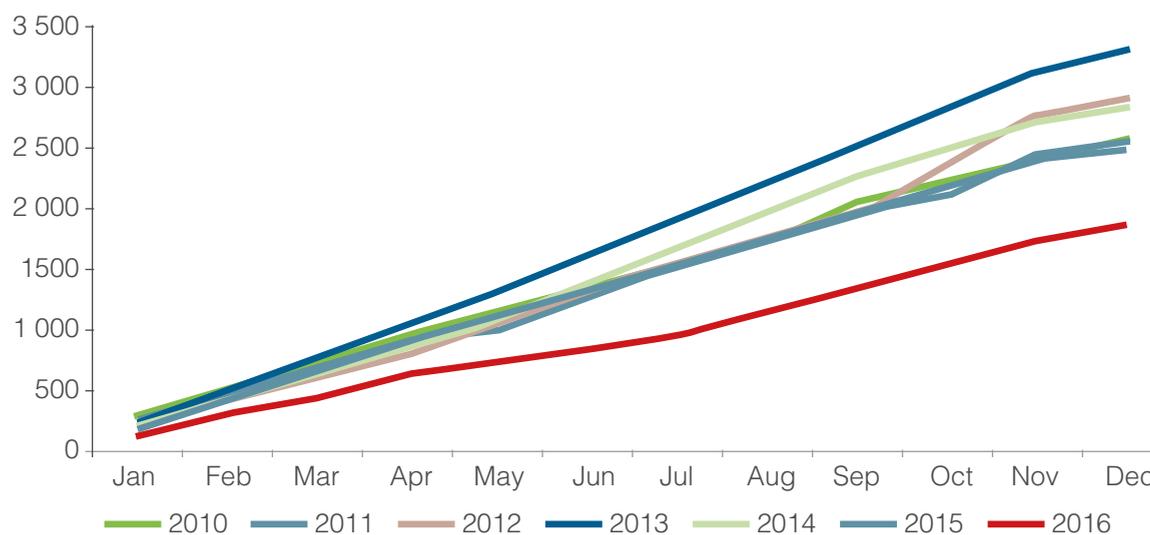
Source: IJG 2017

Over the years, the number of building plans approved showed an upward trend as shown in the figure below, except for 2016 which registered a slow growth in the Building plans being approved. Apart from

the budget cuts from government, lack of serviceable land has often been cited as the reason for the slowdown in building plans in 2016. The Windhoek Municipality has indicated that there is a high demand for

land, but little land left around Windhoek that can be developed. As a result, additions to existing property have exceeded new construction fourfold.

**Diagram 3: Building Plan approved Windhoek for the past 6 years**



Source: IJG 2017

## **NATIONAL CONSTRUCTION INDUSTRY REGULATIONS**

Namibia does not have a regulatory body for the construction industry; however construction firms and stakeholders are required to adhere to the standards set for the construction activities or outputs. The Ministry of Works and Transport is responsible for sectoral policy and regulation, and has a mandate to ensure infrastructure development and maintenance on transport and state asset management through operational excellence and prudent management of resources.

## **NAMIBIA BUILDING REGULATIONS AND STANDARDS**

Namibia currently uses the National Building Regulations and Building Standards Act No. 103 of 1977 that was promulgated in South Africa. This Act promotes uniformity relating to the erection of buildings and prescribes building standards. This Act was adopted and has remained in force subsequent to Namibia's independence in 1990. This includes following the South African SANS 0400 supporting codes that define the code of practice for buildings.

Local authorities have also developed their own building regulations and standards, in particular the Municipality of the City of Windhoek. The Municipality of the City of Windhoek is an autonomous entity and has employed building inspectors who receive and assess building plans for compliance with their set standards. These are done to ensure that buildings are properly designed and positioned for the purposes of ensuring health, safety, welfare and convenience of the end users.

## **STANDARDS ACT, 2005 (ACT NO 18 OF 2005)**

In 2005, the Standards Act (no 18 of 2005) was signed, providing for the promotion, regulation and standardisation relating to the quality of commodities. This Act also established the NSI as the regulatory body responsible for the purpose of determining national standards. The Standards Act gives the NSI the function of setting, establishing and issuing standards in Namibia, or to amend or withdraw any standard that has been set. The establishment of the Namibian Standards Institute (NSI) was necessitated by the fact that in October 2006, the South African Bureau of Standards (SABS), which up to that point had been the de-facto technical inspection body in Namibia, notified the government of Namibia that a law was being passed in South Africa taking away regulatory functions from the SABS. The new regulatory body that was established in South Africa was called the National Regulator for Compulsory Specifications (NRCS). The NRCS has no jurisdiction beyond the border of South Africa and thus there would be no standards regulator in Namibia. This prompted the Namibian Cabinet to establish the NSI through the promulgation of the Standards Act, 2005 (Act no 18 of 2005).

## **SECTOR ASSOCIATIONS**

Shifidi, I. (2012) stated that the industry has in the past been controlled by foreign firms from Germany and South Africa. Over the past few years however, Chinese firms have become more prevalent in the sector, working on many of the country's large projects.

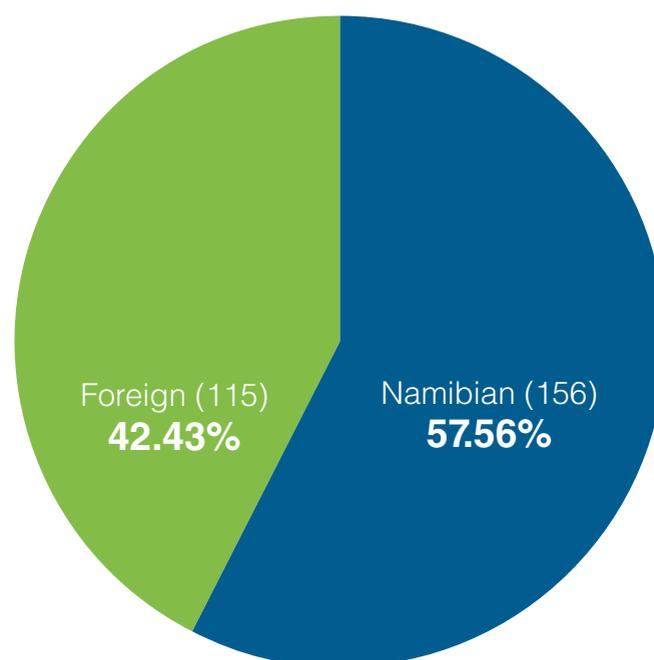
The domination of the industry by German and South African firms can be attributed to the fact that Namibia was first colonised by Germany and subsequently South Africa, while the Chinese dominance follows a pattern currently widespread across Africa. (Shifidi, I. (2012))

In the absence of a centralized body or sector regulator to capture industry data, the study relies on the number of firms registered under the Construction Industries Federation of Namibia (CIF) to serve as a proxy for the number of market players and shares in the construction industry.

## **NAMIBIA INSTITUTES OF ARCHITECTS (NIA)**

The Namibia Institute of Architects (NIA) is a non-profit, statutory institution established in 1952, under the previous title of The Institute of South West Africa Architects. The NIA's purpose is to promote architecture and sound architectural practice among the Namibian architectural profession and general public of Namibia, Southern Africa. Currently the NIA has a membership of 111 registered professional architects, and is a member of the African Union of Architects, The Commonwealth Association of Architects and the Union of Architects, ensuring an international representation. The NIA is also in close affiliation with the Namibian Council for Architects and Quantity Surveyors.

**Diagram 4: Percentage of architects registered in Namibia**



Source: Namibia Institutes of Architects 2016

### **NAMIBIA CONSTRUCTION SKILLS ACADEMY**

The Namibia Construction Skills Academy (NCSA) is responsible for ensuring that contractors are given accredited training needed to run their firms. It aims to provide formal recognition of training in skills and qualifications (e.g. training on tendering). This institution also addresses poor contract management, substandard workmanship, lack of human capacity, non-adherence to specifications and all the industry shortcomings related to cost, quality and time. Although the NCSA has been in existence for some time, it was only given formal accreditation by the Namibian Qualification Authority (NQA) in July 2010.

### **CONSTRUCTION INDUSTRIES FEDERATION OF NAMIBIA (CIF)**

The CIF is a membership-based representative body for construction and related firms in the construction industry. According to the organisation, more than half of construction companies in Namibia are members of the CIF, which was founded in 1952 under the name Master Builders Association, and registered in 1993 as the CIF. The CIF serves as the national voice of Namibia's construction industry. The CIF has a membership are divided into three categories, namely contracting members, small and medium enterprises (SMEs), and trade or affiliated members.

There are some 430 companies that are members of Namibia's Construction Industry Federation. These range from an annual turnover of over N\$200 million to SMEs with an annual turnover of less

than N\$1 million. The contracting members number 90 and are the construction firms involved in the bidding for physical work. The SMEs are also involved in the tendering process and physical work like the contracting members, and they number 26. The trade and affiliated members are 17 and 9 respectively. They subscribe to the CIF because of their connection to the construction sector in that they cater to and supply the construction firms with building materials and related products, Although are not construction companies. Examples of trade and affiliated members are M.Pupkewitz & Sons (Pty) Ltd, Neo Paints Factory (Pty) Ltd and The Namibian Procurement Fund.

Out of the 430 companies which are members of the CIF, there are only a few Chinese companies registered as members, namely Guanxi International Construction Engineering and Jiangsu

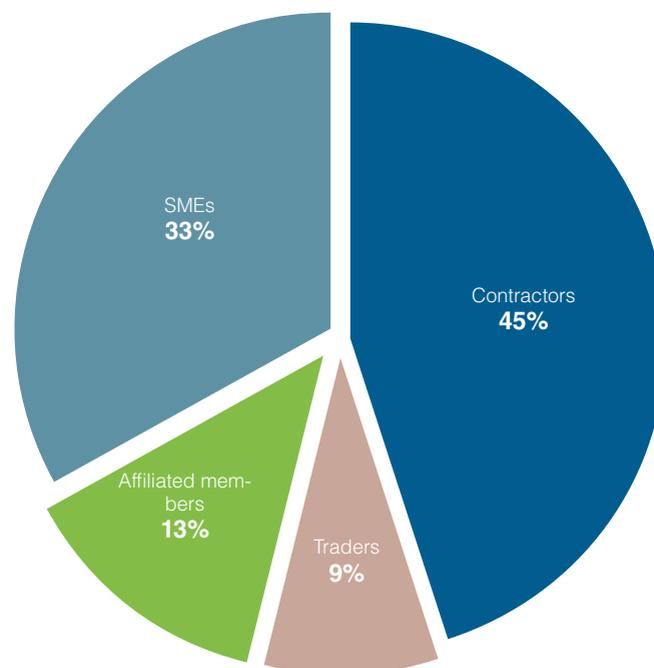
Zhengtai Construction Group, which are both contracting members.

As per the categories of the CIF, the market players in the industry are grouped as contractors, traders, SME's and affiliated members. Contractors are responsible for

the provision of all of the material, labour, equipment (such as engineering vehicles and tools) and services necessary for the construction of the project. Traders supply the necessary materials to the industry, whereas SMEs are small contractors with an annual turnover of less than N\$ 1 million.

Affiliated members provide services to the industry. The contractors and SMEs are mainly involved with actual construction of buildings and traders as well as affiliated members serve the construction product industry with its many subsectors.

**Diagram 5: CIF membership by category**



Source: Construction Industry Federation, Annual Directory 2016

The above graph shows the segmentations of different players in the industry of which more than 40 percent is represented by contractors. However, SMEs are also involved with the contracting but are grouped separately due to the fact that they are small enterprises with annual turnover of not more than N\$1 million.

### **TURNOVERS SHARES OF CIF MEMBERSHIP BY CATEGORIES**

#### **Contractors**

The research established that in the contractor segments is made up both local and foreign firms with an annual turnover ranging from N\$ 200 million to less than N\$20 million. These contractors are active in both the construction of buildings as well as in the infrastructure projects such

as roads, bridges and others. The figure below segregates the firms into their class of turnover as follows;

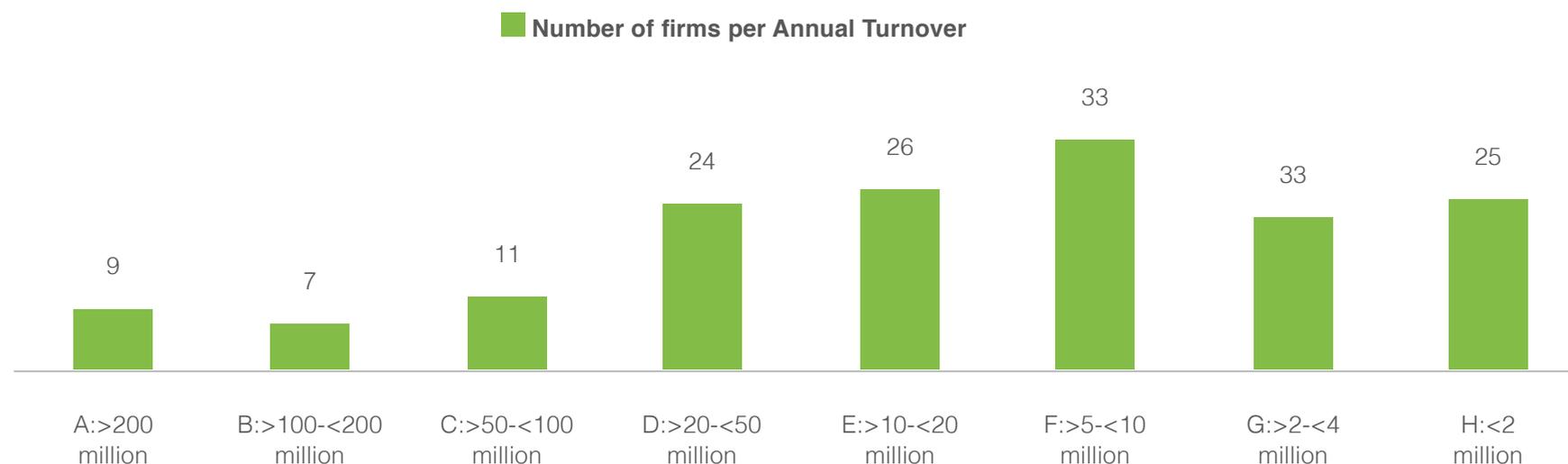
- A :> 200 Million<sup>5</sup>
- B :> 100-<200 Million
- C :> 50-<100 Million
- D :> 20-<50 Million
- E :> 10-<20 Million
- F :> 5-<10 Million
- G :> 2-<4 Million
- H :< 2 Million

As indicated on the figure below, less than 15 per cent of the players are in categories A,B and C which is the annual turnover ranging from N\$ 200 million to not less

than N\$50 million. The study revealed that most of the contractors with high turnovers are Chinese and other foreign companies, mainly South African. This segment is

dominated by a handful of large contractors that can handle large projects. The remaining projects are shared amongst a reasonable number of smaller firms.

**Diagram 6: Number of Contractor firms per turnovers**



Source: Construction Industry Federation, Annual Directory 2016

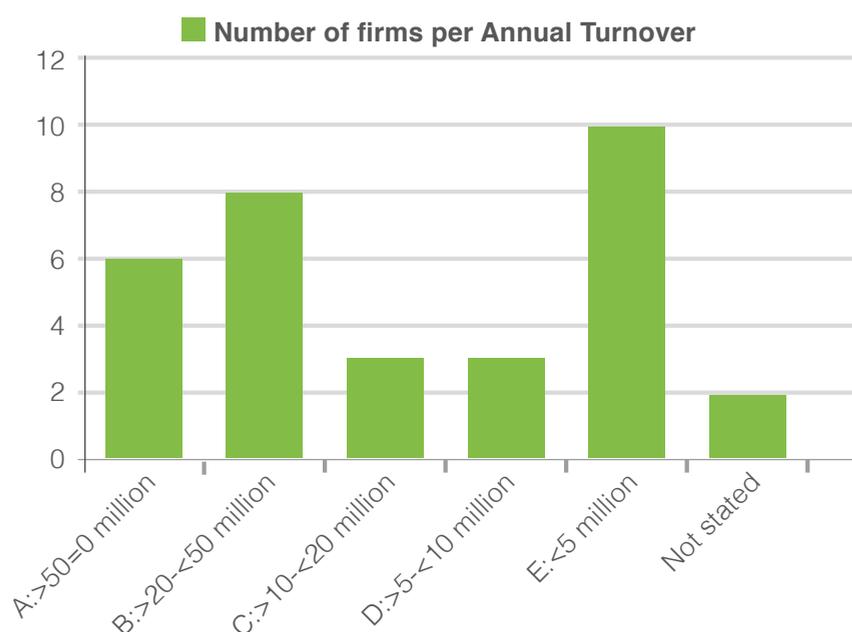
### Traders

Traders are firms involved in the supply of raw materials to the contractors. The study established that there are about 32 firms registered with the CIF. The annual turnover

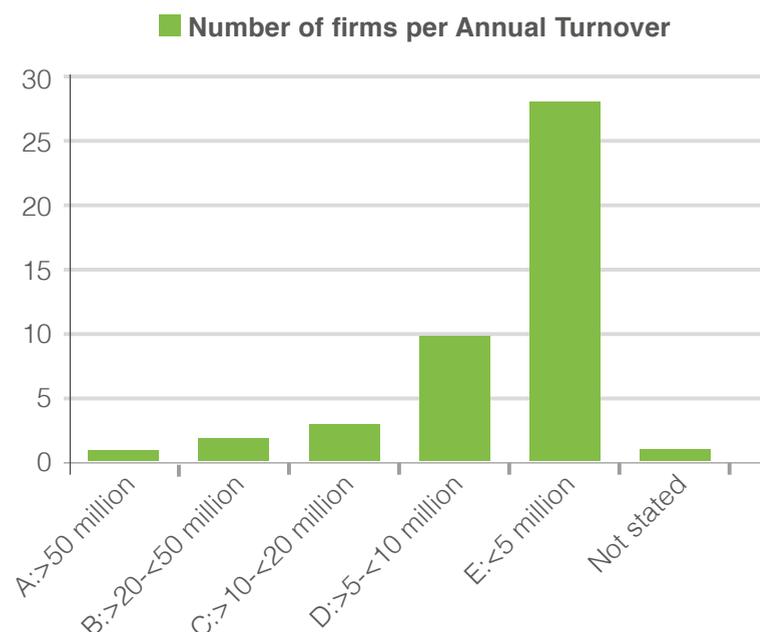
of these companies range from below N\$50 million to more than N\$5 million per annum. As shown in the figure below, the market is dominated by firms with turnover of not less than N\$5 million. Despite the turnover, this market/sector is characterised by different

firms serving different activities to serve the construction value chain, for example, some are involved in cement production, ready-mix concrete supply, steel supply etc.

**Diagram 7: Number of traders per turnovers**



**Diagram 8: Number of affiliated members per turnovers**



Source: Construction Industry Federation, Annual Directory 2016

## NAMIBIA SMALL CONTRACTORS ASSOCIATION

Similar to the Construction Industries Federation (CIF), the Namibia Small Contractors Association (NSCA) which is an independent body represents the interests of small contracting enterprises through, capacity building and information dissemination. The body facilitates training programmes for its members in order to ensure that they are competent to carry out construction work and improve their access to finance. This association was formed by small contractors due to the view that the CIF was representing the interests of big contractors more than those of small contractors

## VALUE CHAIN OF CONSTRUCTION ACTIVITIES

As indicated earlier, the construction industry is divided in two broad subsectors:

buildings and infrastructure. These two subsectors do not generally have the same process and expertise, are not necessarily occupied by the same organizations.

For instance in the buildings subsector, buildings from single-floor houses all the way to skyscrapers have similar construction steps, but the complexity increases with the number of floors or with the design itself. In addition to design complexity, there is also project management complexity in larger-scale projects. Thus, the more costly and complex the building, the larger the contractor that will execute the contract. As for the infrastructure subsector, each type of infrastructure calls for different type of engineering expertise, and firms tend to be more specialized in that subsector.

For both subsectors, building materials and equipment will often come from the same suppliers (which is the Affiliated members), as all of those projects require concrete and rebar. On average, building materials can represent 50 to 70% of the total cost of a construction project in Namibia, creating significant profit margin pressure on the contractor.

Building material is not significantly cheaper in Namibia. Except for steel, the following building materials are produced (or finished) in Namibia:

- Building blocks
- Cement
- Quarrying (sand, aggregates)

Due to the nature of the industry, domestic steel prices are heavily influenced by global steel market condition since all steel products are imported from South Africa. Cement is another input demanded for construction projects. The Namibian

cement industry is one of the youngest in the Namibian economy, consisting of only one cement producer. The Ohorongo cement was commissioned in 2009 at a total investment of N\$2.5 billion with the aim of supplying the entire Namibian market and export to neighbouring country. It currently produce at a tone of 700 000 tons of cement per annum which are being supplied to the domestic market and 40 000 tons are being exported to neighbouring Angola. Because cement is used in almost all construction activities, the cement industry is an important part of the nation's economic and industrial base.

Prior to the establishment of Ohorongo cement, the cement demand was entirely supplied by Afrisam which was represented in Namibia by an established distributor which supplied 95 percent of Namibian cement demand and 5 percent by others, mainly imported from China without any distribution organisation.

The cement industry in its infancy state was battling to survive stiff competition from the South African produce compounded by the low priced products from Asia. As a result, the government granted protection to the industry for a total period of eight (8) years to help it grow and establish itself to face foreign competition when the protection period lapse. In 2012, an import tariff of 60 percent was imposed on all imported cement until 2014; thereafter it will be lowered to 50 percent in 2015 and further down to 42 percent, 24 percent and 12 percent in 2016, 2017 and 2018, respectively. The protection is aimed at making significant contribution to government's drive of developing the country's industrial base that will lead to employment creation and economic growth.

Another key cost driver is heavy machinery (5 to 15% of the total cost of construction projects), which is imported either from

South Africa or China. Leasing can be costly for long term projects, but remains particularly popular for short-term use.

The cost of the workforce usually makes up a significant amount of the total costs of a project. Most of the workforce is unskilled and semi-skilled (electrical; heating, ventilation, air conditioning, plumbing etc), and only a few is skilled (civil engineering technicians), and very skilled (civil engineers), as well as procurement officers, cost controllers, and senior project directors. Typically, the masonry team stays permanently on the construction site, while other trades are periodically present at times when they are installing electrical, plumbing systems, etc.

The players in the industries are construction contractors, construction consultants and the suppliers of construction materials. The contractors are the firms that do the actual construction activities. Contractors are further divided into building contractors, civil contractors, civil/infrastructure contractors and miscellaneous contractors. Consultants provide the various professional services to the clients in the industry. These are further grouped into: architectural consultants, engineering consultants, quantity surveying consultants etc. Suppliers of construction materials, on the other hand include the manufacturers and suppliers of various types of equipment and raw materials used in the industry.

The following sub-sections will discuss the various value chains in the building and infrastructure categories and estimate the number of market players and level of competition in the said categories.

### **Sub-sector: Building**

In building either a small house or a large multi-story structure, the construction follows

similar value chains. What differentiates the value chains from one another are the type of project promoter, the level of technical and management complexity of projects and the consistency of the demand, hereafter explained:

- *Project developers* - An individual home owner brings different requirements than a real estate developer, whether a private commercial developer, a public institution developer, or an industrial developer. The individual owner has a generally low understanding of the construction process, whereas a real estate developer is a professional customer who knows exactly what to ask of a contractor when undertaking a construction project. Similarly, while commercial and institutional buildings are almost identical, commercial and institutional customers do not contract construction firms the same way. The former will contract professional firms based on personal contacts and previous experiences. The latter selects contractors and professionals based on a tender process that requires a significant investment from the bidders.
- *Technical and project management complexity* - A one-floor house might have the least complex construction process, while multi-story buildings are more complex. On one end of the spectrum, housing development is accessible to most of the sector stakeholders and remains the most open value chain of the building subsector, as it is informal and occupied by small and medium firms. On the other end of the spectrum, complex industrial buildings or large-scale building projects offer a more limited market, whereby only foreign

or very large firms are capable of handling the project management and complexity of design. Industrial buildings require more specialized infrastructure construction capacity. In that view, larger and more specialized firms will tend to occupy complex value chains, whereas SMEs tend to occupy more accessible markets like housing or smaller multi-story buildings.

- *Consistency of demand* - Large, complex development projects are less numerous than individual housing, multiplex housing developments, or commercial and institutional buildings. The market with unsteady demand tends to be occupied by foreign firms, which have access to larger (exporting their services) and more specialized markets. This explains the predominance of firms from China on larger projects in Namibia and the presence of firms from other foreign countries in highly specialized work.

Despite differences in end markets, building construction generally entails similar development and construction steps. The

following are the construction process from development to sustainable management.

1. Project developers identifies project; secure land title, land survey, and study funding scenarios.
2. Project developer contracts a design engineering/architecture firm for project concept and, if acceptable to the promoter, detailed engineering plans.
3. Project developer secures funding and insurance packages.
4. Project developer obtains construction permit.
5. Project developer with the assistance of the design firm select lead contractor and hire a third-party supervision firm (often the designer).
6. Lead contractor starts subcontracting process (staff mobilization) and procurement strategy.
7. Lead contractor or subcontractor starts demolition, earthwork, and site preparation.
8. Municipality or third party office inspects.
9. Lead contractor or subcontractor builds foundations.
10. Municipality or third party office inspects.

11. Lead contractor or subcontractor mounts rough framing, electrical systems, and plumbing.
12. Municipality or third party office inspects the construction.
13. Lead contractor or subcontractor issues the certification of occupancy if all inspections confirm compliance with building code.
14. Lead contractor ensures adequate project management.

### Building contractor

The CIF classifies building contractors based on their capacity to undertake particular types of construction projects. Under this criterion, the CIF groups the contractors into different classes based on their annual turnover. The smallest group of firms undertakes high cost projects with monetary value of N\$200 million or more, while the majority undertake low cost projects at a value of N\$2 million or less. Based on the classifications, there are 8 classes of building contractors based on their capacities. The table below gives statistics on the number of companies that fall in the various categories based on the capacity.

**Table 3: Distribution of building contractors by category**

Class	Annual turnover (N\$ Million)	Number of Building Contractors			
		By Origin		Total (No.)	Total (%)
		Local	Foreign		
A	>200			9	6%
B	>100-<200			7	4%
C	>50-<100			11	7%
D	>20-<50			24	15%
E	>10-<20			26	17%
F	>5-<10			33	21%
G	>2-<5			22	14%
H	<2			25	16%
<b>Total (No.)</b>				<b>157</b>	
<b>Total (%)</b>					<b>100%</b>

## Sub-sector: Infrastructure

The infrastructure subsector is less established than the building subsector. The key problem is the level of expertise required to address the variability in project types and demand. Apart from roads, where demand is steady, all other value chains within this subsector are costly. Namibian firms have not developed as much as they could have in this area, and foreign firms are systematically performing better, except in the roads rehabilitation market.

The differentiation factors are also slightly distinct from those in the building sector. What varies between one value chain and another, for instance, is not the project developer, which is most of the time the government or a public-private partnership. The fact that infrastructure projects are financed by public funds has a significant impact on the structure of the industry, which ends up subjected to a cumbersome and constraining bidding process that tends to favour experienced firms with the capacity to provide cash advance guarantees and as with the building subsector, the same factors of complexity in project management and expertise along with the consistency of demand also apply in the infrastructure subsector. The key differentiation factors in the infrastructure value chains follow.

- *Final products* - Final products are very different. Infrastructure generally includes transportation, energy, and water domains. Transport usually includes roads, bridges, railways, airports etc. Energy includes hydropower plants, oil & gas infrastructure (Kudu gas), etc. Water includes irrigation, water canals, drainage and sanitation, and watershed management.

- *Technical and project management complexity* - Roads are simpler projects compare to other infrastructure projects such as hydropower dams. Levels of expertise and complexity in management vary extensively between infrastructure projects. As a result, larger and more specialized firms will tend to occupy complex value chains, whereas small or medium firms tend to occupy more accessible markets like roads.
- *Consistency of demand* - Large complex infrastructure projects are less frequent than roads and or irrigation projects. As a result, this market tends to be occupied by foreign firms that have access to a larger market to develop the level of specialization required.

The infrastructure subsector is generally more tight than the building subsector because most infrastructure projects require a high level of expertise and demand is irregular, which makes it more hospitable to specialized or large foreign firms with more experience than Namibian firms, both in the planning and execution phases. In this subsector, the design and supervision firms have a more active role than in the building subsector. Design and supervision firms performing feasibility studies in the infrastructure subsector tend to be larger than those in the building subsector, given the various experts required to produce a feasibility study. In addition, Namibian design firms often developed partnerships with foreign firms, which helped them learn and participate.

The following steps represent the infrastructure development process, although there is significant variation in nature and scope for each of those steps.

1. Government agencies supply an integrated regional or urban plan with detailed infrastructure needs.
2. Government agency prepares tender documents, assesses bids, and selects an engineering firm.
3. Engineering firm provides scoping and prefeasibility studies with various scenarios for the government to align with their budget constraints.
4. Government assesses and makes the final decision to move proceed.
5. Engineering firm prepares feasibility study, detailed engineering plans, and (sometimes) tender documents.
6. Government develops tender documents, launches the bidding process for the lead construction firm, and selects the firm.
7. Lead contractor mobilizes staff (subcontracting) and building materials (procurement).
8. Lead contractor or subcontractor prepares the site, including major earthwork.
9. Lead contractor or subcontractor installs the various steps for each end product: (a) for road: put layers of gravel/stone/sand before paving; (b) for urban infrastructure: install networks of pipes, drains, etc.; (c) or generally install imported equipment like turbines, electric lines, etc.
10. Third party engineering supervision is present throughout the project to ensure that the quality of the design is respected.
11. Lead contractor ensures adequate project management.

## COMPETITION ASSESSMENTS

Most studies undertaken in the sector are of the view that the industry is prone to competition law infringements. They argue that when relevant markets are defined, as opposed to considering the whole industry, competition is often limited

because many firms are specialized or cannot compete on large projects (OECD, 2008). Furthermore, transportation costs and safety or environmental standards are said to constitute formidable entry barriers in some constructions markets. Clearly limited competition and substantial entry barriers can facilitate different types of anticompetitive conduct, including unilateral and horizontal varieties.

In addition, procurement procedures for construction projects are often conducive to collusion. There are at least two reasons for that. First, the procedures are often designed to be transparent so as to discourage corruption. In other words, the identity of the bidders and the amount of their bids are sometimes released to the public, although normally on an individual

basis. Second, procurement officials may intentionally limit the number of bidders, which also facilitates collusion.

### Barriers to entry

#### Structural barriers

#### *Skills*

The barriers to enter the Namibian construction industry, especially the contractor segment for both construction of buildings and infrastructure projects are quite high. In addition to the regulatory barriers and the extent of vertical integration, the industry is also faced with a dire shortage of specialised skills, such as engineers.

Namibia has a serious shortage of engineers, technologists and technicians. There are estimates that the shortage stands at about 50 construction project manager in 2015 and the number will increase to 100 in 2020<sup>6</sup>. In the year 2013 and 2014, the National Planning Commission carried out econometric forecast to provide a holistic picture of skills shortages in the construction industry. The finding of the econometric forecast is supplemented by interviews, meeting, workshops and a literature study with a view to provide a holistic picture of skills shortages in the industry sector and the table below indicates shortages per occupation or occupational category over two periods of 2015 and 2020.

**Table 4: Skill shortages in the construction industry**

Occupations	Shortages 2015	Shortages 2020
<b>Managers</b>		
Construction Project Manager	50	100
Site Manager	80	160
Foreman	100	180
Environmental Manager	30	20
Engineering Manager	30	50
Contract Manager	30	50
Finance Manager	40	60
Architect	20	20
SHE&Q Manager	100	180
<b>Professionals</b>		
Structural Engineer		
Civil Engineer	20	50
Mechanical Engineer	30	60
Electrical Engineer	30	40
Material Engineer	20	40
Environmental Engineer	30	60
Mechanical (Incorporated Engineer)	150	150
Electrical (Incorporated Engineer)	150	150

Occupations	Shortages 2015	Shortages 2020
Civil (Incorporated Engineer)	150	150
Land Surveyor	50	50
Landscaper	30	60
Quantity Surveyor	40	80
Urban and Regional Planner	30	5
<b>Technicians</b>		
Construction supervisor		
Electrical Engineering Technician	100	140
Draughtsperson	60	100
Mechanical Engineering Technician	100	180
Civil Engineering Technician	100	150
<b>Artisans</b>		
Electrician		
Earth Moving Operator	60	120
Crane and Hoist Operator	30	40
Forklift Driver	200	300
Lift Operator	30	60
Surveyor Operators Draftsman	40	80
Welder	300	450
Painter	400	600
Bricklayer	1000	2000
Roofers	200	300
Carpenter	500	1000
Plasterer	200	400
Plumber	300	600
Concreter	200	300
Floor Layer/Tile Setter	150	300
Earth Moving Operator	100	150
Truck Drivers (Specialised)	200	300

Source: Construction skill plan 2014, NTA

#### *Financial cost*

For small construction firms, the start-up costs for entering their local market tend to be low. That may be due to the fact that relatively few pieces of equipment have to be bought. Small firms commonly lease equipment on an as-needed, project-by-project basis.

There are other financial hurdles, though. Customers with substantial projects often require construction firms to post a bond, which acts as a financial guarantee for the customer in the event that the firm is unable or unwilling to fulfil its obligations. The standard amount of the bond varies substantially from project to project, being as little as zero to as much as the

entire value of the contract. These bond requirements may present formidable obstacles to new firms, especially if they are small.

#### *Customer loyalty*

Large construction companies seem to be better able to absorb transportation costs

than smaller firms, so they typically manage to bid across a wider geographic area. Nevertheless, they still face some obstacles. In particular, buyers with projects suitable for large construction firms are more likely to demand a track record of successfully completed relevant projects.

The larger the project, the more important this factor tends to be because the customer will have more at stake and thus will be less likely to take a chance with an unknown firm. This reputational factor may help to explain why the market for very large construction projects tends to be more concentrated, since it favours incumbents most heavily. The comparatively few major construction firms develop strong ties with the largest clients, making it more difficult for smaller or newer firms to acquire the kind of experience and trust needed to satisfy the clients' prequalification requirements. That means new and smaller firms may not even be allowed to bid on major projects, let alone win them.

### *Vertical integration*

The study presumed that some of the larger contractors are backwardly integrating into input markets such as bricks, cement, aggregates and ready mix concrete. The extent of the vertical integration not only increases barriers to entry, but also increases the possibility of coordinated conduct as it creates platforms for information sharing.

The major construction companies especially South African are vertically integrated into infrastructure and construction materials, such as bricks and aggregate products. This increases the possibility of information sharing, as the construction companies are not only competitor but also enjoy each other's custom.

### Regulatory barriers

The industry is not under regulations and the Tender Board only sets regulation on awarding State projects. According to the Tender board criteria a contractor is required to meet a certain financial capacity in order to bid for tenders of a specific value. For example, a construction company is considered capable of performing a project valued at N\$100 million or more if it recorded an average annual turnover of N\$78 million or more over the last two years.

In addition to the stringent financial requirements, companies need to also demonstrate their capacity to handle projects with regard to their human resources. It stipulates the number of part-time or full-time employees with much specialised skills in the contractor's employ to handle certain sized projects. For example, for civil engineering projects valued at N\$100 million or more, two permanent employees with relevant qualifications must have been employed and for electrical engineering, mechanical engineering or special works valued at N\$100 million or more, three qualified employees must have been employed.

### **Competition dynamics**

The study discovered that the industry is prone to collusion due to the following reason.

The product is simple and not very differentiated. Relatively speaking, most construction firms in Namibia are low-tech businesses. They tend to use fairly basic materials to build the same things their competitors build. Many customers do not care which firm they hire so long as the firm carries out the work according to plan and charges a comparatively low price.

Transparent bid procedures. The general public often has access to bid openings for construction projects, at least in auctions for public procurement. Procurement laws and administrative regulations tend to require a certain amount of transparency so as to discourage corruption. Procurement officials may be required to disclose information such as the identity of bidders and the terms and conditions offered in each bid.

Housing, commercial building and public works all depend on flows from other major sectors. Boom and bust cycles in those other sectors therefore affect construction firms, too. Inelastic demand- though subject to fluctuations, the demand for construction works – once it is there – tends to be fairly price inelastic. A town that needs a new sewer system, for example, is probably not going to be sensitive to modest price increases.

A large number of buyers- large and varied customer base buys construction services. It includes individuals, large and small businesses, and municipal and national governments. The size and heterogeneity of these customers make it more difficult for them to compare information than would be the case if there were only a few buyers. Sub-contracting is common. Many construction projects could not be efficiently completed without some degree of sub-contracting. Even large contractors have to rely on smaller, more specialised firms for some aspects of their projects. But sometimes a winning bidder will subcontract part of a project to a firm that would ordinarily be its rival. In fact, firms in the construction sector often consider talking to and partnering with each other to be a normal way of doing business. Whereas in one project companies might truly behave like independent competitors, in another project they might form a joint venture or have a contractor/subcontractor agreement. That kind of complex relationship rises

concerns for competition authorities because it may not be clear whether or not meetings and communications between the companies served a legitimate business purpose.

## PUBLIC POLICY AND PROCUREMENT POLICIES IN NAMIBIA

Public procurement is the purchase of goods and services by the public sector and usually accounts for a large proportion in the Gross Domestic Product. In 2015, government expenditure on construction activities accounted for 21.7 percent of the Gross Domestic Products.

In Namibia, the public procurement process is governed by the Tender Board of Namibia

Act No. 16 of 1996 as the legal framework, which is further strengthened by the Tender Board Regulations No. 191 of 1997 and the Tender Board Code of procedures No. 191 of 1997. The purpose of the Tender Board of Namibia Act No. 16 of 1996 is to regulate the procurement of goods and services for, the letting or hiring of anything or the acquisition or granting of rights for or on behalf of, and the disposal of property of, the Government; to establish the Tender Board of Namibia and to define its functions; and to provide for incidental matters.

The Namibian Tender Board is the custodian of public procurement. The global assessment of 2007 found the public procurement system in Namibia to be robust in terms of laws and regulations but it is weak when it comes to practice and

implementation (Links F., Daniels C, 2011). The other concern is that the current tender act does not make provisions to deal with malpractices (cartels) of market players once perceived or presented to the tender board.

In 2013, government made a commitment to amend the Tender Board Act, 1996 (Act No. 16 of 1996) regulations by attaching conditions to the awarding of tenders by a way of classifications. This directive was viewed by government as an empowerment policy of reserving public work to Namibian and previously disadvantaged groups with a view to promoting Namibian enterprises growth (Tender Board of Namibia, 2013). These changes take precedence to the Public Procurement Act that was passed in December 2015.

**Table 5: Categorisation of tenders and criteria of awarding**

Where the tender amount	Such tender is reserved for the following categories of the entities
A) Does not exceed N\$20 million	Small and medium enterprise
B) Exceed N\$ 20 million but does not exceed N\$ 60 million	Entities which have equity participation of 100 percent that is owned by Namibian persons of which no less than 30 percent is owned by previously disadvantaged Namibian persons
C) Exceed N\$ 60 million	All entities but preference will be given to entities which has equity participation of no less than 51 percent that is owned by Namibian persons of which no less than 30 percent is owned by previously disadvantaged Namibian persons

The table above illustrates the information contained in a circular issued by the Tender Board to all permanent secretaries of all ministries as well as to some administrative heads of government agencies and offices. Since most of the major construction projects are issued by government, many complaints have been aimed to change government's position in the issuing of tenders to foreign companies.

To address the plight of Namibian construction companies, the Namibian Planning and Construction Council

(NPCC) was proposed in the Namibian Planning and Construction Bill No. 7 of 2010. This Bill is yet to be enacted into law more than 4 years after it was introduced in Parliament. Nonetheless, the best intentions of the Bill are encapsulated in what the NPCC is tasked with as a regulating authority of the construction industry. Some functions of the NPCC are the following:

- to protect the local industry against unfair competition;
- to promote research, development and use of local materials;

- to promote compliance to technical standards, safety standards and relevant statutory laws in the construction industry;
- to recommend to the Minister conditions under which a foreign firm may engage in construction industry in Namibia;
- to standardize the procurement procedures according to international recognized practice;
- to harmonize construction industry with the regional construction standards;
- to promote and facilitate technology

transfer and innovations in the construction industry; and

- to promote health and safety conditions and sound labour relations as well as the protection of the environment.

## PUBLIC PROCUREMENT REFORMS

In order to address some of the said concerns, Government passed the new law, the Public procurement Act of 2015 to replace the Tender Board Act of 1996. This act is not yet enforced until the regulations are gazetted.

This new act will make provision to *regulate the procurement of goods, works and services, the letting or hiring of anything or the acquisition or granting of rights for or on behalf of, and the disposal of assets of, public entities; to establish the Procurement Policy Unit and the Central Procurement Board of Namibia and provide for their powers and functions; to provide for the procurement committees and procurement management units and their powers and functions; to provide for the appointment of bid evaluation committees and their functions; to provide for procurement methods; to provide for bidding process, bidding challenge and review; to provide for*

*preferences to categories of persons, goods manufactured, mined, extracted, produced or grown in Namibia, to Namibian registered small and medium enterprises, joint venture businesses, local suppliers, contractors and service providers; and to provide for incidental matters.*

The law, once implemented, will set out the procedures and the methods to be followed in the public procurement system and will come with measures and standards that speak to the maintenance of ethical conduct by both procuring entities and officials as well as bidders.



## Endnotes

- 1 Appendix one
- 2 National Planning Commission Annual report 2014
- 3 Construction Industry Federation of Namibia, 2012
- 4 Palani, K. Challenges Facing the Construction Industry: A Botswana Perspective. Retrieved from <https://www.irbnet.de/daten/iconda/CIB8943.pdf>
- 5 A – represent companies whose annual turnover is above N\$ 200 Million, B- turnover between N\$100 Million to N\$200 million; C- turnover between N\$50 Million to N\$100 million; D- turnover between N\$20 Million to N\$50 million; E- turnover between N\$10 Million to N\$20 million, F- turnover between N\$5 Million to N\$10 million; G- turnover between N\$2 Million to N\$4 million; H- turnover less than N\$2 million.
- 6 Construction skill plan 2014, NTA



# CHAPTER 4

THE CONSTRUCTION INDUSTRY IN  
SOUTH AFRICA



## GENERAL STATE OF COMPETITION

### Brief overview of the construction industry

The South African construction industry comprises of a diverse spectrum of activities ranging from the design of new construction projects to post-construction maintenance and repairs. Market participants in this industry also offer other services such as rehabilitation of structures, renovation of structures, extension of structures, demolition of existing structures, erection and dismantling of prefabricated buildings, construction of temporary structures, as well as the erection and dismantling of scaffolding (Who Owns Whom, 2015).

Accordingly, the construction industry's activities in South Africa can be broadly divided into the following subgroups:

- a) General residential building construction;
- b) Industrial construction;
- c) Commercial building construction; and
- d) Heavy civil construction.

According to Who Owns Whom (2015), the key areas of infrastructure development in South Africa include the following activities:

- a) Transport infrastructure; inclusive of roads, railways, stations, bridges, airports, waterways and canals, marine ports and harbours;
- b) Public utilities; inclusive of water supply, sanitation and sewage, power stations, telecommunications network and waste disposal; and
- c) Public works; this includes the provision of social housing, sports and recreation facilities, hospitals and clinics as well as educational institutions.

### Size and contribution to GDP

After the dawn of democracy, the South African government was faced with the task of addressing backlogs in social and economic infrastructure inherited from the past political regime. This implied that infrastructure developments such as housing, electricity and roads had to be implemented on a wider scale. This placed the construction industry at the forefront of government's policy objectives of re-addressing past infrastructure development disparities.

According to Statistics South Africa (2011)<sup>1</sup>, the construction industry's share of income was R268 100 million in 2011 as compared to R169 249 million in 2007. This total income represents an annual increase of 12.2% per annum between 2007 and 2011. This annual increase in the construction industry's share of income further demonstrates the important role played by the construction industry in realising the development goals of the country.

Furthermore, the building and construction industry had a share of approximately 40% of total gross fixed investment in South Africa and contributed about 4% to nominal Gross Domestic Product in the second quarter of 2015. The construction industry is further very labour intensive providing about 1 million jobs nationwide, of which 400,000 were in the formal sector. In addition, the construction industry added about R138.9 billion in 2014 to South Africa's GDP (Who Owns Whom, 2015).

### Construction Industry Development Board

Participation in public sector construction tenders in South Africa is regulated by the Construction Industry Development Board ("CIDB"). The CIDB Act, 2000 provides for an establishment of the CIDB in order to

implement an integrated strategy for the reconstruction, growth and development of the construction industry. Therefore, firms that wish to participate in public sectors' tenders have to be registered with the CIDB under relevant categories.

There are various contractor registration categories under the CIDB system. Broad categories includes Civil Engineering ("CE"), Electrical Engineering Works - Building ("EB"), Electrical Engineering Works - Infrastructure ("EP"), General Building ("GB"), Mechanical Engineering ("ME") and Specialist Works ("SW").

The amended CIDB regulations (2013) further provide a ranking framework for construction projects based on both track record and available capital. This criterion allows different firms to tender for different projects in grades 1 to 9. Therefore, the CIDB rating system regulates the extent to which firms can participate in public sector construction tenders.

### History of collusion

In preparation to host the single biggest tournament in the world, South Africa fast tracked its infrastructure roll-out programme. Accordingly, six years before the start of the 2010 FIFA World Cup tournament, simultaneous construction projects such as construction of new stadia, road networks and the construction of railway lines took place throughout the country. Construction companies however took advantage of the simultaneous construction activities and engaged in various collusive agreements.

Initial suspicion of possible anti-competitive behaviour by construction companies emerged after the National Treasury and various local municipalities expressed concerns regarding the sharp increases in costs of constructing the 2010 world cup stadia. Furthermore, international

experience of bidding rigging in the construction industry, specifically in the United Kingdom where widespread bid rigging practises were uncovered between 2000 and 2006, prompted the Commission to initiate an investigation. Other international experiences of bid rigging in construction projects in the USA, South Korea and Netherlands also prompted the Commission in its decision to conduct its own investigation.

Accordingly, the Commission initiated an investigation into the construction industry on the 1st of February 2009 relating to tenders for the construction of 2010 FIFA World Cup stadia. Shortly thereafter, the second investigation was initiated on the 1st of September 2009 and this covered all large and small tenders for construction projects. Resulting from these initiations, the Commission received approximately 150 marker applications and 65 CLP<sup>2</sup> applications which implicated the majority of medium and large construction firms. These included big construction companies such as Murray and Roberts, Group Five, Stefanutti Stocks, WBHO and Aveng.

Given this response from the construction industry, the Commission developed and launched a fast track settlement programme on the 1st of February 2011. The principles of the fast track settlement programme were adopted from similar programmes utilised by the Office of Fair Trade (“OFT”) and the Netherlands Competition Authority (“NMA”). The aim of this programme was to incentivise firms to enter into a comprehensive settlement with the Commission which was financially beneficial to them.<sup>3</sup> Through the fast track settlement programme, construction firms

admitted to bid-rigging 298 contracts to the value of R111.9 billion. Of these contracts 141 were non-prescribed<sup>4</sup>. The Commission concluded settlements with the majority of the firms involved in bid rigging and collusive tendering of projects that took place between 2006 and 2009 in 2013. The total administrative penalties from that settlement process amounted to R1.46 billion.<sup>5</sup>

### Industry Value Chain

Extensive upstream and downstream linkages exist in the construction sector in South Africa. This vertical integration allows contractors to function more efficiently in delivering construction services. As such, some of the largest construction companies are constantly looking to acquire an important input supplier. For instance, Raubex, largely a road contractor has recently acquired an important input supplier for bitumen, Tosas (Who Owns Whom, 2015).

The construction sector's value chain is extensive and comprises of manufacturers as well as importers of components, suppliers of tools, equipment, scaffolding, heavy construction machinery, construction vehicles and building materials. The building material group comprises amongst others of construction aggregate (including sand, gravel, crushed stone, slag, geo-synthetic aggregates and recycled concrete), cement, reinforcing steel and sections, roofing and vertical cladding, particleboard and medium-density, plumbing pipes and fittings as well as flooring (Who Owns Whom, 2015).

Plants hire and transportation comprising of bulldozers, graders, face shovel excavators, dump trucks, rock breakers and front-end loaders. Water trucks, vibrating rollers and compressors also play a pivotal role in this industry. Drilling equipment such as drilling rigs and generators, truck mounted, rough terrain, all terrain or lattice boom cranes further play an important role in the value chain of this industry (Who Owns Whom, 2015).

### Number of operators

The CIDB grading system is used to analyse the number of construction firms in South Africa. Table 1 and Table 4 below are tables extracted from the CIDB Annual Report<sup>6</sup>. Market shares for the construction industry were calculated using these two tables. These are the numbers of registered contractors in South Africa divided according to class of work and then further divided by province. These numbers are analysed according to grades, i.e. Grade 1 to 9, as set by the CIDB grading system.

### Register of Contractors

The Register of Contractors has been established in terms of the CIDB Act (Act 38 of 2000). It grades and categorises contractors according to financial and works capability. It is mandatory for public sector clients to apply the Register when considering construction works tenders. The Register of Contractors facilitates public sector procurement and promotes contractor development and has been firmly established as a key component of the public sector procurement regime.

**Table 1: Number of Contractor Registrations, as at end June 2016**

Grade	CE	EB	EP	GB	ME	SW	Total
1	29 560	1 910	6 823	6 2202	6 688	25 082	132 265
2	1 729	175	203	2 409	305	767	5 588
3	1 007	69	130	669	138	251	2 264
4	1 036	131	262	935	215	230	2 809
5	689	104	190	575	142	168	1 868
6	820	69	213	694	153	129	2 078
7	484	49	108	385	73	77	1 176
8	175	9	39	146	39	30	438
9	83	3	25	46	33	14	204
<b>Total</b>	<b>35 583</b>	<b>2 519</b>	<b>7 993</b>	<b>68 061</b>	<b>7 786</b>	<b>26 748</b>	<b>148 690</b>

Note: Contractors may be registered in multiple classes of work

### Provincial Registration Breakdown

**Table 2: Provincial registration breakdown**

Province	Grade 1*	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Total
EC	10 003	422	167	244	143	127	77	27	3	11 213
FS	3 716	193	65	106	53	76	23	14	4	4 250
GP	24 690	1 014	306	537	339	457	318	167	93	27 921
KZN	4 680	1 393	629	490	290	294	152	48	15	7 991
LM	7 354	262	105	223	121	165	90	20	3	8 343
ML	6 574	290	101	159	126	126	65	16	3	7 460
NW	5 404	254	81	109	53	67	38	13	1	6 020
NC	1 680	126	32	32	25	30	7	8	0	1 940
WC	3 848	266	106	175	76	119	86	33	18	4 727
<b>Total</b>	<b>67 949</b>	<b>4 220</b>	<b>1 592</b>	<b>2 075</b>	<b>1 226</b>	<b>1 461</b>	<b>856</b>	<b>346</b>	<b>140</b>	<b>79 865</b>

Note: There are 18,248 foreign contractors registered in Grade 1 and foreign contractors represent 21.2% in Grade 1.

\*Data for Grade 1 are based on 2015 CIDB.

The table above shows the **provincial breakdown in registrations across Grades 2 to 9**. The Gauteng Province is the busiest province while the Northern Cape Province

is the least busy province. Most of the larger firms have established head offices in the Gauteng province but conduct operations across all provinces. There is a total of

79865 registered contractors, however, there is a further 18248 foreign contractors registered as Grade 1 contractors.

## Market Shares

### Market Share per Grade

**Table 3: Market Shares per Grade as at June 2016**

Grade	CE	EB	EP	GB	ME	SW	Total
1	83.1%	75.8%	85.4%	91.4%	85.9%	93.8%	89.0%
2	4.9%	6.9%	2.5%	3.5%	3.9%	2.9%	3.8%
3	2.8%	2.7%	1.6%	1.0%	1.8%	0.9%	1.5%
4	2.9%	5.2%	3.3%	1.4%	2.8%	0.9%	1.9%
5	1.9%	4.1%	2.4%	0.8%	1.8%	0.6%	1.3%
6	2.3%	2.7%	2.7%	1.0%	2.0%	0.5%	1.4%
7	1.4%	1.9%	1.4%	0.6%	0.9%	0.3%	0.8%
8	0.5%	0.4%	0.5%	0.2%	0.5%	0.1%	0.3%
9	0.2%	0.1%	0.3%	0.1%	0.4%	0.1%	0.1%
<b>Total</b>	<b>100%</b>						

Note: Contractors may be registered in multiple classes of work

CE – Civil, EB/EP – Electrical, GB – Building, ME – Mechanical, SW – Specialist class of works

The table above shows **the market shares of registered contractors per grade**. Grade 1 holds the majority market share of 89% across all classes of work, with specialist class of work (SW) being the highest by 93.8% market share and electrical (EB) being the lowest by 75.8% market share. Grade 9 holds the least market share across all classes of work as they all hold less than 1% market share. This goes to show that

the higher the grade, the lesser the number of contractors registered. This may be due to higher barriers to entry. Grades 1 to 7 of civil engineering holds most of the market share whilst Grade 8 and 9 hold less than 1% of the market share combined. This is the same with electrical (both EB and EP). Grade 1 to 6 of general building (GB) and mechanical engineering (ME) contractors holds the most market share while Grade 7 to 9 holds less than 1% market share each.

Grade 3 to 9 of specialist class of works (SW) holds less than 1% market share each, majority of the market share is found in Grade 1 with far less in Grade 2. In total, most contractors are registered as Grade 1 contractors, only 3.8% market share is held by grade 2 contractors and Grade 3 to 9 contractors hold less than 2% market share each (Grade 7 to 9 holding less than 1% market share each).



## Market Shares per class of work

**Table 4: Market Shares per class of work as at June 2016**

Grade	CE	EB	EP	GB	ME	SW	Total
1	22.3%	1.4%	5.2%	47.0%	5.1%	19.0%	100.0%
2	30.9%	3.1%	3.6%	43.1%	5.5%	13.7%	100.0%
3	44.5%	3.0%	5.7%	29.5%	6.1%	11.1%	100.0%
4	36.9%	4.7%	9.3%	33.3%	7.7%	8.2%	100.0%
5	36.9%	5.6%	10.2%	30.8%	7.6%	9.0%	100.0%
6	39.5%	3.3%	10.3%	33.4%	7.4%	6.2%	100.0%
7	41.2%	4.2%	9.2%	32.7%	6.2%	6.5%	100.0%
8	40.0%	2.1%	8.9%	33.3%	8.9%	6.8%	100.0%
9	40.7%	1.5%	12.3%	22.5%	16.2%	6.9%	100.0%
<b>Total</b>	<b>23.9%</b>	<b>1.7%</b>	<b>5.4%</b>	<b>45.8%</b>	<b>5.2%</b>	<b>18.0%</b>	<b>100.0%</b>

Note: Contractors may be registered in multiple classes of work

CE – Civil, EB/EP – Electrical, GB – Building, ME – Mechanical, SW – Specialist class of works

The table above shows **the market shares of registered contractors per class of work**. General building (GB) contractors hold the highest market share (45.8%) of contractors in South Africa, followed by civil engineering (CE) contractors with 23.9% market share, then specialist class of works contractors with 18% market share, then electrical (EP) and mechanical

engineering contractors with approximately 5% market share each and lastly electrical (EB) contractors with less than 2% market share i.e. 1.7%. Most civil engineers (CV) are Grade 3 contractors and the least are Grade 1 contractors. Most electricians (EB) are Grade 4 contractors and the least are Grade 1 contractors. Most electricians (EP) are Grade 9 contractors and the least are

Grade 2 contractors. Most General Builders (GB) are Grade 1 contractors and the least are Grade 9 contractors, this is the same for mechanical engineers (ME). Most specialist (SW) are Grade 1 contractors and the least are Grade 6 contractors. Although there is no specific pattern to this, it is clear that more contractors are general builders and very few are electricians (EB).



## Market Shares per province per Grade

**Table 5: Market Shares per province per Grade as at June 2016**

Province	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Total
EC	14.7%	10.0%	10.5%	11.8%	11.7%	8.7%	9.0%	7.8%	2.1%	14.0%
FS	5.5%	4.6%	4.1%	5.1%	4.3%	5.2%	2.7%	4.0%	2.9%	5.3%
GP	36.3%	24.0%	19.2%	25.9%	27.7%	31.3%	37.1%	48.3%	66.4%	35.0%
KZN	6.9%	33.0%	39.5%	23.6%	23.7%	20.1%	17.8%	13.9%	10.7%	10.0%
LM	10.8%	6.2%	6.6%	10.7%	9.9%	11.3%	10.5%	5.8%	2.1%	10.4%
ML	9.7%	6.9%	6.3%	7.7%	10.3%	8.6%	7.6%	4.6%	2.1%	9.3%
NW	8.0%	6.0%	5.1%	5.3%	4.3%	4.6%	4.4%	3.8%	0.7%	7.5%
NC	2.5%	3.0%	2.0%	1.5%	2.0%	2.1%	0.8%	2.3%	0.0%	2.4%
WC	5.7%	6.3%	6.7%	8.4%	6.2%	8.1%	10.0%	9.5%	12.9%	5.9%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100.0%</b>						

Note: There are 18,248 foreign contractors registered in Grade 1 and foreign contractors represent 21.2% in Grade 1.

\* Data for Grade 1 are based on 2015 CIDB.

The table above shows **provincial registration market shares per grade and per province**. Grade 1 contractors hold the largest market share of 36.3% in Gauteng and the least market share of 2.5% in Northern Cape, this is the same for Grade 4 to Grade 9 contractors (that is 25.9% and 1.5%, 27.7% and 2.0%, 31.3% and 0.8%, 37.1% and 0.8%, 48.3% and 2.3% and 66.4% and 0.0% respectively). Whereas for Grade 2 (33.0% and 3.0%) and Grade 3 (39.5% and 2.0%) contractors, hold more market share in KwaZulu-Natal and the least in Northern Cape. Gauteng and KwaZulu-Natal make up over 50% of contractor registrations. Foreign contractors are only in Grade 1, there are no foreign contractors in Grade 2 to 9.

The busiest province is Gauteng with a market share of 35%, followed by Eastern Cape with 14% market share, then Limpopo with 10.4% market share, then KwaZulu-Natal with 10% market share, then Mpumalanga with 9.3% market share, then

North West with 7.5% market share, then Western Cape with 5.9% market share, Free State with 5.3% market share and lastly Northern Cape with 5.9% market share. Foreign contractors, however, constitute 21.2% of the market share in South Africa.

### Market Capitalisation

According to Who Owns Who (2015), Aveng Limited is the largest construction and engineering company by revenue in South Africa. The other larger construction companies includes Murray & Roberts, Group Five Ltd, Stefanutti Stocks Holdings Ltd, the Wilson Bayley Holmes-Ovcon Ltd subsidiary, WBHO Construction (Pty) Ltd, Basil Read Holdings Ltd and Calgro M3 (Who Owns Who, 2015).

In addition, below is the split of market capitalisation<sup>7</sup> of heavy of heavy construction companies in 2015:

**Table 6: Market capitalisation of heavy construction companies in 2015**

Company name	Market capitalisation
WBHO	R7.3 billion
Murray and Roberts	R5.2 billion
Raubex	R3.3 billion
Calgro M3	R2.7 billion
Group Five	R2.1 billion
Aveng	R1.5 billion
Stefanutti Stocks	R800 million
Basil Read	R500 million
Esor	R100 million

Source: Price Water Coppers, 2015

### Ownership pattern

The analysis in this section is limited to large construction companies due to the availability of information regarding ownership patterns for these companies in the public domain. In addition, all the

reviewed companies in this section are listed on the Johannesburg Stock Exchange (“JSE”). It is also clear from the subsequent analysis that public shareholding in these companies is greater than non-public shareholding. More so, in most instances, institutional investors such as fund managers are majority shareholders in some of these companies. Below, we briefly outline each of these construction companies’ shareholdings.

### Aveng

As at 30 June 2015, about 94.24% of Aveng’s shares were held by the public while the remainder; 5.76% reflected non-public shareholding of the company. The non-public shareholding of Aveng comprise of Aveng’s directors, Aveng Limited Share Purchase Trust, Community Investment Trust and Aveng’s Empowerment Trust. Below we tabulate the split of Aveng’s shareholding between public and non-public shareholding as well as investment managers’ shareholding as at 30 June 2015.

**Table 7: Aveng’s public and non-public shareholding as at 30 June 2015**

Shareholders	% of issued capital
Directors	0.19
Aveng Limited Share Purchase Trust	1.45
Community Investment Trust	2.06
Aveng Empowerment Trust	2.06
Non-public shareholders	5.76
Public shareholders	94.24
Total	100.00

Source: Aveng Integrated Annual Report 2015

**Table 8: Aveng’s investment management shareholding as at 30 June 2015**

Investment management shareholding	% of issued capital
PIC	13.38
Allan Gray Investment Council	13.26
Visio Capital Management	7.27
Momentum Asset Management	6.61
STANLIB Asset Management	5.39
Investec Asset Management	5.16
Skagen A/S	5.04
Dimensional Fund Advisers	4.40
Kagiso Asset Management	3.46

Source: Aveng Integrated Annual Report 2015

Public shareholders account for a significant portion of Aveng’s ownership; PIC and Allan Gray are some of the biggest shareholders in Aveng. In addition, other investments companies such as Investec, STANLIB and Momentum also have significant shares in Aveng. This demonstrates the importance of institutional investors such as investment managers in the ownership pattern of construction companies in South Africa.

### WBHO

As at 30 May 2016, about 78.72% of WBHO’s shares were held by the public while the remainder; 21.28% reflected non-public shareholding of the company. The non-public shareholding comprises of WBHO’s directors and associates, empowerment schemes and share trusts. Below we tabulate the split of WBHO shareholding as well as the beneficial shareholders in WBHO as at 30 May 2016.

**Table 9: WBHO’s public and non-public shareholding as at 30 May 2016**

Shareholders	% of issued capital
Directors and Associates	1.76
Empowerment schemes	15.42
Share Trusts	4.11
Non-public shareholders	21.28
Public shareholders	78.72
Total	100.00

Source: WBHO

**Table 10: WBHO beneficial shareholding as at 30 May 2016**

Beneficial shareholders holding	% of issued capital
Akani investment Holdings	15.42
Government Employees Pension Fund	12.20
Allan Gray	7.32
Sanlam	6.69
WBHO Management Trust	3.97

Source: WBHO

Public shareholders account for a significant portion of WBHO’s ownership. It is also evident from the above tables that PIC (Government Employees Pension Fund) and Allan Gray are some of the biggest shareholders in WBHO. In addition, other investments companies such as Sanlam also have significant shares in WBHO. This demonstrates the importance of institutional investors such as investment managers in the shareholdings of construction companies in South Africa.

## Group Five

As at 30 June 2015, about 88.12% of Group Five's shares were held by the public while the remainder; 11.88% was held by non-public shareholders. Below, we tabulate Group Five's shareholders split as well as investment managers' shareholding in Group Five as at 30 June 2015.

**Table 11: Group Five's public and non-public shareholding as at 30 June 2015**

Shareholders	% of issued capital
Directors of the company	0.04
Executive committee members of the company	0.11
Senior management of the company	0.07
Empowerment Trusts	11.64
Share trusts	0.02
Non-public shareholders	11.88
Public shareholders	88.12
Total	100.00

Source: Group Five Integrated Annual Report 2015

**Table 12: Group Five's beneficial shareholders holding more than 5% of issued shares as at 30 June 2015**

Beneficial shareholders holding 5% or more	% of issued capital
Government Employees Pension Fund	15.66
Group Five Limited Black Professionals Staff Trust	11.01
Sanlam	10.35
PSG Konsult	9.12
Allan Gray	7.28

Source: Group Five Integrated Annual Report 2015

As is the case for Aveng and WHBO, public shareholders account for a significant portion of Group Five's ownership. It is also evident from the above tables that PIC (Government Employees Pension Fund) and Sanlam are some of the biggest shareholders in Group Five. In addition, other investments companies such as PSG Konsult and Allan Gray also have significant shareholding in Group Five.

## Stefanutti Stocks

As at 28 February 2015, about 85.79% of Stefanutti Stocks 'shares were held by the public while the remainder; 14.21% were held by non-public shareholders. Below, we tabulate the split of Stefanutti Stocks shareholding as well as beneficial shareholders in Stefanutti Stocks as at 28 February 2015.

**Table 13: Stefanutti Stocks public and non-public shareholding as at 28 February 2015**

Shareholders	% of issued capital
Directors and associates of the company and subsidiaries	7.22
Own holdings	3.57
Share trusts	3.42
Non-public shareholders	14.21
Public shareholders	85.79
Total	100.00

Source: Stefanutti Stocks Integrated Annual Report 2015

**Table 14: Stefanutti Stocks beneficial shareholders as at 28 February 2015**

Beneficial shareholders	% of issued capital
Sanlam Group	21.67
Coronation fund Managers	11.87
PSG	8.32
Meyburgh Family Trust	4.40
Stefanutti Stocks Investment Holding	3.57
Government Employees Pension Fund	3.18
MMI	3.04

Source: Stefanutti Stocks Integrated Annual Report 2015

As is the case for other larger construction companies, public shareholders account for a significant portion of Stefanutti Stocks's ownership. It is also evident from the above tables that Coronation fund Managers and PSG are some of the biggest shareholders in Stefanutti Stocks. In addition, PIC (Government Employees Pension Fund) has a stake in Stefanutti Stocks as well.

## Murray and Roberts

As at 30 June 2015, about 90.54% of Murray and Roberts 'shares were held by the public while the remainder; 9.48% was held by non-public shareholders. Below we tabulate split of ownership and investment managers' shareholding in Murray and Roberts as at 30 June 2015.

**Table 15: Murray and Roberts's public and non-public shareholding as at 30 June 2015**

Shareholders	% of issued capital
Non-public shareholders	9.48
Public shareholders	90.52
Total	100

Source: Murray and Roberts Integrated Annual Report 2015

**Table 16: Murray and Roberts's public and non-public shareholding as at 30 June 2015**

Investment management shareholding	% of issued capital
Allan Gray Investment Council	18.86
PIC	13.44
Coronation Asset Management	11.10
Sanlam Investment Management	7.03
Old Mutual Plc	6.43
Kagiso Asset Management	4.82
Dimensional Fund Advisors	4.21

Source: Murray and Roberts Integrated Annual Report 2015

Public shareholders account for a significant portion of Murray and Roberts's ownership. It is also evident from the above tables that PIC and Allan Gray are some of the biggest shareholders in Murray and Roberts. In addition, other investments companies such as Sanlam Investment Management and Kagiso Asset Management also have significant shares in Murray and Roberts. Basil Read

As at 31 December 2015, about 99.98% of Basil Read 'shares were held by the public while the remainder; 0.02% was held by non-public shareholders. Below we tabulate

the split of Basil Read shareholding as well as investment managers accounting for more than 3% shareholding in Basil Read as at 31 December 2015.

**Table 17: Basil Read public and non-public shareholding as at 31 December 2015**

Shareholders	% of issued capital
Directors and associates (excluding employee share schemes)	0.01
Treasury	0.01
Non-public shareholders	0.02
Public shareholders	99.98
Total	100

Source: Basil Read Integrated Annual Report 2015

**Table 18: Basil Read fund managers shareholders as at 31 December 2015**

Fund managers with a holding greater than 3% of the issued shares	% of issued capital
Allan Gray	23.03
Prudential Investment Managers	9.10
PSG Asset Management	7.54
Public Investment Corporation	5.92
Argon Asset Management	3.06

Source: Basil Read Integrated Annual Report 2015

As is the case for the other larger construction companies, public shareholders account for a significant portion of Basil Read's ownership. It is also evident from the above tables that Allan Gray and Prudential Investment Managers are some of the biggest shareholders in Basil Read. In addition, investments companies such as the PIC and PSG Asset

Management also have significant shares in Basil Read.

## Esor

As at 29 February 2016, about 62.94% of Esor 'shares were held by the public while the remainder; 37.06% was held by non-public shareholders; this includes directors and associates of the company holdings, strategic holdings as well as own holdings. Below we tabulate Esor's shareholding split as well as beneficial shareholders accounting for more than 3% shareholding in Esor's shares as at 29 February 2015.

**Table 19: Esor public and non-public shareholding as at 29 February 2016**

Shareholders	% of issued capital
Directors and associates of the company holdings	2.96
Strategic holdings	31.76
Own holdings	2.34
Non-public shareholders	37.06
Public shareholders	62.94
Total	100.00

Source: Esor Integrated Annual Report 2016

**Table 20: Esor beneficial shareholding as at 29 February 2016**

Beneficial shareholders with a holding greater than 3% of the issued shares	% of issued capital
Natha, KP	31.76
Golding, MJA	8.19
Esor Broad Based Share Ownership Scheme	5.32
MMI Holdings	3.23

Source: Esor Integrated Annual Report 2016

The ownership profile for Esor is different compared to the other larger construction companies. Whilst public shareholders still

accounts for the bigger portion of Esor's ownership, the non-public shareholding is however larger compared to the other larger construction companies. In addition, investment managers such as PIC and Allan Gray that have shareholding interests in other larger construction companies do not currently have any interest in Esor.

### Calgro M3

As at 29 February 2016, about 64.57% of Calgro M3's shares were held by the public while the remainder; 35.43% was held by non-public shareholders; this includes directors and associates of the company holdings. Below we tabulate the split in Calgro M3 shareholding as well as shareholders accounting for more than 3% shareholding in Calgro M3 shares as at 29 February 2015.

**Table 21: Calgro M3 shareholders as at 29 February 2016**

Shareholders	% of issued capital
Directors and associates of the company holdings	35.43
Non-public shareholders	35.43
Public shareholders	64.57
Total	100.00

Source: Calgro M3 Integrated Annual Report 2016

**Table 22: Calgro M3 beneficial shareholders as at 29 February 2016**

Beneficial shareholders with a holding greater than 3% of the issued shares	% of issued capital
Pershing LLC	22.53
BPM Family Trust	11.01
Snowball Wealthy Pty Ltd	10.39
DNS Trust	8.26
FJS Trust	7.31
Mr Leo Chih Hao Chou	4.88
Hendrik Brand Trust	4.74
Mr Willem Jakobus Lategan	3.97

Source: Calgro M3 Integrated Annual Report 2016

As is the case for Esor, the ownership profile of Calgro M3 is different as compared to the other larger construction companies. Whilst public shareholders still accounts for the bigger portion of Calgro M3's ownership profile, the non-public shareholding is however larger as compared to the other larger construction companies. In addition, investment managers such as PIC and Allan Gray that have a stake in other larger construction companies do not currently have any interests in Calgro M3.

### Raubex

As at 28 February 2015, about 71.5% of Raubex' shares were held by the public while the remainder; 28.5% were held by non-public shareholders; this includes directors of the company, directors of subsidiaries as well as employees of Raubex. Below, we tabulate the split in Raubex's shareholding as well as beneficial shareholders accounting for more than 5% of the issued shares as at 28 February 2015.

**Table 23: Raubex's public and non-public shareholding as at 28 February 2015**

Shareholders	% of issued capital
Directors of the company	24.00
Directors of subsidiaries	3.60
Employees	0.90
Non-public shareholders	28.50
Public shareholders	71.50
Total	100.00

Source: Raubex Integrated Report 2015

**Table 24: Raubex's public and non-public shareholding as at 28 February 2015**

Beneficial shareholders with a holding greater than 5% of the issued shares	% of issued capital
Raubenbel (Pty) Ltd	13.7
Government Employee Pension Funds	11.0
Old Mutual Group	9.1
Kenworth (Pty) Ltd	8.0

Source: Raubex Integrated Report 2015

The ownership profile of Raubex is also different compared to the other larger construction companies. Whilst public shareholders still accounts for the larger portion of Raubex's ownership profile, the non-public shareholding is however larger as compared to the other construction companies. However, PIC (Government Employee Pensions) also has a significant stake in Raubex. The other major shareholders are also companies such as Raubenbel and Kenworth. It thus appears that for Raubex, institutional shareholders such as investment managers play a limited role in the ownership profile of this company.

### Summary of the ownership pattern

For all the reviewed construction companies, public shareholders accounts

for a significant larger portion of the ownership profile of these companies as compared to non-public shareholders. However, the ownership profiles for three companies; Calgro M3, Esor and Raubex are significantly different to other companies in that non-public ownership is slightly more than the other reviewed companies.

From a public shareholding analysis, institutional investors such as fund managers have a relatively significant stake in most of these companies. In addition, Government Employees Pensions Fund through their investment manager, Public Investment Corporation (“PIC”) has shareholding interests in seven of the nine companies profiled. It thus appears that institutional investors such as fund managers play an important role in the ownership profile of larger construction companies in South Africa.

### Barriers to entry

Depending on the scale of entrance, barriers to entry in the construction industry will accordingly vary. Small contractors such as those classified under CIDB grading 1 face relatively lower barriers to entry in this market (Who Owns Whom, 2015). As per table 1, the vast majority of CIDB graded firms in South Africa are characterised as grade 1.

This may be indicative that entrance in this category is relatively easier as compared to the higher grading levels. However, barriers to entry increase when contractors tender for high value projects; graded levels 2 to 9 under the CIDB rating system. Market participants submit that for high valued projects; some of the barriers to entry include capital requirements, access to equipment, complying with BEE credentials and attracting skilled workers. In addition, the incumbent larger construction companies are dominant and this further

acts as barriers to entry for any new entrant (Who Owns Whom, 2015).

The main barriers to entry in the construction industry can thus be summarised as following:

- a) Registration compliance and regulatory requirements;
- b) High initial capital requirements;
- c) Operating costs that are substantial given that this industry has low profit margins;
- d) Requirement to possess industry specific knowledge;
- e) Need to attract skilled labour whilst the supply thereof is limited.

In addition, the implementation of the CIDB rating system can also act as an additional barrier to entry for public tenders as it limits the number of firms that can participate in this industry. More so, the CIDB ratings’ dual requirements of financial capacity and work capacity further acts as significant barrier to entry for those other firms that are capable to participate in this industry but for the track record.

On the basis of the above, it appears that barriers to entry are high for high valued projects that are typically classified between grades 2 to 9.

### PRICE DETERMINATION

The South African construction sector makes use of a bidding process. In some cases, the only thing that matters in the construction bidding process is presenting the lowest prices to the owner and in some cases the contractor’s qualifications are as important. Construction bidding is a process in which a general contractor (and, in some cases, the architect) is selected to work on a construction project. The bidding process is the process whereby the prime contractor receives subcontractor and vendor prices for labour, material and/or the combination

of the two. One needs to simplify facts, reduce errors and omissions, relying upon speed and efficiency to produce relatively accurate results.

Construction estimating consists of three parts: quantity survey, price extension and the bidding itself. Quantity survey is the physical removal of quantities from the working drawings and specifications. Price extension is the portion of the estimate in which the contractors “price out” the individual items, such as pricing out labour and material using current labour rates and material prices. Depending on the type and size of the projects and the bid strategy the prime contractor’s portion of the total estimate may be only 5% to 20%. Knowing how to bid construction jobs makes the difference between success and bankruptcy for a construction contractor. If a contractor does not know how to bid on construction jobs, they will have no chance at turning a profit.

Obviously every bid is going to take basic costs, like materials and labour, into account, but there are other factors the company will consider before choosing which contractor to hire. These include:

- The quality of work to be done.
- The projected timeframe and completion date
- professionalism during the bidding process, as well as
- the personal experiences of the references for that contractor

Another consideration when preparing an estimate is the actual cost of the project. It is a well-accepted (or at least tolerated) fact that construction projects typically cost more than the estimate foretold.

There are legitimate opportunities that rise with the arrival of the various sub bids or items and are beneficial to the bidder. These opportunities, among others, include:

- Special equipment not available to other bidders.
- Service of expert not available to other bidders.
- Special material prices found through investigation, presumably not available to other bidders.
- Holding an exclusive low quotation not available to other bidders and

obtained without disclosing other sub bids.

- Special construction techniques not used by other bidders.
- Presumably a tighter, more accurate schedule.

Below we have provided data on average quarterly price indices for item-wise

construction activities. All the price indices are expressed in terms of 1991 constant prices, except for the item 'POST TENSIONING' which is based to 2005 constant prices. The data clearly show that all the items have an increasing trend of 1 – 3%, except 'ROADWORK' that has shown a negative growth (-0.4%) for the entire period considered.

**Table 25: Item-wise Price Index for Construction Activities**

CONSTRUCTION ACTIVITIES	2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ALTERATIONS	341,0	347,2	352,7	356,4	361,9	367,1	370,7	376,5
EARTHWORKS	359,9	365,0	369,3	370,1	373,9	377,9	381,5	386,0
PILING	374,6	382,0	389,2	394,6	400,5	404,0	406,5	408,6
CONCRETE (EXCLUDING FORMWORK)	497,8	499,4	514,5	515,9	530,8	543,3	547,8	552,6
FORMWORK	392,7	397,4	402,9	407,0	410,3	415,9	417,9	419,9
PRECAST CONCRETE	431,7	442,9	452,3	464,6	472,1	477,1	478,0	477,4
POST TENSIONING BASE:JAN,2005=100	185,2	208,1	217,9	239,3	239,2	227,4	219,0	213,1
REINFORCEMENT	496,7	532,7	553,6	600,5	611,3	603,1	599,3	590,3
BRICK AND BLOCK WORK	456,7	464,7	470,0	473,8	486,5	494,5	500,9	507,9
MASONRY	311,8	317,4	321,9	325,1	328,4	334,8	337,9	342,1
WATER PROOFING	384,7	387,0	387,8	395,4	399,9	405,4	410,7	420,9
NON METAL ROOFING	504,1	509,6	517,6	515,9	532,3	544,6	559,7	553,1
METAL ROOFING (STEEL)	450,1	479,8	481,8	499,0	506,7	513,1	514,9	524,3
METAL ROOFING (ALUMINIUM)	293,0	299,5	299,5	298,8	302,7	305,0	305,5	328,9
CARPENTRY AND JOINERY	347,9	350,3	359,7	367,1	370,4	377,0	384,6	385,9
CEILINGS	371,9	378,3	387,1	393,5	396,7	415,6	420,0	422,0
RESILIENT FLOOR AND WALL COVERINGS	422,5	428,5	432,0	431,2	440,5	457,2	461,3	467,4
IRONMONGERY	335,7	341,4	343,2	345,4	347,4	351,1	352,1	353,7
STRUCTURAL STEELWORK IN BUILDINGS	505,1	512,8	521,1	524,3	528,9	533,5	535,9	539,5
METALWORK	406,9	415,1	419,0	424,4	427,5	429,7	430,3	430,8
PARTISHINING SYSTEMS	397,5	404,6	412,8	419,3	424,0	428,2	436,6	440,9
ALUMINIUM WORK	389,8	398,6	400,0	401,1	404,1	406,4	410,0	420,4
STAINLESS STEEL WORK	341,0	351,2	357,0	358,9	361,7	359,8	359,4	365,0
IN SITU FINISHES	395,2	399,6	409,1	412,3	420,7	427,6	431,8	437,7
TILING	370,3	374,6	377,0	378,5	380,8	383,1	383,5	387,0



	2013				2014				2015				2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	382,7	388,1	394,0	397,0	405,4	413,2	418,6	419,6	422,1	432,2	438,3	440,1	449,5
	392,4	398,5	407,7	412,7	420,6	427,7	431,6	431,6	436,0	442,7	447,4	453,3	470,5
	417,0	424,9	432,3	435,6	444,9	452,5	455,4	456,6	459,4	457,3	459,6	464,8	483,9
	556,9	563,9	566,5	563,7	573,8	581,6	584,3	587,7	607,9	612,8	615,0	617,1	630,1
	426,5	433,1	436,8	438,9	444,4	450,7	454,2	455,1	457,2	463,6	470,5	476,8	484,3
	491,1	503,0	505,6	505,8	516,0	524,4	527,3	529,5	531,1	521,8	525,3	529,2	546,6
	232,6	240,4	241,1	241,4	250,5	255,4	256,9	258,8	259,0	237,7	238,4	238,6	255,1
	621,7	644,2	646,6	647,8	668,9	685,1	690,2	696,7	662,5	610,9	606,3	604,9	637,2
	522,2	531,3	542,6	547,0	557,9	571,5	584,7	586,7	597,6	608,0	617,5	620,7	637,5
	349,5	356,7	361,2	364,8	369,8	376,9	380,3	380,9	382,9	388,7	395,1	398,8	413,3
	428,5	443,7	457,4	466,4	475,7	483,5	483,9	493,5	499,4	501,5	492,2	492,5	491,2
	563,3	578,4	581,6	585,1	600,6	613,8	621,4	631,3	630,0	631,4	625,4	622,4	640,9
	560,4	617,7	619,4	620,3	632,5	654,6	656,2	656,4	657,1	648,8	639,1	639,6	668,6
	340,3	353,9	382,3	384,3	416,6	438,5	456,1	482,7	492,9	503,3	499,6	481,7	510,0
	388,0	389,9	394,7	397,4	400,7	405,0	405,5	408,0	406,9	410,4	417,0	425,1	433,6
	430,3	434,9	441,3	444,9	463,5	475,8	478,9	481,6	496,4	504,1	506,1	506,8	515,2
	473,5	484,6	502,9	515,6	529,1	545,8	547,4	551,1	554,3	560,5	564,2	571,6	576,7
	359,9	362,8	385,1	385,9	394,8	397,5	406,1	408,1	425,8	453,3	459,9	462,4	478,0
	551,4	558,6	563,7	566,3	573,9	581,5	586,2	587,0	589,2	595,0	599,7	601,2	609,4
	442,2	441,4	443,9	447,3	453,7	474,4	482,8	483,2	484,2	480,2	482,4	483,2	495,2
	450,7	456,4	462,4	465,2	477,3	485,8	490,8	495,6	496,8	496,6	499,7	500,8	513,2
	434,9	437,8	455,8	456,5	467,6	478,2	493,1	512,2	521,9	536,4	542,2	545,1	566,3
	367,8	370,5	373,5	375,0	379,2	383,2	385,9	386,5	387,7	392,8	395,8	396,1	403,2
	443,7	449,2	454,7	455,9	464,1	472,1	477,3	478,5	486,5	495,2	500,5	501,5	512,4
	388,6	388,9	394,4	398,7	406,3	415,2	417,5	418,7	421,8	429,1	430,2	430,0	438,2

CONSTRUCTION ACTIVITIES	2011				2012				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
DRAINAGE	326,2	332,0	335,2	338,5	342,8	349,1	351,5	355,2	
PLUMBING	356,2	355,8	360,6	363,1	366,1	368,6	369,6	372,6	
ALUMINIUM SHOP FRONTS AND PREGLAZED WINDOWS	286,4	291,0	292,6	295,3	295,8	297,7	302,1	306,5	
GLAZING	351,4	354,4	355,1	360,3	355,9	356,7	365,5	366,2	
PAINTING	388,2	394,9	402,9	409,2	416,6	424,3	428,5	433,8	
ROADWORK	-	-	-	-	-	-	-	-	
ELECTRICAL INSTALLATIONS	453,7	459,8	472,1	477,3	486,8	491,3	500,5	501,9	
ELECTRICAL RECTICULATION	523,2	531,1	543,3	550,6	563,5	569,2	576,6	575,4	
MECHANICAL SERVICES	471,2	472,1	496,0	497,6	498,8	500,6	522,1	524,0	
DUCTWORK INSTALLATIONS	452,1	465,9	489,1	496,0	498,6	500,8	521,8	524,2	
REFRIGERATIONS INSTALLATIONS	817,4	798,4	824,0	805,4	824,1	831,1	838,4	879,9	
STEEL WATER PIPE INSTALLATIONS	425,4	429,0	452,0	452,4	451,6	449,1	468,7	468,0	
LUMP SUM DOMESTIC BUILDINGS	-	-	-	-	-	-	-	-	
COMMERCIAL OR INDUSTRIAL BUILDINGS	-	-	-	-	-	-	-	-	
LUMP SUM PRELIMINARIES	-	-	-	-	-	-	-	-	
STEEL BAR REINFORCEMENT- SUPPLIED, CUT BENT AND DELIVERED	489,9	523,3	554,4	599,6	608,2	597,9	603,8	592,6	

Source: Stats SA

## PROCUREMENT POLICIES

### Public Procurement Policies

Construction procurement in the public sector is governed by CIDB prescripts. The CIDB prescripts apply to departments at all levels of Government, state own enterprises and state agencies that procure infrastructure. These prescripts include the:

- Standard for Uniformity in Construction Procurement.
- Code of Conduct for all Parties Engaged in Construction Procurement.
- Construction Industry Development Regulations.

a) *Standard for Uniformity in Construction Procurement.*

This standard is issued in terms of sections 4(f), 5(3)(c) and 5(4)(b) of the Construction

Industry Development Board Act 38 of 2000 read with Regulation 24 of the Construction Industry Development Regulations, 2004 (as amended) issued in terms of section 33.

This standard establishes requirements for procurement within the construction industry which are aimed at bringing about standardisation and uniformity in construction procurement documentation, practices and procedures.

This standard states that construction procurement be undertaken in accordance with:

- the provisions of legislation regulating procurement;
- the CIDB Code of Conduct for all parties engaged in Construction Procurement published in terms of section 5(4) of the Construction Industry Development Board Act; and

- the roll out plan of the CIDB Competence Standards Framework for Construction Procurement.

b) *Code of Conduct for all Parties Engaged in Construction Procurement.*

This code of conduct applies to the various parties involved in public and private procurement, relating to the development, extension, installation, repair, maintenance, renewal, removal, renovation, alteration, dismantling or demolition of a fixed asset, including building and engineering infrastructure. In this context, it includes work associated with the provision of supplies, services, engineering, construction works and disposals. The parties that may be directly and indirectly involved include agents, contractors, employers, employees, representatives, subcontractors and tenderers.

	2013				2014				2015				2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	360,3	365,7	370,0	371,8	377,9	389,4	393,4	403,8	405,9	414,2	420,6	421,1	429,2
	391,8	395,7	401,7	409,2	412,7	417,0	418,6	421,2	422,4	431,6	433,6	433,5	442,1
	312,6	315,2	326,2	336,8	344,0	353,2	364,6	382,4	389,5	400,8	403,8	405,1	428,9
	368,5	371,2	385,8	417,3	425,2	440,1	459,5	497,8	509,9	526,6	527,4	527,6	578,3
	442,1	449,9	456,6	461,7	469,8	488,6	492,7	493,5	495,8	503,1	507,6	510,0	518,5
	593,0	604,0	617,5	616,2	637,3	648,8	653,4	644,6	601,8	600,3	592,3	576,1	575,9
	514,0	521,9	539,9	545,5	575,8	558,7	586,3	591,1	575,1	586,8	570,4	576,1	601,8
	593,8	602,2	621,1	626,6	663,7	636,3	665,4	675,2	658,7	672,5	647,5	662,1	692,4
	530,9	535,9	563,8	568,2	575,7	578,8	608,8	611,3	611,8	609,8	638,4	642,0	651,1
	543,4	569,1	591,8	591,8	596,4	605,5	634,9	634,9	634,9	630,0	656,0	656,0	667,3
	899,2	882,2	925,6	935,0	977,8	933,6	989,3	992,2	951,8	981,1	983,3	993,5	1006,9
	481,0	485,9	511,9	513,1	517,6	522,4	552,1	553,0	553,1	539,3	567,7	569,1	572,8
	451,9	459,7	468,2	472,7	483,2	490,9	498,7	501,4	503,6	510,4	512,6	515,4	529,3
	456,9	464,6	474,1	478,1	489,5	496,0	504,2	507,2	506,8	510,8	513,3	515,6	528,7
	422,1	428,6	439,2	444,3	454,2	461,4	464,8	462,6	459,1	471,4	475,8	479,5	490,2
	621,3	641,6	653,6	653,6	671,4	684,3	702,3	708,4	673,3	617,9	626,6	624,5	652,9

In the interests of a healthy industry that delivers value to clients and society, the parties in any public or private construction-related procurement should, in their dealings with each other:

- Behave equitably, honestly and transparently;
- Discharge duties and obligations timeously and with integrity;
- Comply with all applicable legislation and associated regulations;
- Satisfy all relevant requirements established in procurement documents;
- Avoid conflicts of interest; and
- Not maliciously or recklessly injure, or attempt to injure, the reputation of another party.

### c) *Construction Industry Development Regulations.*

The Minister of Public Works has under section 33 of the Construction Industry Development Board Act, 2000, (Act No. 38 of 2000), made the regulations set out in the Schedule. Construction Industry Development Regulations outlines regulations that govern the register of contractors, the register of projects, legal procedures and evidence required as well as issues concerning determinations in relation to fees, change of particulars, approved forms and transitional measures.

### **Compliance Monitoring**

The CIDB Compliance Monitor tracks compliance of individual public sector clients to CIDB procurement prescripts, focusing on the Register of Projects and

Tenders. Through bilateral engagements with individual clients the CIDB provides support, including training and capacitation. Where clients show unwillingness to comply however, the CIDB can issue a charge and institute a disciplinary hearing in terms of Regulations. The CIDB has the power to fine public sector clients up to R100 000 for failure to comply with prescripts. The transgression and the fine may also be reported to the Auditor General.

### Alignment to Legislative Framework

The CIDB prescripts are aligned to the broader legislative and regulatory framework for procurement in the public sector including: the SA Constitution, PFMA, MFMA, PPPFA, BBBEEA and National Treasury Regulations.

The *Constitution of the Republic of South Africa 1996* (Constitution) is the principal piece of legislation that regulates public procurement in South Africa (Gilfillan and Tucker, 2003). Section 217 of the Constitution sets out primary and secondary objectives of public procurement. The primary objective of public procurement is that when any organ of state contracts for goods and services it should be dealt with through a system that is fair, competitive, equitable, transparent and cost effective (OECD, 2010). The Constitution gives importance to protecting and advancing persons or categories of persons disadvantaged by unfair discrimination. Thus, the secondary objective of public procurement is that procurement policy may provide for, firstly, categories of preference in the allocation of contracts and, secondly, the protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination. The Constitution permits organs of state to implement a preferential procurement policy that advances persons previously disadvantaged by unfair discrimination. Section 217 (3) provides for legislation that will prescribe a framework within which the policy must be implemented to be enacted.

*The Public Finance Management Act (1999)* establishes a regulatory framework for procurement in national and provincial departments as well as state-owned enterprises (Ambe and Badenhorst-Weiss, 2003). It ensures that government spending is transparent, accountable and sound. Heads of government departments and agencies are designated as accounting officers legally obliged to ensure good governance in financial management (OECD, 2010). Local authorities are also guided by the Municipal Finance Management Act (2003). Section 51 (1) (a) of the Public Finance Management Act echoes the constitutional requirement

which states that an accounting authority for, among others, a national or provincial department or public entity must ensure that the particular department or entity has and maintains an appropriate procurement and provisioning system which is fair, equitable, transparent, competitive and cost-effective (Tucker and Gilfillan, 2013). The Public Finance Management Act is implemented through the regulations published under it, namely the National Treasury Regulations (Treasury Regulations). Treasury publishes and maintains a *List of Restricted Suppliers* from which accounting officers are required to check the prohibition status of bidders prior to awarding contracts. Treasury also maintains a *List of Tender Defaulters*, which is a statutory obligation in terms of *The Prevention and Combating of Corrupt Activities Act of 2004*. This act provides that companies convicted of tender fraud may be restricted from doing business with the public sector for up to 10 years (OECD, 2010). *A Policy Strategy to Guide Uniformity in Procurement Reform Process in Government (2003)* is a legislation that guides the Treasury in setting standards and to publish guidelines and practice notes that ensure uniform and competitive tender procedures at all levels of government (OECD, 2010).

*The Municipal Finance Management Act 56 of 2003* establishes a regulatory framework which includes procurement in municipalities and municipal entities (Ambe and Badenhorst-Weiss, 2003). The Municipal Finance Management Act regulates, amongst others, the manner in which municipal powers and functions are exercised and performed and the management of the financial affairs of municipalities and other institutions in the local sphere of government (Tucker and Gilfillan, 2013). These require that the entities to which they apply adhere to the Preferential Procurement Policy Framework Act.

*The Preferential Procurement Policy Framework Act (2000)* ensures transparency in awarding tenders. It sets out the criteria and procedures using a preference points system (also known as award criteria) that favours firms owned by previously disadvantaged individuals. The implementation of the Preferential Procurement Policy Framework, gives effect to section 217(3) of the Constitution of the Republic of South Africa, by providing a framework for the implementation of a fair public preferential procurement policy (Raga and Taylor, 2010). This Act enables the provisions for preferencing provided in the Constitution to be implemented. The implementation methodology provided for in this Act (namely award criteria) is the method which is least likely to compromise good governance objectives (Pautz, Watermeyer and Jacquet, 2003). The Framework for Supply Chain Management (2003) commends a governance framework for awarding government contracts and appointing consultants. Required bid evaluation and bid adjudication committees are separate and members have to declare conflict of interest (OECD, 2010). The Promotion of Equality and the Prevention of Unfair Discrimination Act 4 of 2000 prohibits the state or any person from discriminating unfairly against any person on the grounds of race or gender through the denial of access to contractual opportunities for rendering services or by failing to take steps to reasonably accommodate the needs of such persons (Ambe and Badenhorst-Weiss, 2003).

*Broad-based Black Economic Empowerment Act 53 of 2003* establishes a code of good practice to inform the development of qualification criteria for the issuing of licenses or concessions, the sale of state-owned enterprises and for entering into partnerships with the private sector; and development and implementation of a

preferential procurement policy (Ambe and Badenhorst, 2003).

*National Treasury Regulations* were established because The Constitution of the Republic (Chapter 13) mandates the National Treasury to ensure transparency, accountability and sound financial controls in the management of public finances. The National Treasury is responsible for managing South Africa's national government finances. Supporting efficient and sustainable public financial management is fundamental to the promotion of economic development, good governance, social progress and a rising standard of living for all South Africans. The National Treasury's legislative mandate is also described in the Public Finance Management Act (Chapter 2). The National Treasury is mandated to promote government's fiscal policy framework; to coordinate macroeconomic policy and intergovernmental financial relations; to manage the budget preparation process; to facilitate the Division of Revenue Act, which provides for an equitable distribution of nationally raised revenue between national, provincial and local government; and to monitor the implementation of provincial budgets. As mandated by the executive and Parliament, the National Treasury will continue to support the optimal allocation and utilisation of financial resources in all spheres of government to reduce poverty and vulnerability among South Africa's most marginalised.

### Public Procurement Policies Impact on Competition

The CIDB has a toolkit that describes proven good practice for procurement, programs, projects, risk and service management. The Toolkit brings together policy and best practice in a single point of reference. It helps to ask the critical questions about

capability and project delivery; it provides practical advice and guidance on how to improve. The Procurement module of the CIDB's Toolkit is aimed at government as a whole and to private sector clients wishing to do business with government. Benefits and efficiencies are obtained from:

- improved contract management capability where the module serves the basis for capacitation;
- better purchasing practices and improved outcomes;
- uniform and standardized approach to procurement and supply-chain management across all levels of government, resulting in reduced cost of doing business for both agencies and service providers;
- greater predictability and certainty in the procurement processes;
- the management of procurement becoming routine and administration procedures becoming mechanized;
- cost efficiencies in terms of staff training, the submission of tenders, the compilation of procurement documents and the management of the procurement processes;
- improved industry performance, with a recognition of socio-economic, economic and regional development;
- ethical, acceptable and enhanced responsible business practices;
- establishment of a base for further advancement into electronic procurement;
- and improved business relationships between the private and public sector through a procurement process that is consistent, transparent and easily understood;
- an improved understanding of the requirements of the regulatory regime for procurement; and
- improved understanding of facets of the procurement and related activities.

## REGULATORY/LEGISLATIVE FRAMEWORK

The CIDB Act, 2000 provides for an establishment of the CIDB in order to implement an integrated strategy for the reconstruction, growth and development of the construction industry. The CIDB Act, 2000 also recognises government's vision of a construction industry development strategy that promotes stability, fosters economic growth and international competitiveness, creates sustainable employment and addresses historical imbalances as it generates new construction industry capacity.

### Structure

The amended CIDB regulations (2013) provide a ranking framework on the basis of both the track record and available capital. The criteria that allows the different firms to tender for different projects in grades 1 to 9, is the firm's annual turnover, value of projects undertaken and available working capital. Thus the extent to which firms can participate in bids in the public sector is regulated by this system.

The values required to determine the **financial capability** of a contractor are as indicated in the table below:

Designation	Upper limit (R) of Tender value range	Method A [subregulation (2A)]			Method B [Subregulation (2B)]
		Best Annual Turnover (R) (2 year)	Largest contract (R) (5 year)	Available capital (R)	Available capital (R)
1	200,000	-	-	-	N/A
2	650,000	-	150,000	-	N/A
3	2,000,000	1,000,000	500,000	100,000	N/A
4	4,000,000	2,000,000	1,000,000	200,000	N/A
5	6,500,000	3,250,000	1,600,000	650,000	1,300,000
6	13,000,000	7,800,000	3,250,000	1,300,000	2,600,000
7	40,000,000	24,000,000	10,000,000	4,000,000	8,000,000
8	130,000,000	90,000,000	32,500,000	13,000,000	26,000,000
9	No Limit	270,000,000	100,000,000	40,000,000	80,000,000

Source: CIDB

To qualify to be categorised in a specific **works capability** designation, a contractor must have successfully completed a contract of at least the value indicated in column 4 of the above table.

The CIDB regulations however provide for provisions that allow two or more firms to enter into joint ventures that provides them with a higher grade in order to bid for certain projects. These joint ventures are unincorporated associations and their main purpose is securing and executing

the contract for members' benefit. The provisions in the joint venture agreements include, amongst others, exclusivity clauses<sup>9</sup> and sub-contracting clauses.<sup>9</sup> These joint ventures provisions are summarised below:

Designation	Deemed to satisfy joint venture arrangements
3	Three contractors registered in contractor grading designation 2
4	Three contractors registered in contractor grading designation 3
5	Two contractors registered in contractor grading designation 4; One contractors registered in contractor grading designation 4; and Two contractors registered in contractor grading designation 4.
6	Two contractors registered in contractor grading designation 5; One contractors registered in contractor grading designation 5; and Two contractors registered in contractor grading designation 5.
7	Two contractors registered in contractor grading designation 6; One contractors registered in contractor grading designation 6; and Two contractors registered in contractor grading designation 5.
8	Three contractors registered in contractor grading designation 7
9	Three contractors registered in contractor grading designation 8

Source: CIDB Regulations, 2013 (as amended)

Further to the grading system, there are also various CIDB standards and regulations to give effect to the CIDB Act. These standards are as follows:

- a) Standard of Developing Skills through Infrastructure Contracts (2013),
- b) Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts (2013),
- c) Standard for Uniformity in Construction Procurement (2010),
- d) Code of Conduct for all parties involved in construction procurement (2003) and
- e) Construction Industry Development Regulations 2004 (as amended) (CIDB Regulations).<sup>10</sup>

### Rationale

According to the study by Hekima Advisory (2014), the objectives of the CIDB are extensive and have two prime objectives; the promotion of growth and development of the industry as well as providing a governing basis within which the construction industry should operate. The CIDB Act, 2000 outlines these objectives as follows, amongst others:

- a) Promote the contribution of the construction industry in meeting national construction demand and in advancing (i) national, social and economic development objectives, (ii) industry performance, efficiency and competitiveness, and (iii) improved value to clients;
- b) Provide strategic leadership to construction industry stakeholders to stimulate sustainable growth, reform and improvement of the construction sector;
- c) Promote best practice through the development and implementation of appropriate programmes and measures aimed at best practice and improved performance of public and private sector clients, contractors and other participants in the construction

delivery process;

- d) Promote, establish or endorse uniform standards and ethical standards that regulate the actions, practices and procedures of parties engaged in construction contracts;
- e) Promote sustainable growth of the construction industry and the participation of the emerging sector therein.
- f) Promote appropriate research on any matter related to the construction industry and its development.

### Enforcement

The CIDB Act 2000 requires the CIDB to maintain a national register of contractors in order to facilitate public sector procurement and promote contractor development. Thus in order for contractors to be eligible to tender for public sector contracts, they have to be registered on the national register. A fine not exceeding 10% of the value of the affected contract can be imposed if a contractor is awarded a public sector contract without being registered. Furthermore a fine not exceeding R100 000 can be levied on a person (legal person) who has contravened the CIDB Act and/or any of its regulations.<sup>11</sup> A number of firms have been sanctioned by the CIDB for various contraventions of the CIDB Act and regulations since 2007. Individual directors and firms collectively have in the past been meted with suspensions for a specified period (generally 6 months to 12 months, and in few cases, up to 60 months). Those firms or directors would thereafter be required to re-apply for registration, pay a fine not exceeding R100 000 and/or downgraded.<sup>12</sup>

Below we highlight construction ratings systems that different countries<sup>13</sup> follow as a comparison to the CIDB rating system implemented in South Africa.

### International comparisons

#### (a) China:<sup>14</sup>

The Chinese Business and Qualification System, a regulatory system, is defined in five official documents, including Construction Law issued by National People's Congress (NPC, 1998) with major principles. This includes the way contractors operate business within certain types of works in line with the specifications defined in their qualification grades.

Contractors are divided into three broad categories:

- 1) Main contractor – classified as Special Grade (highest level), Grade I, II and III (lowest level);
- 2) Specialist contractor - graded as Grade I, II, III;
- 3) Labour contractor – classified as Grade I and II.

The criteria for assessing the level of qualification grade include the level of registered capital, staff capacity, technology capacity and previous track record. In terms of grading, there are three categories of qualifications: Grade A, B, and C. This system has been amended to include comprehensive and specialty qualifications. The summary is as follows, as outlined by the Jones Day Commentary (2007)<sup>15</sup>:

Qualification	Standards
Comprehensive qualification	<ul style="list-style-type: none"> <li>• Registered capital of Renmimbi (“RMB”) 6 million.</li> <li>• Staffing requirement: i) at least 60 registered supervision engineers; ii) at least 5 registered cost engineers; iii) at least 15 registered personnel, including Class 1 architect, Class 1 constructor (jian zaoshi), Class 1 registered structural engineer, or other registered engineers majoring in survey and design; iv) the chief technical representative must be a registered supervision engineer and have more than 15 years’ experience in construction or have engineering-related senior professional title.</li> <li>• The applicant must have 5 or more Grade A Speciality Qualifications.</li> <li>• The work scope: construction supervision for projects of all sizes, and relevant services such as project management and technical consultancy.</li> </ul>
Specialty qualification	<ul style="list-style-type: none"> <li>• Grade A: <ul style="list-style-type: none"> <li>- Registered Capital of RMB 3 million.</li> <li>- Staffing Requirement: (1) at least 25 registered personnel, including registered supervision engineers, registered cost engineers (at least 2), Class 1 architect, Class 1 constructor (jian zaoshi), Class 1 registered structural engineers, or other registered engineers majoring in survey and design. The number of registered supervision engineers must meet specific requirements that vary with different specialties. (2) The chief technical representative must be a registered supervision engineer and have more than 15 years’ experience in construction or have engineering-related senior professional title.</li> <li>- Track record: more than three Class 2 projects of the applied for specialty within the previous two years.</li> <li>- Work scope: construction supervision for projects of all sizes in relevant specialty, and relevant services such as project management and technical consultancy for projects of the applied for specialty.</li> </ul> </li> <li>• Grade B: <ul style="list-style-type: none"> <li>- Registered Capital of RMB 1 million.</li> <li>- Staffing Requirement: (1) at least 15 registered personnel, including registered supervision engineers, registered price engineers (at least 1), Class 1 architect, Class 1 constructor (jian zaoshi), registered structural engineers, or other registered engineers majoring in survey and design. Similar to the standards for Grade A Specialty Qualification, the number of registered supervision engineers must meet specific requirements that vary with different specialties. For example, if a company applies for Grade B Specialty Qualification for Building Construction Works, it must employ at least 10 registered supervision engineers. (2) The chief technical representative must be a registered supervision engineer and have more than 10 years’ experience in construction.</li> <li>- Work scope: construction supervision for Class 2 projects or below in relevant specialty, and relevant services such as project management and technical consultancy for projects of the applied for specialty.</li> </ul> </li> <li>• Grade C (only for building construction; irrigation, water, and electricity; highway, infrastructure, and public utilities): <ul style="list-style-type: none"> <li>- Registered Capital of RMB 500,000.</li> <li>- Staffing Requirement: (1) The applicant must employ a certain number of registered supervision engineers, which varies with different specialties. (2) The chief technical representative must be a registered supervision engineer and have more than 8 years’ experience in construction.</li> <li>- Work scope: construction supervision for Class 3 projects or below in relevant specialty, and relevant services such as project management and technical consultancy for projects of the applied specialty.</li> </ul> </li> </ul>

Foreign enterprises working in China must apply and register for a qualification grade, and operate business within the defined contents.

**(b) Malaysia:<sup>16</sup>**

The construction grading system in Malaysia is administered by the Construction

Industry Development Board, similar to that of South Africa. However, the CIDB system in Malaysia is further characterised by a multi-racial social sphere, whereby all the companies are registered as either Bumiputera or non-Bumiputera.<sup>17</sup> A Bumiputera company must have the majority of shares (at least 51%) owned by Malays/ Bumiputera and the majority (at least 51%)

of the workforce in the company are Malays/ Bumiputera. It is also mandatory to register with the CIDB before undertaking any contractors tendering capacity and their paid up capital. The criteria for the grades of registration of contractors by the CIDB is based on paid up capital and tendering capacity, as illustrated in the table below<sup>18</sup>:

Contractor Grades of Registration	Tendering Capacity (RM)	Paid-up Capital	Size of company
G7	No Limit	RM 750, 000 (£ 150, 000)	Large construction company
G6	Not exceeding 10 million	RM 500, 000 (£ 100, 000)	
G5	Not exceeding 5 million	RM 250, 000 (£ 50, 000)	Medium size construction company
G4	Not exceeding 3 million	RM 150, 000 (£ 30, 000)	
G3	Not exceeding 1 million	RM 50, 000 (£ 10, 000)	Small size construction company
G2	Not exceeding 500, 000	RM 25, 000 (£ 5, 000)	
G1	Not exceeding 200, 000	RM 5, 000 (£ 1, 000)	

Source: CIDB Malaysia

Furthermore, the Ministry of Finance and Public Works requires construction companies to register with Contractor Service Centre (“PKK”) in order to tender and undertake government projects. This is required regardless of the registration with CIDB. The Ministry further classifies contractors by PKK based on paid-up capital and contractors are divided into six classes from A (RM 600, 001) to F (RM 10, 000).

**(c) Saudi Arabia:**

The Saudi Arabia’s contractor classification law is based on an assessment of a contractor’s financial, technical, administrative and execution capabilities. This is done in order to classify contractors in the appropriate field and grade in

accordance with the provisions of this law and its regulations. Furthermore, according to article 6 of this law, a contractor shall be classified in the grade consistent with his financial, technical, administrative, and execution capabilities in one or more of the classification fields, according to elements and criteria specified in the regulations.<sup>19</sup>

The financial capabilities shall be assessed on the basis of the balance sheet (budget), income statement (profit and loss account), financial ratios as well as administrative and financial systems applied. Moreover, article 6 of this law provides for the assessment of administrative and technical capabilities on the basis of efficiency in financial, technical and execution management as well as their organisation, records and control. Finally, article 6 of this law provides for an

assessment of execution capabilities on the basis of projects executed or under execution in the public or private sector within the Kingdom or abroad.<sup>20</sup>

**(d) Sri Lanka:<sup>21</sup>**

In Sri Lanka, there is a National Registration and Grading Scheme for Contractors, which is a central registration scheme started by the institute for Construction Training and Development, revised in 1993, 1995 and 2008.<sup>22</sup> Registration and grading is based on financial capability, the technical capability, plant and equipment and relevant experience. The grades range from C1 to C10, as demonstrated in the table<sup>23</sup> below:

Grade	Financial Limit (Rs. Million)	Field of Speciality
C1	$X \geq 600$	<ul style="list-style-type: none"> <li>• Building Construction</li> <li>• Highways</li> <li>• Bridge</li> <li>• Water Supply and Drainage</li> <li>• Irrigation &amp; Drainage</li> <li>• Dredging &amp; Reclamation</li> <li>• Storm Water Drainage</li> <li>• Groynes &amp; Revetments &amp; Reclamation</li> </ul>
C2	$600 \geq X > 300$	
C3	$300 \geq X > 150$	
C4	$150 \geq X > 50$	
C5	$50 \geq X > 25$	
C6	$25 \geq X > 10$	
C7	$10 \geq X > 05$	
C8	$05 \geq X > 02$	
C9	$02 \geq X$	
C10	$01 \geq X$	

Moreover, a new promotional registration scheme for small-scale contractors has been introduced, called grade C-11 and has a financial threshold for project size at LKR 500, 000.

Thus as per the above ratings from different countries, it is clear that similar principles to those of the South African CIDB ratings are applied in the different countries profiled. This shows that the principles of the CIDB ratings are consistent with other developing countries.

## STATE SUPPORT

### Taxes

All contractors have to be in “good standing” insofar as their tax and service charge obligations are concerned in order to contract with government. Each person earning over a certain amount, and each organisation that is making a profit, must pay taxes.

### Value added tax (VAT)

Value Added Tax (VAT) is levied at a standard rate of 14% on all goods and services subject to certain exemptions, exceptions, deductions and adjustments provided for in the VAT Act 89 of 1991,

as amended. The owners of Sole Proprietorships and Partnerships must register as VAT vendors under their own names. The owners of a CC or a Private Company must register as a VAT vendor in the name of the business.

Several countries collect money from individuals and companies from a system of Value Added Tax. When you buy goods from a shop you pay VAT. The shopkeeper then “looks after” the money for South African Revenue Services (SARS) for a period of up to two months, and then adds up all the VAT amounts collected, and sends this amount to SARS. The shopkeeper collects VAT on behalf of SARS. The VAT is never his money. The shopkeeper is known as a VAT Vendor.

In South Africa, every business with a turnover of R300 000 per annum and more must register as a VAT vendor. However, the South African Revenue Service proposed that the threshold be increased from an annual turnover of R300 000 to R1 million. Any business operating within a turnover from R20 000 to R300 000 per annum may apply to become a VAT vendor. The SARS may or may not agree to register such an enterprise. Tax evasion is a serious crime. A business should approach SARS if it has problems in paying its taxes as arrangements can be made to pay SARS over time.

### Employee Tax

A business that pays salaries, wages and other remuneration above the tax thresholds must register with SARS for employees’ tax. Tax threshold is the amount a person must earn before they must pay tax. In this tax year, it is R40 000 for individuals under 65 years and R65 000 for individuals 65 years or older. This is done by completing and submitting an EMP101 form to SARS. Once registered, the employer will receive a monthly return (an EMP201) that must be completed and submitted together with the deducted tax within seven days after the end of the month for which the amount was deducted.

Employees’ tax is the tax that an employer, as an agent of the government, deducts from the earnings of employees and pays over to SARS every month. This monthly deduction serves as credit that is set off against the final tax liability of an employee, which is determined once a year. Employees’ tax consists of SITE (Standard Income Tax on Employees) and PAYE (Pay As You Earn). The remuneration of directors of private companies (including individuals in close corporations performing similar functions) is subject to employees’ tax paid twice a year as provisional tax.

Private companies and close corporations need to register as taxpayers. These companies are taxed at a flat rate of 29%. In addition to this, secondary tax (STC) on companies is levied on companies at a rate of 12,5% on all company after tax profits distributed by way of dividends.

Small-business corporations (those with an annual turnover of less than R6 million) benefit from a graduated tax rate of 0% on the first R35 000 taxable income, 10% from R35 001 to R250 000 taxable income and 29% in excess of R250 001 taxable income, are allowed to write off certain investment expenditure in the year in which it is incurred.

It is beyond the scope of most contractors, and indeed businesses in general, to be able to submit Company Tax Returns without appointing specialists to help them. (Pty) Ltd companies are required by law to appoint an auditor. Sole proprietor, partnerships or CCs do not have to appoint an auditor. It is, however, recommended that these forms of businesses appoint an auditor, an accounting officer, or a company tax expert to complete these returns. Such experts will advise on what deductions are permitted from the gross income to determine company profits.

Businesses are advised to calculate their tax obligations based on profits before tax at regular intervals.

### Income tax

Income tax is levied on South African residents' income earned worldwide, with appropriate relief to avoid double taxation. Non-residents are taxed on their income from a South African source. Tax is levied on taxable income that, in essence, consists of gross income less allowable deductions as per the Act. The lower income earners pay a smaller percentage of their income in

tax than higher income earners. The income earned by sole proprietors and each partner in a partnership forms part of their personal income and is taxed as such.

### Subsidies

#### National Infrastructure Plan

The South African government adopted a National Infrastructure Plan in 2012 aimed at transforming the economic landscape while simultaneously creating significant numbers of new jobs, and strengthen the delivery of basic services. R827 billion was invested in building new and upgrading existing infrastructure. These investments were set to improve access by South Africans to healthcare facilities, schools, water, sanitation, housing and electrification. On the other hand, investment in the construction of ports, roads, railway systems, electricity plants, hospitals, schools and dams were also set to contribute to faster economic growth.

### Incentives

#### Small, Micro- and Medium-sized Enterprises (SMME) Development Incentives

*Black Business Supplier Development Programme (BBSDP)* is a cost-sharing grant offered to small black-owned enterprises to assist them to improve their competitiveness and sustainability in order to become part of the mainstream economy and create employment. BBSDP provides a grant to a maximum of R1 000 000 (R800 000 maximum for tools, machinery and equipment and R200 000 maximum for eligible enterprises to improve their corporate governance, management, marketing, productivity and use of modern technology).

*Co-operative Incentive Scheme (CIS)* is a 90:10 matching cash grant for registered primary co-operatives (a primary co-operative consists of five or more members who are historically disadvantaged individuals). The CIS is an incentive for co-operative enterprises in the emerging economy to acquire competitive business development services, and the maximum grant that can be offered to one co-operative entity under the scheme is R350 000.

*Incubation Support Programme (ISP)* was initiated by the DTI as a grant to develop incubators into successful enterprises with the potential to revitalise communities and strengthen local and national economies. The ISP encourages partnerships whereby big businesses assist SMMEs with skills transfer, enterprise development, supplier development and marketing opportunities.

*The Technology and Human Resources for Industry Programme (THRIP)* is a partnership programme funded by the dti and managed by the National Research Foundation (NRF). On a cost-sharing basis with industry, THRIP supports science, engineering and technology research collaborations focused on addressing the technology needs of participating firms and encouraging the development and mobility of research personnel and students among participating organisations.

### Industrial Development-Related Incentives

*The Manufacturing Competitiveness Enhancement Programme (MCEP)* is one of the key action programmes of the Industrial Policy Action Plan (IPAP) 2012/13 – 2014/15. It will provide enhanced manufacturing support aimed at encouraging manufacturers to upgrade their production facilities in a manner that sustains employment and maximises value-

addition in the short to medium term. The MCEP comprises two sub-programmes: the Production Incentive (PI) and the Industrial Financing Loan Facilities which will be managed by the dti and the Industrial Development Corporation respectively.

*Manufacturing Investment Programme (MIP)* is a reimbursable cash grant for local and foreign-owned manufacturers who wish to establish a new production facility; expand an existing production facility; or upgrade an existing facility in the clothing and textiles sector.

*Seda Technology Programme (STP)*, as part of the Government's strategy to consolidate small-enterprise support activities since April 2006, the activities of the Godisa Trust, the National Technology Transfer Centre (NTTC), the three business incubators of the dti, the Technology Advisory Centre (TAC), the technology-transfer activities of the Technology for Women in Business (TWIB) programme and the support programmes for small enterprises of the South African Quality Institute were merged into a single programme – the seda Technology Programme (STP).

*Support Programme for Industrial Innovation (SPII)* is a support programme of the dti, managed by the Industrial Development Corporation (IDC). The SPII is designed to promote technology development in industry in South Africa through the provision of financial assistance for the development of innovative products and/or processes. The SPII specifically focuses on the development phase, which begins at the conclusion of basic research and ends when a pre-production prototype has been produced.

*Sector-Specific Assistance Scheme (SSAS)* is a reimbursable 80:20 cost-sharing grant offering financial support to export councils, joint action groups and industry associations. The scheme comprises two

sub-programmes, namely Generic Funding and Project Funding for Emerging Exporters (PFEE). The aim of the SSAS is aligned to the dti's overall objectives in several respects, as indicated below.

*Production Incentive (PI)*, under the PI, applicants can use the full benefit as either an upgrade grant facility or an interest subsidy facility, or a combination of both. Eligible enterprises include clothing manufacturers, textile manufacturers, Cut, Make and Trim (CMT) operators, Footwear manufacturers, Leather goods manufacturers, and Leather processors (specifically for leather goods and footwear industries).

*The Foreign Investment Grant (FIG)* compensates qualifying foreign investors for costs incurred in moving qualifying new machinery and equipment (vehicles excluded) from abroad to the Republic of South Africa.

*The Capital Projects Feasibility Programme (CPFP)* is a cost-sharing programme that contributes to the cost of feasibility studies likely to lead to projects outside South Africa that will increase local exports and stimulate the market for South African capital goods and services.

*Business Process Services Incentive (BPS)*: The South African Government implemented a Business Process Outsourcing and Offshoring (BPO&O) incentive programme as from July 2007. Between July 2007 and March 2010, the incentive resulted in the creation of at least 6 000 new jobs and attracted R303 million in direct investment. As part of a process of improving South Africa's position as an investment destination, a systematic review of the BPO&O incentive programme was undertaken with the private sector, resulting in a revised BPS incentive.

## Trade, Export and Investment Incentives

*Export Marketing and Investment Assistance (EMIA)*: The dti assists South African exporters by organising National Pavilions to showcase local products at international trade exhibitions. The EMIA scheme bears costs for space rental, the construction and maintenance of stands, electricity and water charges, as well as freight charges, up to a maximum of three cubic metres or two tonnes per exhibitor. Also included are assistance with International Trade Exhibitions, Group Outward-Selling Missions and Group Outward-Investment Missions

*The Critical Infrastructure Programme (CIP)* is a cost-sharing cash grant for projects designed to improve critical infrastructure in South Africa. The grant covers qualifying development costs from a minimum of 10% to a maximum of 30% towards the total development costs of qualifying infrastructure. It is made available to approved Eligible Enterprise upon the completion of the infrastructure project concerned. Infrastructure for which funds are required is deemed to be 'critical': if the investment would not take place without the said infrastructure or the said investment would not operate optimally.

## TRADE RESTRICTIONS

### Import of construction materials

Restrictions on imports generally take two forms: tariffs and quantitative restrictions.

#### Tariffs

Tariffs are taxes on imported goods upon their entry into a country. Tariffs, or import taxes, are usually calculated as a percentage of the value of a given imported product. Tariff fees are collected for most governments by what is known as a "customs" agency. Tariffs restrict or discourage imports by making imported

goods more expensive than domestic goods. Tariffs vary widely from country to country from product to product within countries. Most countries impose no tariffs at all on some imports, but most imports are subject to at least minimal tariffs.

The import of construction materials in South Africa face the following tariffs:

Heading/ Subheading	CD	Article Description	Stat Unit	Rate of Duty				
				General	EU	EFTA	SADC	MERCO SUR
2502.00	3	Unroasted iron pyrites	kg	free	free	free	free	free
25.17		Pebbles, gravel, broken or crushed stone, of a kind commonly used for concrete aggregates, for road metalling or for railway or other ballast, shingle and flint, whether or not heat-treated; macadam of slag, dross or similar industrial waste, whether or not incorporating the materials cited in the first part of the heading; tarred macadam; granules, chippings and powder, of stones of heading 25.15 or 25.16, whether or not heat-treated:						
2517.01	9	Pebbles, gravel, broken or crushed stone, of a kind commonly used for concrete aggregates, for road metalling or for railway or other ballast, shingle and flint, whether or not heat-treated	Kg	Free	Free	Free	Free	Free
2517.20	3	Macadam of slag, dross or similar industrial waste, whether or not incorporating the materials cited in subheading 2517.10	Kg	Free	Free	Free	Free	Free
2517.30	8	Tarred macadam	kg	Free	Free	Free	Free	Free
25.23		Portland cement, aluminous cement, slag cement, supersulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers:						
2523.10	7	Cement clinkers	kg	free	free	free	free	free
2523.2		Portland cement:						
2523.21	8	White cement, whether or not artificially coloured	kg	free	free	free	free	free
2523.29	9	Other	kg	free	free	free	free	free
2523.30	6	Aluminous cement	kg	free	free	free	free	free
2523.90	3	Other hydraulic cements	kg	free	free	free	free	free
26.01		Iron ores and concentrates, including roasted iron pyrites:						
2601.1		Iron ores and concentrates (excluding roasted iron pyrites):						
2601.11	2	Non-agglomerated	kg	free	free	free	free	free
2601.12	9	Agglomerated	kg	free	free	free	free	free
2601.20	0	Roasted iron pyrites	kg	free	free	free	free	free
26.16		Precious metal ores and concentrates:						
2616.10	7	Silver ores and concentrates	Kg	Free	Free	Free	Free	Free
2616.90	3	Other	kg	Free	Free	Free	Free	Free
28.05		Alkali or alkaline-earth metals; rare-earth metals, scandium and yttrium, whether or not intermixed or interalloyed; mercury:						
2805.1		Alkali or alkaline-earth metals:						
2805.11	0	Sodium	Kg	Free	Free	Free	Free	Free
2805.12	7	Calcium	Kg	Free	Free	Free	Free	Free

Heading/ Subheading	CD	Article Description	Stat Unit	Rate of Duty				
				General	EU	EFTA	SADC	MERCO SUR
2805.19	1	Other	Kg	Free	Free	Free	Free	Free
2805.30	3	Rare-earth metals, scandium and yttrium, whether or not intermixed or interalloyed	Kg	Free	Free	Free	Free	Free
2805.40	8	Mercury	kg	Free	Free	Free	Free	Free
3816.00	4	Refractory cements, mortars, concretes and similar compositions (excluding products of heading 38.01)	kg	free	free	free	free	free
40.11		New pneumatic tyres, of rubber:						
4011.80		Of a kind used on construction, mining or industrial handling vehicles and machines:						
4011.80.10	3	Having a rim size of less than 91 cm	u	20%	10%	10%	Free	20%
4011.80.20	0	Having a rim size of 91 cm or more	u	Free	Free	Free	Free	Free
4011.90		Other						
4011.90.10	8	Having a rim size of less than 91cm (excluding those for use on wheelchairs)	u	20%	10%	10%	Free	20%
4011.90.20	5	Other	u	Free	Free	Free	Free	Free
40.16		Other articles of vulcanized rubber (excluding hard rubber):						
4016.95		Other inflatable articles:						
4016.95.20	5	Of rubberized fabric, with hermetically sealed ends, for use as moulds in the manufacture, construction or maintenance of concrete pipes, voided (cavity) blocks, beams, slabs and structures	Kg	Free	Free	Free	Free	Free
44.18		Builders' joinery and carpentry of wood, including cellular wood panels, assembled flooring panels, shingles and shakes:						
4418.40	0	Shuttering for concrete constructional work	Kg	15%	Free	Free	Free	15%
57.02		Carpets and other textile floor coverings, woven, not tufted or flocked, whether or not made up, including "kelem", "schumacks", "karamanie" and similar hand-woven rugs:						
5702.3		Other, of pile construction, not made up:						
5702.31	1	Of wool or fine animal hair	m2	30%	18%	15%	Free	30%
5702.32	8	Of man-made textile materials	m2	30%	18%	15%	Free	30%
5702.39	2	Of other textile materials	m2	30%	18%	15%	Free	30%
5702.4		Other, of pile construction, made up:						
5702.41	6	Of wool or fine animal hair	m2	30%	18%	15%	Free	30%
5702.42	2	Of man-made textile materials	m2	30%	18%	15%	Free	30%
5702.49	7	Of other textile materials	m2	30%	18%	15%	Free	30%
5702.50	4	Other, not of pile construction, not made up	m2	30%	18%	15%	Free	30%
68.10		Articles of cement, of concrete or of artificial stone, whether or not reinforced:						
6810.1		Tiles, flagstones, bricks and similar articles:						
6810.11	8	Building blocks and bricks	Kg	Free	Free	Free	Free	Free
6810.19	9	Other	Kg	Free	Free	Free	Free	Free
6810.9		Other articles:						

Heading/ Subheading	CD	Article Description	Stat Unit	Rate of Duty				
				General	EU	EFTA	SADC	MERCO SUR
6810.91	4	Prefabricated structural components for building or civil engineering	Kg	Free	Free	Free	Free	Free
6810.99	5	Other	Kg	Free	Free	Free	Free	Free
6901.00	0	Bricks, blocks, tiles and other ceramic goods of siliceous fossil meals (for example, kieselguhr, tripolite or diatomite) or of similar siliceous earths	Kg	Free	Free	Free	Free	Free
69.02		Refractory bricks, blocks, tiles and similar refractory ceramic constructional goods (excluding those of siliceous fossil meals or similar siliceous earths):						
6902.10	8	Containing by mass, singly or together, more than 50 per cent of the elements Mg, Ca or Cr, expressed as MgO, CaO or Cr <sub>2</sub> O <sub>3</sub>	Kg	Free	Free	Free	Free	Free
6902.20	2	Containing by mass more than 50 per cent of alumina (Al <sub>2</sub> O <sub>3</sub> ), of silica (SiO <sub>2</sub> ) or of a mixture or compound of these products	Kg	Free	Free	Free	Free	Free
6902.90	4	Other	Kg	Free	Free	Free	Free	Free
69.02		Refractory bricks, tiles and similar refractory ceramic constructional goods (excluding those of siliceous fossil meals or similar siliceous earths):						
6902.10		Containing by mass, singly or together, more than 50 per cent of the elements Mg, Ca or Cr, expressed as MgO, CaO or Cr <sub>2</sub> O <sub>3</sub>	kg	Free	Free	Free	Free	free
6902.20		Containing by mass more than 50 per cent of alumina (Al <sub>2</sub> O <sub>3</sub> ), of silica (SiO <sub>2</sub> ) or of a mixture or compound of these products	kg	Free	Free	Free	Free	free
6902.90		Other	kg	Free	Free	Free	Free	free
69.04		Ceramic building bricks, flooring blocks, support or filler tiles and the like:						
6904.10	5	Building bricks	1000u	Free	Free	Free	Free	Free
6904.90	1	Other	kg	Free	Free	Free	Free	Free
69.05		Roofing tiles, chimney-pots, cowls, chimney liners, architectural ornaments and other ceramic constructional goods:						
6905.10	9	Roofing tiles	kg	Free	Free	Free	Free	free
6905.90	5	Other	kg	Free	Free	Free	Free	Free
70.16		Paving blocks, slabs, bricks, squares, tiles and other articles of pressed or moulded, glass, whether or not wired, of a kind used for building or construction purposes; glass cubes and other glass smallwares, whether or not on a backing, for mosaics or similar decorative purposes; leaded lights and the like; multicellular or foam glass in blocks, panels, plates, shells or similar forms:						
7016.10	7	Glass cubes and other glass smallwares, whether or not on a backing, for mosaics or similar decorative purposes	kg	15%	Free	Free	Free	15%
7016.90		Other:						

Heading/ Subheading	CD	Article Description	Stat Unit	Rate of Duty				
				General	EU	EFTA	SADC	MERCO SUR
7016.90.10		Multicellular or foam glass in blocks, panels, plates, shells or similar forms	kg	Free	Free	Free	Free	Free
7016.90.20	8	Bricks (excluding those of multicellular or foam glass)	kg	Free	Free	Free	Free	Free
7016.90.90	9	Other	kg	15%	Free	Free	Free	15%
7107.00	5	Base metals clad with silver, not further worked than semi-manufactured	Kg	Free	Free	Free	Free	Free
7109.00	2	Base metals or silver, clad with gold, not further worked than semi-manufactured	kg	free	free	free	free	free
7111.00	6	Base metals, silver or gold, clad with platinum, not further worked than semi-manufactured	kg	free	free	free	free	free
72.10		Pig iron and, spiegeleisen in pigs, blocks or other primary forms:						
7201.10	5	Non-alloy pig iron containing by mass 0,5 per cent or less of phosphorus	Kg	Free	Free	Free	Free	Free
7201.20	4	Non-alloy pig iron containing by mass more than 0,5 per cent of phosphorus	Kg	Free	Free	Free	Free	Free
7201.50	8	Alloy pig iron; spiegeleisen	kg	Free	Free	Free	Free	Free
73.02		Railway or tramway track construction material of iron or steel, the following: rails, check-rails and rack rails, switch blades, crossing frogs, point rods and other crossing pieces, sleepers (cross-ties), fish-plates, chairs, chair wedges, sole plates (base plates), rail clips, bedplates, ties and other material specialized for jointing or fixing rails:						
7302.10	5	Rails	kg	5%	Free	Free	Free	5%
7302.30	4	Switch blades, crossing frogs, point rods and other crossing pieces						
7302.40	9	Fish-plates and sole plates	kg	5%	Free	Free	Free	5%
7302.90	1	Other	kg	5%	Free	Free	Free	5%
7311.00		Containers for compressed or liquefied gas, or iron or steel:						
7311.00.20	4	Of a welded construction, indelibly stamped that it has a water capacity of 1,5 litres or more but not exceeding 114 litres, identifiable for use with liquefied petroleum gas	kg	15%	Free	Free	Free	11,25%
7311.00.90	5	Other	kg	Free	Free	Free	Free	Free
84.57		Machining centres, unit construction machines (single station) and multi-station transfer machines, for working metal:						
8457.10	7	Machining centres	u	Free	Free	Free	Free	Free
8457.20	1	Unit construction machines (single station)	u	Free	Free	Free	Free	Free
8457.30	6	Multi-station transfer machines	u	Free	Free	Free	Free	Free
87.04		Motor vehicles for the transport of goods:						
8704.21		G.V.M not exceeding 5 t:						
8704.21.10	6	Shuttle cars for use in underground mines; low construction flameproof vehicles, equipped with control mechanisms both in the front and at the rear, for use in underground mines	u	Free	Free	Free	Free	Free

Heading/ Subheading	CD	Article Description	Stat Unit	Rate of Duty				
				General	EU	EFTA	SADC	MERCO SUR
8704.22		G.V.M exceeding 5 t but not exceeding 20 t:						
8704.22.10	2	Shuttle cars for use in underground mines; low construction flameproof vehicles, equipped with control mechanisms both in the front and at the rear, for use in underground mines	u	Free	Free	Free	Free	Free
8704.23		G.V.M exceeding 20 t:						
8704.23.10	9	Shuttle cars for use in underground mines; low construction flameproof vehicles, equipped with control mechanisms both in the front and at the rear, for use in underground mines	u	10%	Free	Free	Free	10%
9801.00		Original equipment components:						
9801.00.40	1	For motor vehicles for the transport of goods of heading 87.04, of a vehicle mass not exceeding 2 000 kg or of a G.V.M. not exceeding 3 500 kg, or of a mass not exceeding 1 600 kg or of a G.V.M. not exceeding 3 500 kg per chassis fitted with a cab (excluding dumpers designed for off-highway use, shuttle cars and low construction flame-proof vehicles, for use in underground mines and off-the-road logging trucks; excluding tyres)	kg	20%	20%	20%	20%	20%
9801.00.45	2	For motor vehicles for the transport of goods of heading 87.04, of a vehicle mass exceeding 2 000 kg or a G.V.M. exceeding 3 500 kg, or of a mass exceeding 1 600 kg and of a G.V.M. exceeding 3 500 kg per chassis fitted with a cab (excluding shuttle cars and low construction flame-proof vehicles for use in underground mines and off-the-road logging trucks; excluding tyres)	kg	20%	20%	20%	20%	20%
9801.00.50	9	For chassis fitted with engines of heading 87.06, of a mass not exceeding 1 600 kg, or of a G.V.M. not exceeding 3 500 kg (excluding those for dumpers designed for off-highway use, shuttle cars and low construction flame-proof vehicles, for use in underground mines and off-the-road logging trucks; excluding tyres)	kg	20%	20%	20%	20%	20%
9801.00.55	8	For chassis fitted with engines of heading 87.06, of a mass exceeding 1 600 kg and a G.V.M. exceeding 3 500 kg (excluding those for shuttle cars and low construction flame-proof vehicles for use in underground mines and off-the-road logging trucks; excluding tyres)	kg	20%	20%	20%	20%	20%

The above table shows the tariff rates for various construction articles with the article description and their respective tariff codes. The respective statistical units and rates per duty are included.

### Quantitative restrictions

Quantitative restrictions seek to limit access to imports by making them scarce, which, according to the laws of supply and demand, makes them more expensive. Most countries in the world apply quotas to the import of certain goods and services (although applying tariffs is much more common).

Information of quantitative restrictions in the import of construction materials in South Africa is not publicly available.

## COUNTRY SPECIFIC ISSUES

### Review of CIDB Rating System and Bid Rigging in the Construction Sector

For the purpose of this study, the CIDB grading system is regarded as a form of standardisation implemented by the Construction Development Industry Board. This is on the basis that the CIDB grading system sets requirements and standards that govern the participation of contractors in each advertised tender according to the different grading levels. Thus each contractor must adhere to the stipulated standards set by the CIDB in different grades to be eligible to tender for projects.

Therefore having established that the CIDB grading system is a form of standard setting, in the next section, we briefly review guidelines from the different competition authorities regarding the implementation of standards in a manner that does not result in anticompetitive effects. Furthermore, we will highlight some cases that dealt with the implementation of standards from a

competition perspective albeit this will be contained in the annexure with the exception of the South African case precedent. We, however, commence by presenting the definition of standardisation adopted by the European Commission.

### Definition of standardisation

According to the European Commission ("EC")'s Guidelines (2001), standardisation agreements have as their primary objective in the definition of technical or quality requirements with which current or future products, production process or methods may comply. The EC Guidelines (2001) further submits that standardisation agreements can cover various issues, such as standardisation of different grades or sizes of a particular product or technical specifications in markets where compatibility and interoperability with other products or systems is essential.

### EC's approach on the implementation of standards

The EC submits that significant economic effects can arise as a result of standardisation. This can happen through the promotion of economic interpenetration on the internal market, encouraging the development of new and improved products and improved supply conditions. In addition, the EC further states that standards can increase competition and lower the output and sales costs and thus beneficial to the whole economy (EC Guidelines, 2011).

However, the EC further eludes that standard setting can in certain instances also restrict effective competition by potentially restricting price competition, limiting or controlling markets, innovation or technical development. The three main channels through which standards can reduce competition is through (i) reduction of price competition, (ii) foreclosure of innovative

technologies and (iii) exclusion of, or discrimination against certain companies by prevention of access to standard.

The EC further states that standardisation agreements are not capable of producing restrictive effects on competition in the absence of market power. Thus, it is unlikely that restrictive effects will occur in situations where effective competition exists amongst different voluntary standards (EC Guidelines, 2011).

However should the standard-setting agreements risk creating market power, the EC proposes that the following principles be adhered to which will make the standards fall outside the scope of Article 101(1) and thus not raise competition concerns:

- a) The participation in the standard-setting should be unrestricted;
- b) The procedure for adopting the specific standard should be transparent;
- c) Standardisation agreements should not contain obligation to comply with the standards; and
- d) The standard setting organisation's rules would need to ensure that effective access to standards on fair, reasonable and non-discriminatory terms.

In the event that the standard setting agreements do not adhere to any of the above principles, the EC will assess the possible effects of the agreements on the relevant markets (i.e. effects based approach). The following will form part of this effects based assessment:

- a) Determination of whether members of standards setting organisation have the option to develop alternative standards or products that do not comply with agreed standard;
- b) Determination of whether the standard is applicable across the board

- or applies only to members on a discriminatory basis or third parties;
- c) Determination of whether the process of designing and choosing particular standards was open to all members and other interested parties;
  - d) Taking into account the applicable market shares of the goods and services that are subject to standards, market shares of firms that are involved in setting the standards can be utilised if it is difficult obtaining overall market shares;
  - e) If it is established that the agreement will discriminate between participating or potential competitors, then it could potentially lead to anti-competitive outcomes;
  - f) Standard-setting agreements with various different types of IPR disclosure models will need to be discussed on a case to case basis, whether the disclosure model will guarantee effective access to the standard;
  - g) Finally, standard-setting agreements that provides for ex-ante disclosures for most restrictive licensing terms will not restrict competition in principle.

### USA's approach in the assessment of standards

The approach to assess the exclusionary effect of standards and standard-setting in the United States is based on a rule of reason analysis, where the anti-competitive effect would be evaluated against the pro-competitive or efficiency gains resulting from the standard.

Thus, the U.S. approach follows three aspects of assessment, namely, a power inquiry, a structural inquiry and an assessment of the reasonableness of the standard.

**Power inquiry** entails the determination of whether the standard setting organisation possesses sufficient market power in the relevant market to result in any anti-competitive effect. Therefore, if the standard-setting organisation fails to represent a significant share of a properly defined relevant market or fails to influence a significant share, the claim is best dismissed.<sup>24</sup>

The **structural inquiry** pertains to the competitiveness of the internal structure of decision-making body with regards to collective market dominance. However, if the standard-setting organisation is characterised by collective market dominance but a large number of individual members, the result is that, while the organisation considered a single entity might be thought to wield substantial power, price collusion among members is in fact highly unlikely or impossible. Moreover, the ability to fix prices is not essential to competitive harm from standard setting. First, the standard setting may operate to reduce market output, thus permitting firms to charge higher prices even if they are too numerous to come to an agreement about prices. Second, standard setting can exclude low-cost or innovative products and thus protect the standard setters from loss of market share.<sup>25</sup>

The **reasonableness assessment** determines whether the standard setting organisation acted reasonably or not. This can be undertaken through an assessment of the process employed by the standards organisation in not approving the firm or adopting a particular standard. The following are factors that might indicate that the process utilised by the organisation might be unreasonable:

- 1) Discriminatory treatment that is not justifiable (in situations where it is apparent that there was unfair discrimination between firms in similar

circumstances by the standard setting organisation, then the standard organisation's conduct can be regarded as unreasonable); and

- 2) When there is a clear indication that there was a lack of attention to the facts of a firm's case (this could be in the form of evidence of arbitrary decision making by the organisation, notices not provided when the matter was heard, failure to consider witnesses or evidence from both sides and excessively hasty examinations).<sup>26</sup>

### The South African approach to standard setting

The South African competition authorities are yet to develop formal guidelines on how standards should be implemented in order for them to remain competition neutral. Thus instead of discussing the guidelines from the South African context, we will discuss a case that dealt with the implementation of standardisation.

The only case thus far in South Africa that assessed the impacts of standards on competition was the *Netstar/Tracker*<sup>27</sup>. The allegations were made against members of stolen vehicle recovery ("SVR") committee of the Vehicle Security Association of South Africa ("VESA"), an industry association and an association itself. The complainant, Tracetec alleged that the standards that were set for the SVR systems prevented entrants from entering and expanding the market to offer such services.

In this case, the Tribunal recognised that pro-competitive and anti-competitive consequences can arise as a result of standard settings. Furthermore the Tribunal differentiated between "*benign and malign standard setting*". In this regard, the Tribunal identified the following consideration factors in the assessment of the effect of standards on competition:

- a) Determination of whether the organisation that is setting the standard possessed market power,
- b) Determination of who was driving the implementation of the standards. In this regard, the Tribunal was of the view that standards set and driven by competitors will in most likelihood result in anti-competitive effects,
- c) Determination of the effects of standards vis-à-vis whether standards led to the exclusion of a firm from the market or that standards were merely communicated,
- d) Determination of the reasonability of the standards, in this regard the Tribunal was of the view that this should include the assessment of whether the standard was consistent with its rationale and whether an efficient firm or one that is as efficient would be able to comply with the standards.

Based on the above approach, the Tribunal concluded that the standards that were set by VESA (and which Netstar, Tracker and Matrix participated in) were anti-competitive and excluded entrants and potential entrants in the market for stolen vehicle recovery services and thus contravened section 4(1)(a) of the competition Act. Specifically, the Tribunal findings in this regard were as follows:

- a) SVR committee possessed market power as they represented about 90% of the market and they were an organ of VESA, which was also found to possess market power as well;
- b) The industry association, the South African Insurance Association (“SAIA”) had a limited role in the creation of the standards and that the standards were not consumer driven;
- c) The Tribunal however concluded that albeit the standard did not prevent firms from offering SVR services, they did however found that it would not

- be possible for a firm to expand in the market without VESA approval. This assertion was on the basis that insurers required VESA approved service providers and SVR systems were required by insured motorists;
- d) The Tribunal further concluded that there was a lack of reasonability with the standards based on the criteria of awarding more firms on the basis of a financial guarantee as compared to the full criteria. The Tribunal further concluded that the standards were designed to suit the incumbents on the basis that their new products were approved despite not meeting the criteria.

However, the Competition Appeal Court (“CAC”) overturned the Tribunal’s decision on appeal. The CAC concluded that the Tribunal’s decision was taken not in terms of the facts of the case but rather on a theoretical assessment of the effects of standard setting in a market. The CAC further criticised the Tribunal in its reliance on the rule of reason approach adopted in the United States for the following reasons:

- a) This approach diverted the Tribunal’s attention from the merits of the case and thus ignoring to assess whether the Commission’s evidence supported the complaint;
- b) The Tribunal neglected to assess whether there was substantial prevention or lessening of competition in the market for SVR systems stemming from the application of those standards.<sup>28</sup>

However, the CAC highlighted that its disagreement with the Tribunal’s reliance on other jurisdictions did not infer the rejection in using other jurisdictions’ guidance in the assessment of standards in South Africa. In this regard, the Tribunal submits that “(t) *his is not to say that reference to foreign authorities and the approach taken in other*

*courts may not be helpful in standard setting cases*”.<sup>29</sup> Furthermore, the CAC further used principles and factors from other jurisdictions in supporting its conclusion that standards did not result in anti-competitive effects.<sup>30</sup>

Thus, from the South African context, it is evident that a rule of reason approach is followed in the assessment of the pro- and anti-competitive effects of standard setting. Albeit it is clear from the CAC’s ruling that this should be compatible with the facts of the case and should include a determination of whether the implementation of such standards resulted in a substantial lessening of competition or not.

Having discussed guidance from the USA, EU and the South African jurisdictions in assessing the potential anti-competitive effects of standard setting, we next analyse the competitive impact of the CIDB ratings in South Africa.

### **Analysis of the competitive impact of the CIDB ratings in South Africa**

#### **Possible adverse effects of the CIDB ratings**

According to Hovenkamp (1999), standards setting may lead to exclusion of potential firms in a particular market. This exclusion of firms can further facilitate collusion and also protect incumbents firms by removing the threats or lowering alternative or innovations that can shift the market. In addition, It is commonly accepted that when there are many firms, reaching an agreement on the terms of coordination and punishment strategies tends to be more difficult as cheating may be harder to detect.<sup>31</sup> Thus, it is a generally accepted principle that when there are few active firms in a specific market, the likelihood of collusion increases.

The recent construction cartel uncovered by the Commission involved mainly companies involved in the level nine CIDB ratings. Because of the dual requirements by the CIDB of financial capability and track record, this implied that only few companies stood a realistic chance of successfully being awarded the level 9 graded projects. Even if a firm can have the financial capability to undertake the projects, they might not yet have the required experience in similar projects to be a realistic contender for those projects.

In this regard, the study by Hekima Advisory (2014) submits that albeit there were 67 firms in 2013 registered for grade 9 Civil Engineering projects, in reality there are about seven firms that have the capability to construct big projects such as highways, stadiums, power stations and the alike. It thus on this basis we are of the view that the CIDB ratings may have created an environment conducive for collusive conducts in the recent construction cartel. This is on the basis that literature identifies few active firms as an important condition for the formation and sustainability of collusive agreements to be formed and sustained.

Furthermore, economic literature asserts that high barriers to entry are one of the prerequisite structural conditions in sustaining collusive conduct.<sup>32</sup> Without high entry barriers positive profits extracted as a result of collusive conducts would generally attract entry of other firms, which would then reduce the profitability of collusive conduct (hit and run strategies are possible). Thus, in addition to limiting the number of firms in the construction industry, more so in the level 9 ratings, the CIDB ratings requirements are a significant barrier to entry for those other firms that are capable to participate in this industry but for the track record. These barriers to entry further create an environment conducive for cartel formation.

### **Possible welfare effects of the CIDB ratings:**

However, the implementation of the CIDB ratings can also results in highly significant and welfare enhancing efficiencies. The implementation of these CIDB ratings ensures that construction projects are compatible with safety and health concerns. Thus, by implementing these CIDB ratings, the end consumers' welfare are enhanced as imperfect information about the ability of a contractor to undertake different projects will not lead to dangerous consequences such as construction buildings collapsing. The safety aspect is a very important consideration as most of the projects undertaken will need to withstand wear and tear as well as calamities without putting the safety of citizens at risk. Thus, the implementation of the CIDB ratings can result in social welfare as these ratings ensure that contractors undertaking these projects will deliver a product that will not harm the end consumers.

Below we provide our conclusions coupled with a discussion on possible mitigating factors that can be implemented in ensuring that the current CIDB rating does not lead to further competition concerns.

### **Conclusion and Recommendations**

It is generally accepted in economic literature that the existence of cartels in the form of, but not limited to, price fixing and market allocation has adverse impact on growth and efficiency. In addition, various forms of collusive conduct directly oppose consumer welfare benefits sought through healthy competition.<sup>33</sup> Furthermore Hovenkamp (1999) submits that standards setting may lead to exclusion of potential firms in a particular market. The exclusion of firms can further facilitate collusion and also protect incumbents firms by removing the threats of entry by an innovative player.

We have concluded that the CIDB rating system can be regarded as a form of standardisation. Furthermore construction firms competing for public tenders need to adhere to these ratings and thus the CIDB as the standards setting body possess market power in the construction industry especially for public tenders. Various competition authorities including South Africa hold the principle that competition concerns regarding the implementation of standards can only be possible when the standard setting body possess market power.<sup>34</sup> It is thus on this basis that we conclude that the implementation of these CIDB ratings had the unintended consequence of creating an environment conducive for cartel formation, particularly for projects in the CIDB grading 7 to 9. This assertion is supported by the fact that the uncovered construction cartel was instigated by the top tier of the grade 9 level construction in the CIDB General Buildings ("GB") and Civil Engineering ("CE") categories. Albeit there are more than 50 firms' registered in the GB and CE categories, the reality is that currently only the top tier construction firms that have the ability to undertake these large projects.<sup>35</sup> Thus based on the CIDB ratings and the top tier construction firms' knowledge that they were the only ones eligible of undertaking larger projects made it easier for them to reach various collusive agreements particularly for projects categorised under CIDB grading 7 to 9. Notwithstanding that the implementation of these CIDB ratings also resulted in welfare enhancing benefits, the anti- competitive effects of excluding other firms and creating an environment conducive for cartel formation are still a valid competition concerns that needs to be addressed. Given this conclusion, below we provide some recommendations to alleviate these identified concerns.<sup>36</sup>

Firstly the simultaneous roll out of major projects by government is a crucial factor that contributed to the formation of the last construction cartel. The knowledge that there were multiple projects commissioned made the cartelists firms willing to sacrifice other lucrative deals knowing that they will be compensated through other projects. Therefore it is recommended that major construction projects should not be rolled out around the same period but rather be rolled out in different stages to mitigate creating an environment conducive for cartel formation. In addition larger projects can also be rolled out in smaller packages in order to allow smaller graded firms to participate in those projects and this will invariably increase competition and reduce the likelihood of cartel formation.

Secondly albeit the CIDB ratings allows for lower graded firms to form joint ventures and thus qualify for a higher grading, the

stipulated number in forming a joint venture is rather restrictive. In this regard, the CIDB ratings can increase the eligible number to form a joint venture in the different grades in order to allow relatively smaller firms to participate in those projects and this will invariably increase competition.

Thirdly the CIDB can introduce tougher sanctions to those contactors found to have contravened the provisions of the competition Act. These tougher sanctions can provide a further deterrence mechanism for any firms wanting to take part in collusive conducts.

In addition the current CIDB ratings provisions do not limit the number of contracts a firm can bid for or undertake at the same time. In this regard, we propose that after consultation with all affected stakeholders, the CIDB should within each grading stipulate the number of projects a

firm can bid for within a particular point in time. These proposed limitations will allow greater participation by smaller firms in this market albeit through the joint venture provisions and this will invariably reduce the likelihood of collusion and thus increase competition.

Lastly, there should be a closer working between the CIDB, the Commission and National Treasury in ensuring that public sector tenders are not subject to collusive tendering. In this regard, we propose that the three entities meet on a regular basis to discuss developments in this construction industry. The frequency of the meetings can be increased if there is any ongoing investigation by any of these organisation or when larger projects similar to those undertaken prior to the 2010 FIFA World Cup are about to be commissioned.



## References

Hekima Advisory (2014), The role of CIDB in limiting construction industry cartels. Available at: [http://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/534f8d5fe4b053dc26f7a611/1397722463112/1400407\\_EDD-UJ\\_RECBP\\_Project+Report\\_App12\\_Case+Study+-+Construction+and+Cartels\\_Final.pdf](http://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/534f8d5fe4b053dc26f7a611/1397722463112/1400407_EDD-UJ_RECBP_Project+Report_App12_Case+Study+-+Construction+and+Cartels_Final.pdf) [09 February 2016].

European Commission. 2001. Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements. Available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001Y0106\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001Y0106(01)&from=EN) [09 February 2016].

European Commission. 2011. Guidelines on the applicability of Article 101 of the EC Treaty to horizontal cooperation agreements. Available at: [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114\(04\)&from=DA](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011XC0114(04)&from=DA) [09 February 2016].

Hovenkamp, H. (1999) Federal Antitrust Policy: The Law of Competition and its Practice (2nd ed.) West Publishing Company: St Paul, Minnesota.

Motta, M "Competition Policy: Theory and Practice", Cambridge University Press, 2004.

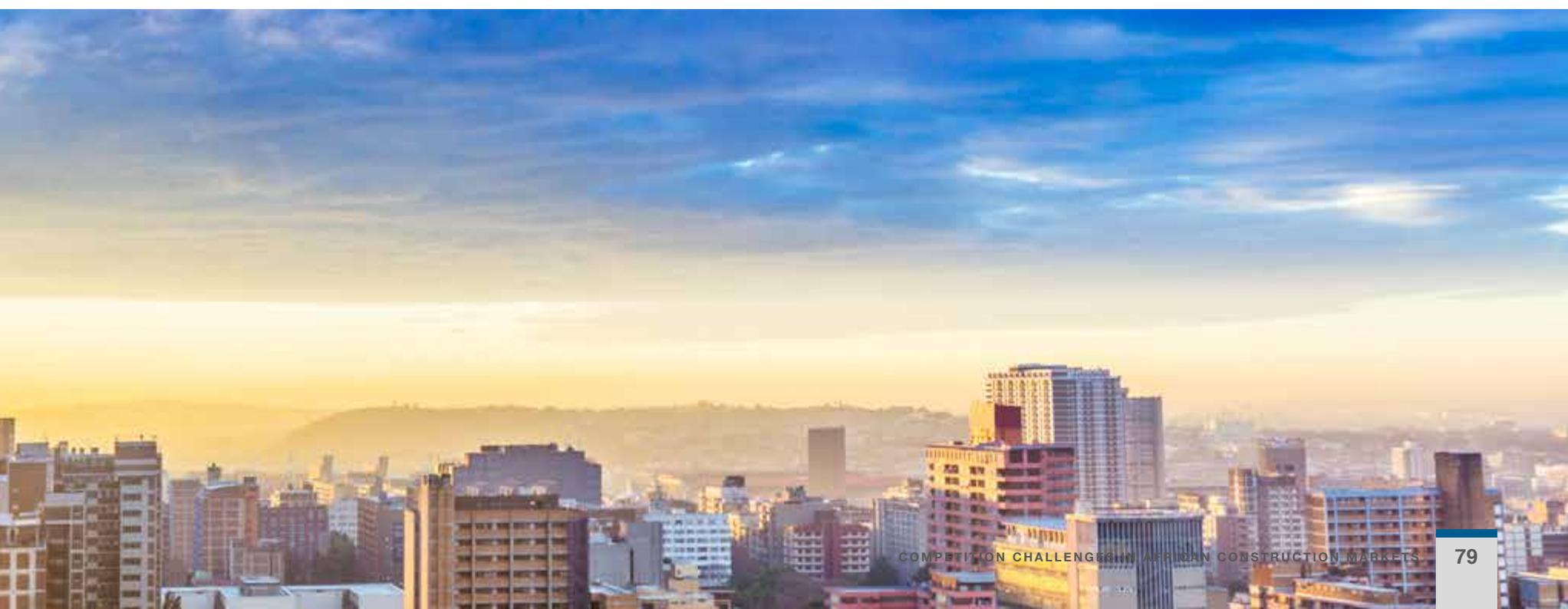
Ratshisusu, Hardin (2014): Limiting collusion in the Construction Industry: A review of the bid-rigging settlement in South Africa, Journal of Economic and Financial Sciences, Sept. 7(S), pp 587-606.

Statistics South Africa 2012. Construction Industry 2011. Available at: <https://www.statssa.gov.za/publications/P5002/P50022011.pdf> [ 09 February 2016].

South Africa. 2000. Construction Industry Development Board Act, 2000. Notice 21755 of 2000. Government Gazette, 38, November 2000.

South Africa. 2000. Construction Industry Development Amendment Regulations, 2013. Notice 9983 of 2013. Government Gazette, 577(366299), November 2000.

Who Owns Whom 2014. Sector Report: Construction in South Africa 2015



## Annexure A: Case precedents

### EU Case precedents

#### (a) EMC Development AB vs European Commission

The main applicant of the complaint was EMC Development AB, a company that was engaged in the ongoing testing, development and commercial exploitation of a method of producing energetically modified cement. The respondent to the complaint was the European Cement Association (“ECA”) which represented 25 national cement industry associations and cement companies in Europe. CEN is an independent organisation whose members were the national standard-setting bodies of 28 European countries. The European Cement Standard defined 27 common cement products that were described by the various national standards bodies within CEN. Those products are further grouped into five main cement types (CEM I to CRM V).

The applicant claimed that the European Portland cement producers had formed a cartel in order to create barriers to entry into the European cement market through the use of the standards. The European Commission initially concluded that the standards as examined under Guidelines of Article 81(1) did not restrict competition and that these standards were drafted in a sufficient performance based manner. The Commission therefore rejected the argument relating to a cartel and geographic division of markets.

The decision was taken for review by the applicant and the Review Court firstly concluded that the applicant did not establish that the contested decision was vitiated by a manifest error of assessment regarding the Commission’ finding that the procedure for adoption of the standard was

open, non-discriminatory and transparent. Secondly, the Review Court further held that the applicant failed to demonstrate that the Commission erred in its finding that the standard was binding and thus reject the second complaint. Lastly, regarding the allegation that the Commission failed to examine the standard in light of Directive 89/106 and the alleged non-conformity of the standard with that directive, the Review Court dismissed that allegation. It further stated that the review related to the legality of the contested decision and not of the Standard.<sup>37</sup>

#### (b) European Commission vs Rambus

The respondent to this case was Rambus, a company incorporated in Delaware (USA) and the case was in relation to the claiming of potentially abusive royalties for the use of certain patents for Dynamic Random Access Memory (“DRAM”) chips subject to the alleged deceptive conduct in the context of standard setting process. The deceptive conduct was on the basis that Rambus failed to disclose the existence of patents and patents applications which was revealed at a later stage to be relevant to the standard adopted.

There was also an industry-wide US based standard setting organisation, JEDEC that developed a standard for the DRAMs. Rambus further asserted patents on all JEDEC-compliant SDRAM chips and owns the proprietary RDRAM and XDR DRAM technology. Thus 90% of the commercial DRAM productions were exposed to Rambus’s patent claims.

The Commission thus concluded that there were substantial barriers to entry into this market mainly because the industry was locked into the JEDEC and subsequent standards. In order to remedy this, Rambus committed to a maximum royalty rate of 1.5% for subsequent standards and this

commitment extended this rate to all market participants and guaranteed that the industry will not pay more than the capped rates.<sup>38</sup>

#### (c) European Commission vs Samsung

In this case, Samsung was seeking preliminary (interlocutory) and permanent injunctions against Apple Inc. (“Apple”) before the courts of various Member States on the basis of certain of its standard essential patents (“SEPs”) covering Universal Mobile Telecommunications Service (“UMTS”) technology. Samsung also committed to license these SEPs on fair, reasonable and non-discriminatory (“FRAND”) terms and conditions during the standard-setting process in the European Telecommunications Standards Institute (“ETSI”).

However the Commission concluded that Samsung’s seeking of preliminary and permanent injunctions against Apple on the basis of its UMTS SEPs, in the exceptional circumstances of this case and in the absence of any objective justifications, raised concerns as to the compatibility of seeking of such injunctions with Article 102.

The Commission further concluded that Samsung’s seeking of preliminary and permanent injunctions against Apple on the basis of UMTS SEPs could not be justified by: (i) the need to protect Samsung’s IPR; or (ii) the need to protect Samsung’s commercial interests; (iii) the public interest in an effective standardisation process; or (iv) possible advantages in terms of effectiveness that also benefit consumers.

Samsung further amended its commitments which included Samsung not seeking injunctions on the basis of its Mobile SEPs against any potential licensee willing to enter a licence agreement on FRAND TERMS and conditions. In addition, Samsung committed

that potential licensee can also choose not to sign up to the Licensing Framework.

### **USA Case precedent:**

#### a) Radiant Burners case:

The U.S. Supreme Court has condemned efforts by firms to use Standard Settings Organisation (“SSO”) proceedings as means of excluding products produced by rivals. The OECD submission by the United States outlines a few examples of cases that relate to anticompetitive exclusion involving standard setting. The first is the Radiant Burners case, whereby the Supreme Court considered allegations that manufacturers of gas burners had violated Section 1 of the Sherman Act, which prohibits concerted action that unreasonably restricts competition, by conspiring to manipulate the American Gas Association’s certification tests for such products. The plaintiff claimed that its competing product had been effectively excluded from the market as a result of tests that were not based on objective standards; that competitors of those seeking certification improperly influenced the Association’s decisions; and that the Association and its utility members agreed to refuse to sell gas for use in burners that were not certified. The trial court dismissed the complaint, but the Supreme Court reversed, stressing the potential for harm to competition, stating: “It is obvious that petitioner cannot sell its gas burners, whatever may be their virtues, if, because of the alleged conspiracy, and the purchasers cannot buy gas for use in those burners.”<sup>39</sup>

#### b) Hydro level case:

The second case is the Hydro level case, in which the defendant was the American Society of Mechanical Engineers (“ASME”), an SSO that developed safety codes for boilers and other heavy equipment. One

of ASME’s members (a competitor of the plaintiff) persuaded the chairman of one of ASME’s subcommittees to provide an unofficial (and unjustified) letter stating that plaintiff’s product was unsafe. Thereafter, the competitor used that response to discourage customers from buying the plaintiff’s product. Hydro level sued the employer of the subcommittee chairman, the competitor, and ASME for violating Section 1 of the Sherman Act. The Supreme Court affirmed a jury verdict against ASME, holding the SSO liable for the actions of its subcommittee chairman because he acted on the “apparent authority” of ASME to discourage customers from purchasing one competitor’s water boiler safety device. The Supreme Court noted that ASME had not enacted any “meaningful safeguards” to try and prevent such actions.<sup>40</sup>

#### c) Rambus case

This case precedent relates to anticompetitive “hold up” tied to standard setting. Collaborative standard setting in the U.S. have increasingly incorporated technologies that are protected by intellectual property rights. As such issues have arisen in collaborative standard setting, which involve the potential for ‘hold up’ by the owner of the patented technology after its technology has been chosen by the SSO as a standard and others have incurred sunk costs that effectively increase the relative cost of switching to an alternative standard.

An example of the case precedent is the Rambus case which involved a firm, Rambus that participated in and then withdrew from involvement in the Joint Electronic Device Engineering Councils (“JEDEC”); an SSO comprised of major computer companies that developed standards for different classes of “dynamic random access memory” (“DRAM”) computer chips. JEDEC required that its

members participate in good faith, and the Federal Trade Commission (“FTC”) found that JEDEC’s policies created the expectation that members would disclose patents and patent applications that later might be enforced against those practicing the JEDEC standards. In addition, JEDEC members were obligated to offer assurances to license patented technologies on RAND terms, before members voted to adopt a standard that would incorporate those technologies.

The FTC found that Rambus violated section 5 of the FTC Act by engaging in deceptive conduct before JEDEC when it failed to disclose relevant patents and patent applications, and misled JEDEC members into believing that Rambus was not seeking patent rights that would cover implementations of JEDEC standards. The FTC further found that Rambus’s actions contributed significantly to JEDEC’s technology selections and that JEDEC’s choice of standard contributed significantly to Rambus’s acquisition of monopoly power. According to the FTC, the switching costs that developed as chip manufacturers became increasingly committed to the standard locked the industry in and rendered Rambus’s monopoly power durable. The FTC concluded that Rambus unlawfully monopolized the markets for four technologies incorporated into the SSO’s standards in violation of section 5 of the FTC Act. In a subsequent opinion and order on remedy in Rambus, the FTC barred Rambus from making future misrepresentations and omissions to SSOs and directed Rambus to license key patented technologies based on certain specified maximum allowable royalty rates.

Rambus appealed, and a panel of the U.S. Court of Appeals for the District of Columbia overturned the FTC’s decision and remanded the case to the FTC for further proceedings. The court opined that, if

JEDEC, in the world that would have existed “but for” Rambus’s deception, would have standardized the very same technologies, then Rambus’s alleged deception could not be said to have had an effect on competition in violation of the antitrust laws. The court did not view JEDEC’s loss of an opportunity

to seek favourable RAND licensing terms as an “antitrust” harm. Because the FTC did not reject the possibility that JEDEC would have developed the same standard even absent Rambus’s deceptive conduct, the court held that “the Commission failed to demonstrate that Rambus’s conduct

was exclusionary, and thus to establish its claim that Rambus unlawfully monopolized the relevant markets.” The full D.C. Circuit Court of Appeals and the Supreme Court refused to review this decision, and the FTC ended the case by dismissing the complaint against Rambus.<sup>41</sup>

## Endnotes

- 1 The Construction Industry survey commenced in 2007 and conducted every four years.
- 2 CLP refers to the Competition Commission (Commission)’s Corporate Leniency Policy.
- 3 See CC invitation to Firms to Settle Available at : <http://www.compcom.co.za/wp-content/uploads/2014/09/Media-Release-Competition-Commission-invites-construction-firms-to-settle.pdf>
- 4 Section 67 of the Competition Act states that a complaint in respect of the prohibited practice may not be initiated more than three years after the practice has ceased. Thus the non-prescribed cases fell outside the three years prescription period.
- 5 See CCSA 2013/2014 Annual report page 9 available at : <http://www.compcom.co.za/wp-content/uploads/2014/09/Competition-Commission-AR-201314-web.pdf>
- 6 CIDB Annual Report 2015/2016.
- 7 Market capitalisation measures the value of the company’s issued share capital; the number of shares multiplied by the current price of those shares on the stock market.
- 8 Exclusive clauses restrict members to engage in any activity related to the contract other than as members of joint ventures.
- 9 Sub-contacting clauses states that no member shall subcontract any obligation, work or duty for which it is responsible in terms of the agreement without the prior written consent of the management committee.
- 10 The focus of this brief is the assessment of the CIDB ratings’ impact on competition and thus these other standards will not be discussed further.
- 11 Ratshisusu, Hardin (2014): Limiting collusion in the Construction Industry: A review of the bid-rigging settlement in South Africa, *Journal of Economic and Financial Sciences*, Sept. 7(S), pp 587-606.
- 12 Ibid
- 13 USA, EU, Australia and the more developed countries do not have construction ratings systems in place but rather implement construction standards
- 14 The Chinese’s anti-monopoly law came into effect in 2008 and thus from the publically available information, the only cartel uncovered in the ‘broad construction industry’ was the pre-mixed concrete cartel case.
- 15 <http://www.jonesday.com/chinas-ministry-of-construction-issues-new-qualification-regulations-for-construction-design-and-supervision-enterprises-07-30-2007/>
- 16 The Malaysia Competition Commission (MyCC) was established on the 1st of April 2011 with the purpose of enforcing the Competition Act 2010 (CA 2010). From their website and publically available information, there is no mention that any construction cartel has been uncovered.
- 17 Only about 13% of construction companies in Malaysia are large.
- 18 More than half the contractors registered in Malaysia were G1 contractors. It is suspected that this high numbers is related to the minimum paid-up capital of only RM5, 000 and those they are allowed to undertake the projects to a maximum of RM 200,000.
- 19 <http://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEWjqz56Nys7KAhVD8RQKHeATBDMQFg-gaMAA&url=http%3A%2F%2Fwww.nazaha.gov.sa%2Fen%2FLibrary%2FDocument%2FRegulations%2FDocuments%2FContractorClassificationLaw.pdf&usq=AFQjCNHCKOM0YEol40UWJh7dKGdIYJ13sQ&bvm=bv.113034660,d.d24>

- 20 Grading system: classification is obtainable in Saudi Arabia by the Ministry of Municipal and Rural Affairs pursuant to the Contractor Classification Law (and implementing regulations). This is mandatory. Additionally, a classification of grade 1 enables the contractor to enter into building contracts in excess of USD74.66M while a grade 5 company can only enter into contracts up to USD1.86M.
- 21 We could not find information on public platforms regarding the history of cartel in the construction industry in Sri Lanka
- 22 <http://www.icralanka.com/images/pdf/Sri%20Lanka%20Construction%20-%20Sept%2015%20final.pdf>
- 23 [http://www.bre.polyu.edu.hk/20th\\_asia\\_construct/Country%20Reports/Sri%20Lanka.pdf](http://www.bre.polyu.edu.hk/20th_asia_construct/Country%20Reports/Sri%20Lanka.pdf)
- 24 Ibid
- 25 Ibid
- 26 Ibid
- 27 Competition Tribunal, Competition Commission and Tracetec v. Nestsar (Pty) Ltd, Matrix Vehicle Tracking (Pty) Ltd, Tracker Network (Pty) Ltd and Vehicle Security Association of South Africa, Case no.: 17/CR/Mar05
- 28 The CAC submits that the Tribunal “approached this question on a theoretical basis concerning the potential effect of standards in a market instead of examining the factual basis of the complaint that had been referred to it”, Case no/: 97-99/CAC/May10
- 29 Case no/: 97-99/CAC/May10, page 88
- 30 Par. 67,68 and 71; Case no.: 97-99/CAC/May10
- 31 See M. Motta, “Competition Policy: Theory and Practice”, Cambridge University Press, 2004, p.142
- 32 See M. Motta, “Competition Policy: Theory and Practice”, Cambridge University Press, 2004, p.143
- 33 See W. Landes,, 1983, “Optimal sanctions for antitrust violations,” The University of Chicago Law Review, vol. 50, no. 2, pp 652 – 678
- 34 To the extent that CIDB has market participants as its board members and the board is standard setting body, it does breach the border that CIDB has market power.
- 35 Ratshisusu, Hardin (2014): Limiting collusion in the Construction Industry: A review of the bid-rigging settlement in South Africa, Journal of Economic and Financial Sciences, Sept. 7(S), pp 587-606.
- 36 Please refer to Ratshisusu, Hardin (2014): Limiting collusion in the Construction Industry: A review of the bid-rigging settlement in South Africa, Journal of Economic and Financial Sciences, Sept. 7(S), pp 587-606 for more innovative remedies in terms of remedies at regulatory level; procurement level; and firm level.
- 37 Case T-432/05
- 38 Case COMP/ 38.636-Rambus
- 39 OECD. Directorate for Financial and Enterprise Affairs Competition Committee. Standard Setting. DAF/COMP (2010)33. Accessed at [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP\(2010\)33&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP(2010)33&docLanguage=En) on 25/01/2016
- 40 OECD. Directorate for Financial and Enterprise Affairs Competition Committee. Standard Setting. DAF/COMP (2010)33. Accessed at [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP\(2010\)33&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP(2010)33&docLanguage=En) on 25/01/2016
- 41 OECD. Directorate for Financial and Enterprise Affairs Competition Committee. Standard Setting. DAF/COMP (2010)33. Accessed at [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP\(2010\)33&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP(2010)33&docLanguage=En) on 25/01/2016



# CHAPTER 5

MARKET STUDY OF THE  
CONSTRUCTION INDUSTRY IN  
MAURITIUS

## INTRODUCTION

The Competition Commission of Mauritius (CCM) is a statutory body established in 2009 to enforce the Competition Act 2007 ('the Act') in Mauritius. The Act empowers the Executive Director of the CCM ('the ED') to investigate into potential restrictive business practices<sup>1</sup>. In addition, section 30 of 'the Act' provides that the ED should, inter alia, (i) keep the operation of the markets in Mauritius and the conditions of the competition markets under constant review; and (ii) undertake general studies on the effectiveness of competition in individual sectors of the economy in Mauritius.

In April 2017, pursuant to section 30 of the Act and in the context of the cross-country sector studies conducted by the African Competition Forum, the ED launched a market study into the construction industry in Mauritius.

A market study is not an investigation of restrictive practices resulting in the infringement of the Competition Act 2007. The aim of the market study is to understand the current conditions of competition in the local construction industry and identify prevailing competition concerns, if any. The CCM has no authority or expertise to investigate any alleged breaches of law other than the Competition Act. It would be for Government to take such wider concerns into account when considering any recommendations we might make.

The main focus of the study has been the identification and assessment of potential barriers to entry or constraints to the process of competition in the various markets within the construction sector. These potential barriers to entry or constraints may be arising from the regulatory framework, the market structure or the conduct of the players in the industry. Key aspects that have been reviewed

include the degree of concentration and vertical integration, pricing, norms and standards and public procurement process for construction works.

This report summarises the findings of the construction market study and is organized as follows:

- An overview of the construction industry in Mauritius.
- The construction regulatory framework in Mauritius.
- Price determination of construction material and the providers of professional services in the construction industry.
- The underlying public procurement framework and- issues related to construction works.
- An assessment of the potential competition issues in the construction industry.
- Conclusion.

## THE CONSTRUCTION INDUSTRY IN MAURITIUS

### Brief overview of the construction industry

The construction sector is often the engine that stimulates the development of an economy. In Mauritius, the sector has significant contribution to economic growth, employment creation and income generation. Its contribution to GDP is estimated at around 7.5% for the year 2017. It should be noted that the share to GDP of the construction sector has been declining since 2011 when it accounted for 6.6% to reach 3.7% in 2016. However, after the negative growth experienced by the construction sector over the period 2011 to 2015 and no growth in 2016, Statistics Mauritius estimated a growth rate of 7.5% for 2017 and projected the construction sector to grow by 9.5% in 2018.

In terms of employment, the construction sector currently provides some 56,500 jobs or around 10% of total employment in the country. In addition, the Statistics Mauritius estimated that that construction sector contributed around Rs 50 billion or 62.5% of the gross fixed investment of Rs 80 billion in 2017<sup>2</sup>.

### Types of construction work

The construction sector encompasses all types of activities which involve construction, repairs, demolition and renovation of buildings and infrastructure. Construction projects can be divided into governmental (public sector) and non-governmental (private sector) and comprise the following types<sup>3</sup>:

#### Residential buildings

Residential buildings include all real estate properties where more than half of the floor area services for dwelling purposes.

#### Non-residential buildings

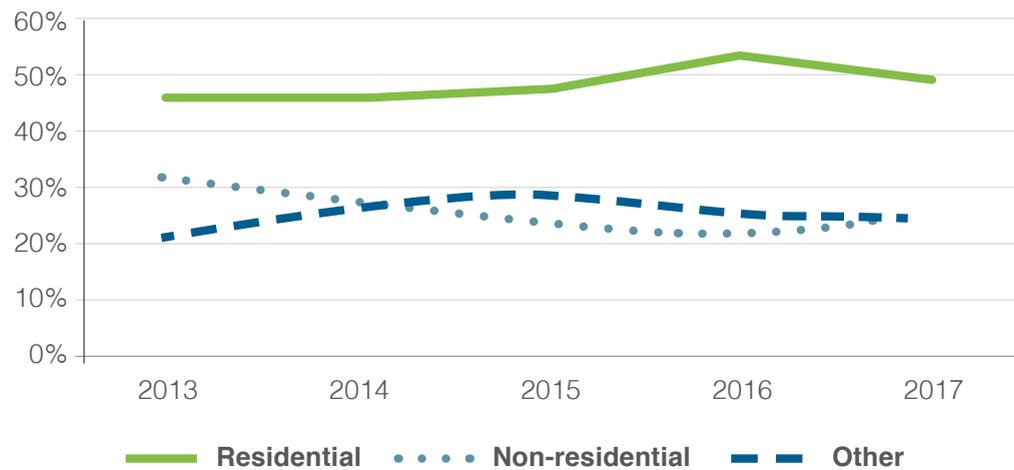
Non-residential buildings include properties mainly used for industrial, commercial, educational, health and purposes other than dwelling.

#### Other construction works

Other construction works include works such as on road constructions, dams, reservoirs, pipe laying, electricity distribution networks, land improvement and reclamation and all other civil engineering works.

The shares of residential buildings, non-residential buildings and other construction works of the value of the construction output, as measured by their value in terms of gross fixed investment, for the period 2013 – 2017 are illustrated in Diagram 1 below.

**Diagram 1: Evolution of the types of construction work**

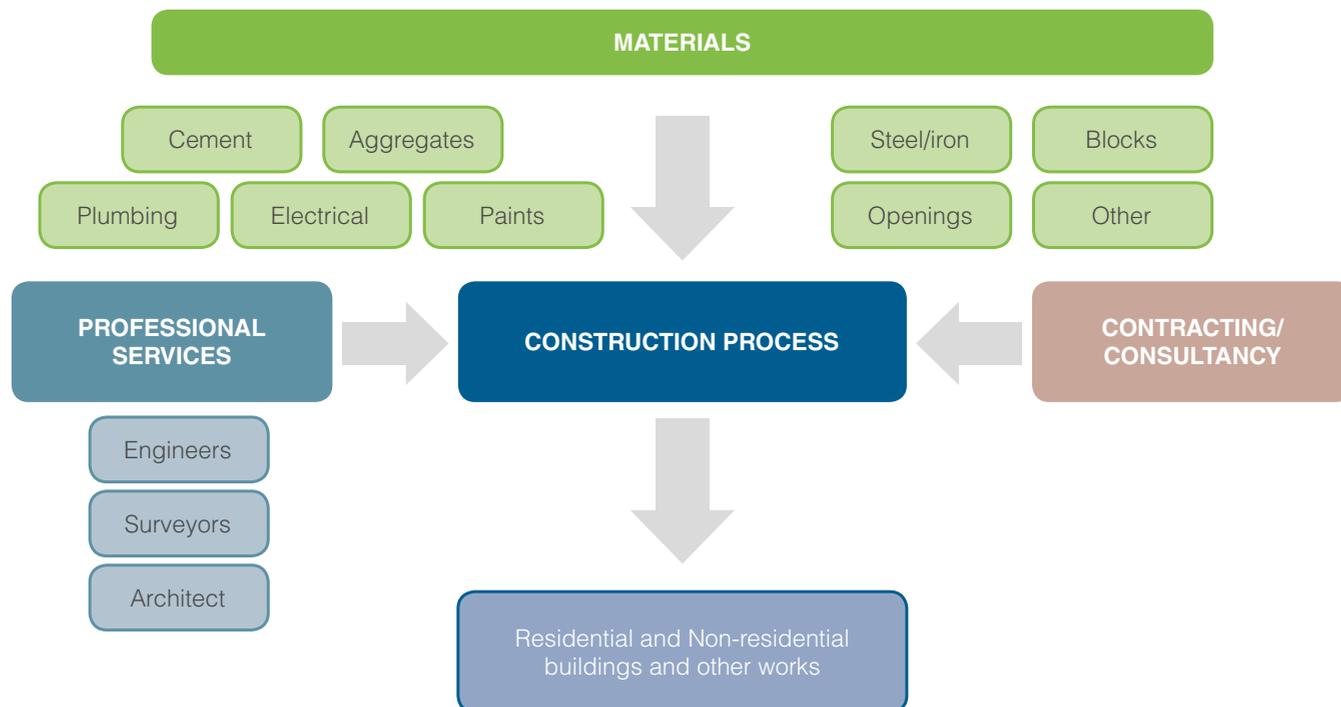


Source: Statistics Mauritius

In 2017, around 50% of construction works related to residential buildings and that of non-residual buildings and other construction works ranged between 20% - 30%. It is observed that the fall in the share of non-residential buildings has been declining over the period under consideration.

The main inputs required to deliver the various outputs in terms of residential and non-residential buildings and other construction works such as roads, dams, reservoirs and public utility networks is illustrated in Diagram 2.

**Diagram 2: The construction process from inputs to finished products**



As illustrated in Figure 2, the supply chain in the construction sector in Mauritius relate to the supply of:

- construction materials which include:
  - cement;
  - aggregates (gravels and sand);
  - blocks;
  - ready-mix concrete;
  - iron bars;
  - plumbing and electrical installation;
  - openings (aluminium, metal, wooden);
  - and
  - other supplies (paints, sanitary installation, flooring, timber, etc)
- professional services which include architects, surveyors and engineers.
- contracting and consultancy services.

### The cement market

Cement is an essential input which is used in all types of construction works (residential, non-residential and other construction works). It is used as an intermediate product in the production of ready mixed concrete, pre-cast concrete products and mortar<sup>4</sup>. One important characteristic of this product is its lack of substitutes. There is no effective substitute to cement. Less cement can be used in construction projects but it cannot be effectively substituted by another product.

Among the three main types of cement, which are the Ordinary Portland Cement (OPC), the Portland Pozzolana Cement and the Portland slag Cement<sup>5</sup>, it is the OPC which is the most common type of grey cement used in Mauritius. This, in view of its wide range of applications.

Cement is not produced domestically. It is imported in bulk by two main companies, namely Lafarge (Mauritius) Cement Ltd and Kolos Cement Ltd. They are both engaged in the bagging and distribution of the product in bulk or in bagged formats under the brand names “Baobab” and “Kolos”, respectively. The demand for cement is estimated to range between 600,000 and 700,000 tonnes annually or around 450 kg per capita in Mauritius.

In 2016, total cement imported amounted to 691,000 tonnes<sup>6</sup> valued at Rs 1,669 million or around USD 49 million. This represents a 12% increase in the amount of cement imported compared to the previous year with 619,000 tonnes of cement being imported.

#### Operators in the cement market

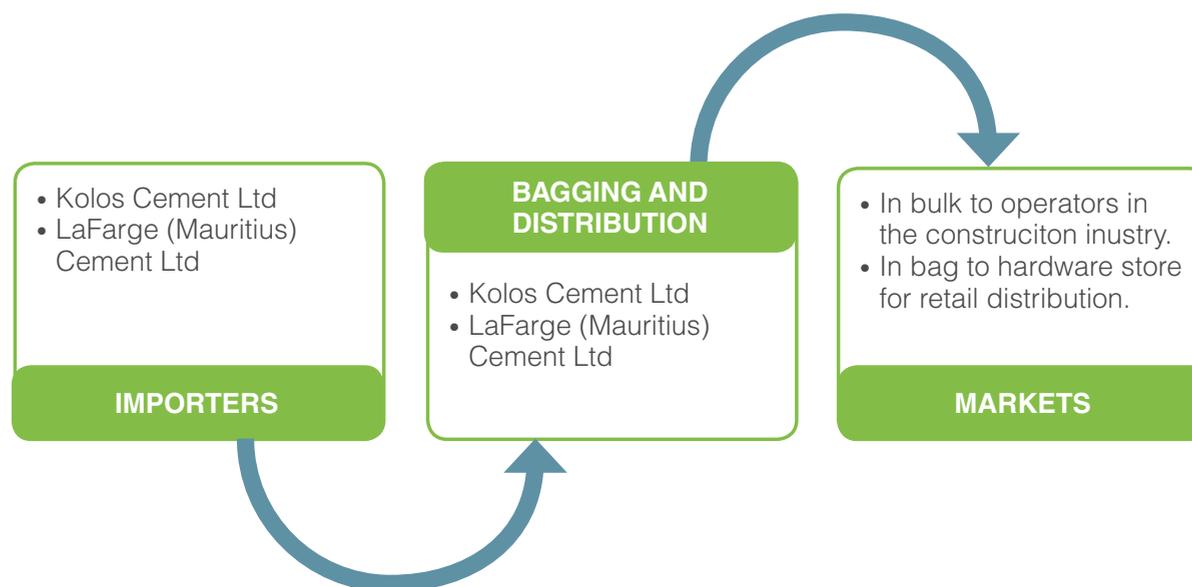
It is important to highlight that the cement market in Mauritius has recently been characterized by the merger between Lafarge S.A and Holcim Ltd.

Lafarge (Mauritius) Cement Ltd, a member of the LafargeHolcim Group is a leader in the cement industry in Mauritius, being one of the main importer and distributor of cement in the country. Before the merger of Lafarge S.A and Holcim Ltd in the year 2014, the other main importer of cement and distributor in Mauritius, was the local subsidiary of Holcim Ltd; Holcim (Mauritius) Ltd.

Post-merger, after the divestment<sup>7</sup> of the shares of Holcim (Mauritius) Ltd to the Gamma Group which was as the purchaser of such shares and hence became the owner of Holcim (Mauritius) Ltd, the new entity became known as Kolos Cement Ltd<sup>8</sup>. The Gamma Group has majority shareholder of Kolos Cement Ltd and exercises controlling interest in the latter.

Diagram 3 below illustrates the value chain in the cement industry in Mauritius. Imported bulk cement is stored at the respective cement terminals of the operators, after unloading from the ships. The bulk cement is either processed into bagged cement and distributed to hardware stores for retail distribution or sold in bulk format at wholesale level to their respective clients such as construction companies or ready-mixed concrete companies.

**Diagram 3: Supply chain of cement and the associated operators**



a) *Lafarge (Mauritius) Cement Ltd*

Like its international counterpart, Lafarge (Mauritius) Cement Ltd is an importer and wholesale supplier of cement. It has a production capacity of 40,000 metric tons per month and has invested in a ‘ship unloader’ and a ‘vacuum pump’ which will further allow the company to unload cement from ships and process and distribute the cement at a faster pace<sup>9</sup>.

Lafarge (Mauritius) Cement Ltd’s cement terminal allows for the vertical storage of 35,500 metric tons of cement in concrete silos. Bulk cement is processed into bags of 25 kg and 50 kg under the brand ‘Baobab’ of CEM I 42.5N; CEM II 32.5; and MC 22.5N for masonry works in bags of 10 kg and 25 kg. The company also supplies cement in bulk to players in the construction industry.

The Executive Director has gathered<sup>10</sup> that the Group LafargeHolcim owns 58.36% of Lafarge (Mauritius) Cement Ltd. The shareholding structure of the company is shown below.

**Table 1: Shareholding structure of Lafarge (Mauritius) Cement Ltd**

Shareholder	% of shares owned
LafargeHolcim Group <sup>11</sup>	58.36
Taylor Smith Investment Ltd	28.98
State Investment Corporation Ltd	7.93
Other shareholders (less than 2% shareholding)	4.73

Source: Compiled from Registrar of Companies

b) *Kolos Cement Ltd*

Kolos Cement Ltd is the other main importer and distributor of cement in Mauritius. It has the largest terminal in the Indian Ocean, with a total capacity of 60,000 tons, representing more than 2 months of the market consumption<sup>12</sup>. Kolos Cement Ltd has also the largest stocking capacity of finished products representing 3,000 tons and has a discharging equipment for

cement; which is deemed as unique in the region<sup>13</sup>. Its principal activities therefore include unloading, storing, bagging and distribution and sale of cement products in Mauritius. The company supply bagged and bulk cement of the type CEM I 42.5N, CEM II 42.5, CEM III A 42.5 and CEM III B 32.5<sup>14</sup>.

In terms of the shareholding structure, Kolos Cement Ltd is found to be fully owned by the Gamma Group through Gamma Cement Limited.

Market shares and level of concentration in the cement market

The two players in the cement market are therefore Lafarge (Mauritius) Cement Ltd and Kolos Cement Ltd with almost 100% market share. It is to be noted that the market for cement has been liberalized as from 1 July 2011. As such there could potentially be some operators importing cement but from information gathered so far, it appears that the volume of such imports would be insignificant in comparison to that of the two main players.

Table 2 represents the indicative market shares of the two players and the degree of concentration, as measured by the Herfindahl Hirschman Index (HHI)<sup>15</sup>.

**Table 2: Indicative Market shares and concentration in the cement market**

Company	Indicative Market share
Kolos Cement Ltd	40% - 50%
Lafarge (Mauritius) Cement Ltd	50% - 60%
HHI	5,000 – 5,200

Source: Computed from publicly available information<sup>16</sup>

It is found that the HHI index for the cement market is around 5,000, which indicates that the cement market is highly concentrated. However, given the characteristics of the industry: huge investment requirement, most of which would potentially be sunk costs; minimum efficient scale to be achieved; and the relative smaller size of the local market, it is unlikely that many operators would be attracted to enter the market.

### The market for the supply of ready-mix concrete, aggregates and blocks

Concrete is a mixture of cement, water and aggregates (fine and coarse), or rocks. The mixture forms a fluid mass that is easily moulded into shape. When the paste hardens, it gains strength to form the rock-like mass known as concrete.

Aggregates are inert granular materials such as sand, gravel, or crushed stone that, along with water and Portland cement and are an essential ingredient in the manufacture of concrete. Aggregates account for 60 to 75 percent of the total volume of concrete and are divided into two distinct categories: fine and coarse.

Natural gravel and sand are usually dug or dredged from a pit, river, lake, or seabed. Crushed aggregate is produced by crushing quarry rock, boulders, cobbles, or large-size gravel. Recycled concrete is a viable source of aggregate and has been satisfactorily used in granular subbases, soil-cement, and in new concrete.

Blocks are used to make walls, pavements and other inputs in construction. Concrete blocks are made from cast concrete, e.g. Portland cement and aggregate, usually sand and fine gravel for high-density blocks. Given the size and weight, blocks are locally produced in Mauritius.

#### Operators in the market for ready-mix concrete, aggregates and blocks

In Mauritius, ready-mixed concrete is currently being supplied by four companies, namely Pre-Mixed Concrete Ltd, Betonix Ltd, Gamma Materials Ltd and Eastern Mix Ltd. In addition, there are a number of small operators which produce and supply concrete at the site of the client using mainly labour and a minimum level of mechanisation (smaller sized concrete mixer and in some cases concrete pump). However, these smaller enterprises cater for a limited market for residential buildings mainly.

The suppliers of ready-mix concrete are also in the business of aggregates and construction blocks. As explained earlier, aggregates and cement are the two key inputs in the production of construction blocks and ready-mix concrete. Suppliers of construction materials do benefit from economies of scope and scale in providing aggregates, concrete and blocks. Fine Crush Ltd (which is the sister company of Betonix Ltd and part of the Bhunjun Group), Gamma Materials Ltd, Eastern Stone Crusher Ltd (the holding company of Eastern Mix Ltd) and United Basalt Products

Ltd are active in the supply of aggregates and blocks. It is highlighted that UBP has 49% shareholding in Pre-Mixed Ltd, with Lafarge (Mauritius) Ltd having controlling interest with its 51% shareholding. In the case of ready-mix concrete, the providers supply their products directly to consumers; that is those who are building their own houses and those companies undertaking construction works. For aggregates and construction blocks, consumers obtain their required products directly from the suppliers or through a hardware store in the vicinity.

A brief description on the various operators in the supply of construction materials is provided below.

#### *United Basalt Products Ltd*

United Basalt Products Ltd ('UBP') was founded in 1953 following the merger of five companies engaged in stone crushing: Stone Utilities, Stone Masters, Stone & Bricks, Concrete Products and Building & Engineering. It is a public company with about 3,941 shareholders and is listed on the stock exchange of Mauritius since June 1989. Its current capitalization is around Rs 2.2 billion (USD 61.5 million). Its activities are categorized into 3 main segments, namely: stone crushing, retail and agriculture.

UBP runs 8 production and sales plants and 2 sales depots at strategic points throughout Mauritius, besides units in Rodrigues, Madagascar and Sri Lanka.

The main shareholders of UBP are GML Investissement Ltee and Forward Investment and Development Enterprises Ltd which respectively hold 25.01% and 9.45% of the total shares. The rest of the shareholders hold less than 5% of the ordinary share capital of the company<sup>17</sup>.

### *The Bhunjun Group*

The Bhunjun Group, a family owned business, is a major player in the local construction industry with its subsidiaries namely, Bhunjun & Sons Ltd, Bhunjun Properties Ltd, Betonix Ltd and Fine Crush Ltd. It offers a wide range of interrelated services in the construction and real estate development.

The Bhunjun Group supplies construction materials like aggregates and building blocks through its subsidiary Finecrush Ltd; and ready-mixed concrete through its another subsidiary Betonix Ltd. The Group is active in the construction and real estate development through its subsidiaries: Bhunjun & Sons Ltd and Bhunjun Properties Ltd.

### *Pre-Mixed Concrete Ltd*

Pre-mixed Concrete Ltd, is a company that is specialised in the production of ready-made concrete. It is one of the main ready-made concrete producers in Mauritius. It is owned 51% by Lafarge (Mauritius) Ltd and by United Basalt Products (UBP) (49%)<sup>18</sup>.

### *The Gamma Group*

The Gamma Group is engaged in the building materials, construction and property activities. In the 'materials' segment, it is active, through its Gamma Materials Ltd, in the production and supply of aggregates, asphalt and precast products, ready-mixed concrete, concrete blocks and cement. In the 'construction' segment, it is active, through Gamma Civic Ltd, in the building engineering and civil engineering markets, as well as infrastructure. And in the 'property' segment, the Group is active in commercial property, residential property and hotels and resorts. It also has a strategic alliance with Colas<sup>19</sup>.

With a combined market capitalization of USD 200 million and current combined group turnover of USD 250 million, the

Gamma Group is listed on the Stock Exchange of Mauritius since November 1994 and appears today amongst the Top 10 most performing companies on the Stock Exchange of Mauritius with 5-year total return to shareholders of 392%.

### *The Eastern Stone Crusher Ltd*

The Eastern Stone Crusher Ltd is a family company founded in 2000. It forms part of the Eastern Group of Companies which also includes the Eastern Mix Ltd and the ESC Construction Ltd. The Eastern Stone Crusher Ltd supplies aggregates and construction blocks and his wholly-owned subsidiary Eastern Mix Ltd supplies ready-mix concrete.

### **Market shares and level of concentration in supply of concrete, aggregates and blocks**

In the absence of segregated data on each product of the operators and taking into consideration the three of them, namely the Bhunjun Group, Gamma Group and Eastern Group inter-related companies, we have calculated the market shares based on the estimated total turnover for the construction materials. For comparison purposes, the turnover of Pre-Mixed Ltd and UBP Ltd, being related companies, have been combined.

**Table 3: Indicative Market shares and concentration**

Company	Indicative Market shares
Bhunjun Group (Betonix Ltd and Finecrush Ltd)	25% - 30%
Gamma Materials Ltd	17% - 22%
Pre-Mixed Ltd and UBP Ltd	35% - 45%
Eastern Group	5% - 10%
HHI	3,000 – 3,500

Source: Computed from publicly available information<sup>20</sup>

As illustrated in Table 3, the markets for the supply ready mix concrete, aggregates and construction blocks are also highly concentrated with the three firms having around 90% market share and the HHI ranging between 3,000 and 3,500.

### **The market for the supply of iron bars and metal products**

Iron and steel are also a major input in the construction sector. Also known as commodity items, they are used in building as well as civil engineering projects. They consist of rebars, H beams and other shapes, pipes (structural pipes and others), sheet piles, galvanized steel sheets and other coated sheets (e.g. roofing), heavy and medium plates, steel sheets and other secondary and tertiary wire rod products. Iron bars and rebars are used as a tension device to reinforce concrete and masonry structures.

The market of iron bars has been fully liberalized in terms of removal of price control as from April 2007. There is no restriction on the volume of iron bars imported but are subject to permits and quality control terms of certification by the Mauritius Standard Bureau. Same control applies to locally manufactured iron bars. In 2016, the total volume and value of iron and steel imported amounted to 114,000 tonnes and Rs 2,567 million (around USD 75 million). In comparison with the figures for 2015, the volume and value of iron and steel imported were 7% and 30% lower for 2016.

The annual volume of Iron bars, which are mainly used in the reinforcement in construction of buildings and other infrastructure, traded annually on the local market is estimated to range between 70,000 to 90,000 tons. Of these, around 65% - 70% are imported and the remaining 30% - 35% are produced locally by one local enterprises dealing in scrap metals.

### Operators in the supply of iron bars

The main operators in the iron and steel market include local manufacturers, wholesale importers and hardware stores. Larger construction companies also directly import iron bars and steel products.

The two local manufacturers of iron bars are: Samlo Koyenco Steel Co. Ltd which operates a foundry makes iron bars by processing scrap metals; and Shankar Steel Ltd which manufactures iron bars from imported steel billets.

Kosto Ltd, a subsidiary of Desbro (Seychelles) and part of Murray & Roberts Group, operates a steel mill and is in the importation and distribution of iron bars and other steel products. Joonas Co. Ltd is another major player in the market.

### Market shares and level of concentration in the supply of iron bars

As indicated previously, the steel product market, including iron bars has been liberalised since 2007 and there are presently numerous players in the market. We estimate that the four above listed players in the market would have combined market share in the range of 65% - 75% and the concentration index of HHI to be 1,400 – 1,600.

### **Professional services**

Projects in the construction industry in Mauritius can be regrouped into residential buildings, non-residential buildings and other works. Other works are mainly public works such as the construction of roads, bridges, social housing projects, construction and renovation of government buildings such as hospitals and educational institutions. The services of architects, engineers and quantity surveyors are demanded for the various types of

construction works listed above, albeit to limited extent for individual residential projects such as small and medium-sized houses.

Professional services are either provided by individual construction professionals, particularly for small project or by consultants which registered companies.

The regulatory framework for professionals in the construction industry is provided below.

#### **Architects**

Architects have the role of planning, designing, and overseeing the construction of buildings. The profession of architects in Mauritius is regulated and controlled by the Professional Architects' Council set up under section 3 of the Professional Architects' Council Act 2011. In Mauritius, as per the Professional Architects' Council Act 2011, only professional or authorized foreign architects are allowed to practice in Mauritius.

To become a registered professional architect by the Professional Architects' Council, the applicant should firstly be a citizen of Mauritius, or a resident in Mauritius if not a citizen) and has attained the age of 21. The professional architect should not have been convicted of an offence involving fraud or dishonesty in any country or been disqualified or deregistered from practicing architecture. Moreover, he/she should hold a degree or an equivalent qualification in architecture, after full-time studies of a duration of not less than 5 years, from a university or other institution which is – (i) recognised by the “Union Internationale des Architectes” in accordance with the UNESCO/UIA Charter for Architectural Education; or (ii) recognised by the competent authority of the country where the degree or equivalent qualification has been

obtained; and (iii) approved by the Council. He/she should also have at least 2 years' approved post qualification experience; and have paid the registration fee as may be prescribed.

#### **Engineers**

Engineers contribute to the construction sector by designing materials, structures, and systems while considering the limitations imposed by practicality, regulation, safety, and cost.

The process for the registration of engineers in Mauritius is in two stages, firstly the approval of qualifications and secondly the assessment of experience in the practice of engineering (Registration Stage).

The approval of qualifications consists of ensuring that the candidates' qualifications in engineering are of a standard which satisfies the requisites of Section 13 of the Registered Profession Engineers' Council Act (1965). This may require candidates to demonstrate a sound and adequate knowledge of mathematics, engineering science and fundamental engineering principles applicable to their field of engineering through a technical interview.

The assessment of experience in the practice of engineering which occurs at the registration stage entails that the applicants must have had at least 24 months of satisfactory training, under the supervision of a Registered Professional Engineer, from their own field or an allied field.

#### **Quantity Surveyor**

The quantity surveyor is responsible for managing all costs relating to building and civil engineering projects, from the initial calculations to the final figures. They seek to minimize the costs of a project and enhance

value for money, while achieving the required standards and quality.

In order to practice as a professional quantity surveyor in Mauritius, the applicant has to be registered at the professional quantity Surveyors' Council which is governed by the Professional Quantity Surveyors' Council Act 2013. To be a registered quantity surveyor, the applicant must have attained the age of 21, not been convicted of an offence involving fraud or dishonesty in any country and not been disqualified from practicing quantity surveying. The applicant should also hold a degree or an equivalent qualification in quantity surveying from an approved institution with at least 3 years approved post-qualification experience and pay registration and annual fee as may be prescribed.

## Contractors

Contractors play an important role in the construction industry. They are one who undertake the responsibility to carry out and deliver construction projects. Contractors are regulated by the Construction Industry Development Board Act 2008. In August 2017, there were 1803 contractors registered with the Construction Industry Development Board, of which there were 989 building contractors, 493 civil engineering contractors, 113 mechanical contractors and 138 electrical contractors. Amongst these, the top five contracting firms with the highest turnover in the construction sector were: (1) Bhunjun & Sons Ltd; (2) General Construction Co. Ltd; (3) Transinvest Construction Ltd; (4) Rehm-Grinaker Construction Ltd; and (5) Manser Saxon Contracting Limited.

## REGULATORY FRAMEWORK

In Mauritius, the construction industry is mainly regulated by the government through the Construction Industry Development Board (CIDB) which operates under the

aegis of the Ministry of Public Infrastructure and Land Transport.

### The Construction Industry Development Board Act

The CIDB is responsible for the promotion of the development and improvement of the construction industry. It is a statutory body which has been established under the CIDB Act of 2008. The CIDB has among others the main functions of regulating and registering providers of construction works and construction services; providing the standardisation and improvement of construction materials and techniques; developing standard forms of construction agreements and contracts; and publishing periodically indicative schedules of rates for construction works.

#### Composition of the Construction Industry Development Council

The CIDB is administered by its Construction Industry Development Council, which is statutorily prescribed at Section 8 of the CIDB Act 2008 and is composed as follows:

- (a) a Chairperson, appointed by the Minister;
- (b) a representative of the Ministry;
- (c) a representative of the Ministry responsible for the subject of environment;
- (d) a representative of the Ministry responsible for the subject of local government;
- (e) a representative of the Professional Architects' Council established under the Professional Architects' Council Act;
- (f) a representative of the Professional Quantity Surveyors' Council established under the Professional Quantity Surveyors' Council Act;
- (g) a representative of the Council of Registered Professional Engineers of Mauritius established under the

Registered Professional Engineers Council Act;

- (h) a representative of the small and medium enterprises of the construction sector, to be appointed by the Minister;
- (i) a representative of an association of contractors for building and civil engineering works, to be appointed by the Minister;
- (j) a representative of an association of contractors for mechanical and electrical works, to be appointed by the Minister;
- (k) a person having wide experience in the construction industry, to be appointed by the Minister.

The Construction Industry Development Council comprises therefore of members which are representatives of the private stakeholders of the construction industry, which by virtue of their registration are subjected to the regulatory control of the CIDB.

A potential concern may therefore be whether the private stakeholders, which by virtue of their position as the Construction Industry Development Council members, may take decisions which unjustly favour the enterprises which they represent to the detriment of the other stakeholders of the industry. While any potential conflict of interest might not amount to a restrictive business practice as defined by the Competition Act 2007, this might be hindering competition in the construction sector by putting stakeholders not represented at the Construction Industry Development Council at a competitive disadvantage and/or constitute a corruption issue.

It is however highlighted that there are internal procedures set up for the Construction Industry Development Council to mitigate the potential conflict of interest concern. The CCM has been informed that the members of the Construction Industry Development Council are provided with the agenda of the council

meeting prior to the meeting on which they are expected to base themselves to determine whether they would be in any potential situation of conflict of interest for any decision. Where any conflict of interest is declared, this is recorded by the Council secretary in the minutes of the Council meeting and the member who has declared the interest does not take part in the proceedings or decision in relation to that matter.

#### Registration of contractors and consultants

In Mauritius, as per the CIDB Act 2008, no person can offer his services as a consultant or as a contractor in both the public and the private sector unless he is registered. It is the council which decides whether to grant an application or not.

Contractors are classified into 8 Grades A to H. The grading is based on their financial capabilities and the nature of the projects they can undertake. This means that a contractor could achieve a high grading provided it had available capital and its financial performance over the last few years. The rationale of having a grading system of contractors in Mauritius is to have a method of classification, which allows the regulatory body to know which value of work that the contractor can undertake. It is highlighted that a contractor is not allowed to undertake construction works above his Grade Limit. Licenses of contractors are renewed on a yearly basis and the CCM has been informed by the CIDB that at the moment of renewal, if the financial circumstance of the contractor has changed, the latter can

apply for registration for either an upper or lower grade, based on documentary evidence. They will also be required to pay for a registration fee for additional class of works or additional area of specialization. To the extent that contractors may apply for an upper or lower grading each year, the grading system does not therefore constitute any barrier to entry or expansion for contractors. The grading system appears to be more a method of classification therefore which allows the regulatory body, i.e., CIDB to better regulate and monitor the activities.

Table 4 illustrates the number of contractors registered with the CIDB.

**Table 4: Number of contractors registered with CIDB as at August 2017**

Grade	BUILDING CONSTRUCTION WORKS		CIVIL ENGINEERING CONSTRUCTION WORKS		MECHANICAL WORKS		ELECTRICAL WORKS		MEP WORKS		TOTAL
	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	
GRADE A (Above 250 Million)	22	23	12	152	12	11	5	25	1	6	269
GRADE B (Up to 200 Million)	4	3	2	1	3	0	3	1	1	1	19
GRADE C (Up to 150 Million)	16	2	3	3	3	1	4	5	4	1	42
GRADE D (Up to 75 Million)	34	13	18	21	13	7	10	6	3	1	126
GRADE E (Up to 50 Million)	69	1	19	3	12	1	17	1	3	6	132
GRADE F (Up to 25 Million)	59	2	25	3	9	2	8	0	7	2	117
GRADE G (Up to 10 Million)	152	0	52	2	12	0	15	0	7	0	240
GRADE H (Up to 5 Million)	587	2	175	2	27	0	38	0	26	1	858
<b>TOTAL</b>	<b>943</b>	<b>46</b>	<b>306</b>	<b>187</b>	<b>91</b>	<b>22</b>	<b>100</b>	<b>38</b>	<b>52</b>	<b>18</b>	<b>1 803</b>

Source: CIDB

The CIDB Act also puts an obligation on consultants providing professional construction services to be registered with CIDB. Table 5 provides the number of consultants registered with CIDB as at August 2017.

**Table 5: Number of consultants registered with CIDB as at August 2017**

Category	Number
Architecture	102
Civil Engineering	254
Mechanical Engineering	78
Electrical Engineering	87
Quantity Surveying	62
Project Management in Construction	160
MEP Services	16
Multiple Fields	98
Total	857

Source: CIDB

Consultants and contractors registering at the CIDB are however required to pay a fee. The fee includes (i) a processing fee (ranging between Rs 500 - Rs1000) and (ii) a registration fee and annual renewal fee (ranging between Rs 2 500 - Rs150, 000), as per field of specialization. The registration and annual renewal fee will depend on the grading of the consultants/contractors<sup>21</sup>.

There is no fee to provisional registration as a foreign contractor. However, registration

for a permanent application costs Rs 10,000 to the foreigner.

### Construction standards

While the CIDB is mandated to 'encourage the standardization and improvement of the construction materials and techniques', the institution which is responsible for the development of common standards on construction is the Mauritius Standard Bureau (MSB). Consequently, both the CIDB and the MSB are involved in the development and adoption of the common standards and improvement of constructions materials and techniques in the construction industry in Mauritius.

#### Mauritius Standard Bureau

The Mauritius Standards Bureau (MSB) is, a corporate body, set up under the Mauritius Standards Bureau Act 1993 has the responsibility of ensuring the standardisation, quality assurance, testing and metrology of construction materials. It also offers calibration services as a custodian of the national measurement standards. It is the 'Building and Construction Standard Committee', a technical committee set up by the MSB is responsible for the development of common standards in the construction industry.

MSB operates a certification marking scheme for products and a national

management system certification scheme (ISO 9001, ISO 14001, ISO/IEC 27001, ISO 22000, HACCP). MSB is a member of the International Organization for Standardization (ISO), an affiliate member of the International Electrotechnical Commission (IEC) and a member of the African Organisation for Standardisation (ARSO).

However, although a few standards such as MS 10 and MS 34 are mandatory, the standards developed or adopted by the MSB are usually voluntary. All standards developed in Mauritius are voluntary standards and it is the Consumer Protection Unit within the Ministry of Industry, Commerce and Consumer Protection which adopts regulations made under the Consumer Protection Act 1991 to make a standard mandatory. The standards made mandatory standards by the Consumer Protection Unit. The main rationale for having such standards imposed by the Consumer Protection Unit is for safety purposes.

The Business Facilitation Act 2017, which came into force on 20th of May 2017 provides that cement imported in Mauritius should comply with the standard MS 36-1:2006.

The table 6 shows the Mauritian standards for construction materials in Mauritius<sup>22</sup>.

**Table 6: Standards for construction materials in Mauritius**

Construction Material	Standard	Specification for
Cement	MS 36-1:2006-Cement	Cement
Aggregates	MS EN 12620:2002+A1:2008	Concrete
	MS 129:2006 (EN 13139:2002)	Mortar
Iron and metal	BS 882: 1992	natural source for concrete
	MS 10:1999	carbon steel bars for the reinforcement of concrete
	MS 34:2002	cold reduced steel wire for the reinforcement of concrete
	MS 35:2006	Steel fabric for the reinforcement of concrete
	MS ISO 1461:2009	Hot dip galvanized coatings of fabricated iron and steel articles
Blocks	MS ISO 4998:2011	Continuous hot-dip zinc-coated carbon steel sheet of structural quality
	MS 42:2000	Precast concrete building blocks
	ISO 9001:2000-certified	Conform to BS 6073:3.5 N/mm <sup>2</sup> and other standards manufacture

Source: Mauritius Standard Bureau

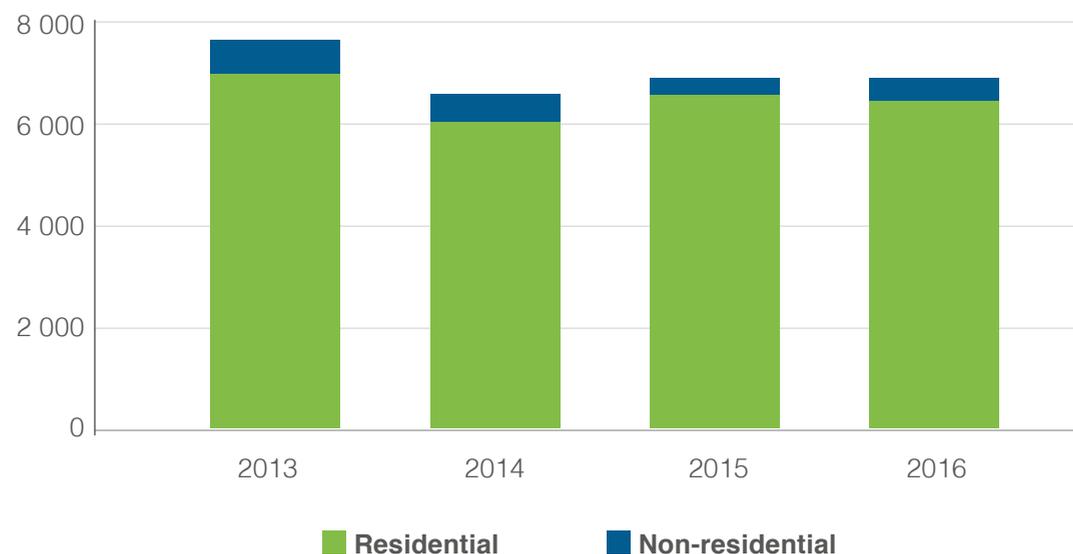
### Building permits

The Building and Land Use Permit is an administrative document which gives the means to administration for checking that a project of construction complies with the norms and rules of the local

authority. It takes on average 21 days to obtain the building and land use permit.

Figure 4 reports the number of permits issued for residential and non-residential buildings.

**Diagram 4: Number of building permits issued**



Source: Statistics Mauritius

## Government Intervention

### *Trade restrictions*

There are at present no specific trade restrictions as far as construction materials are concerned.

The exports and imports of goods in Mauritius are regulated under the Consumer Protection (Export Control) Regulations 2000 and the Consumer Protection (controls of Imports) Regulations 1999 respectively.

The documents and permit required for exportations of goods are:

- Export permits
- Export Certificates
- Kimberley Process Certificates

Import of cements and iron and steel including iron bars is open to anyone provided that the latter has the required import permit<sup>23</sup> and satisfies the relevant quality standard.

### *Taxes and subsidies*

Taxes targeted at specific products or services may unwittingly create an uneven playing field by channeling consumers towards substitutes that are not subject

to tax. On the other hand, inefficient businesses that would have exited the market under competitive conditions may be “sponsored” by subsidies to remain in the market as they do not face competitive discipline to improve and innovate.

### *Taxes*

The government charges a 15% VAT on all construction materials. In addition to the VAT, an excise duty of 6% and 10% are charged only for iron bars of 6mm and greater than 6mm respectively.

### *Subsidies*

The Government does not offer any subsidy or grants to the construction industry. However, loans up to a maximum amount of Rs 250 000 are offered at a preferential interest rate by the Development Bank of Mauritius for inter alia, the construction commercial or office building, any other related activity under the micro credit scheme to mainly registered small and medium enterprises, small businesses holding a Business Registration Card at an interest rate of 6% per annum with a repayment period of up to 5 years, depending on the project.

## **PRICE DETERMINATION**

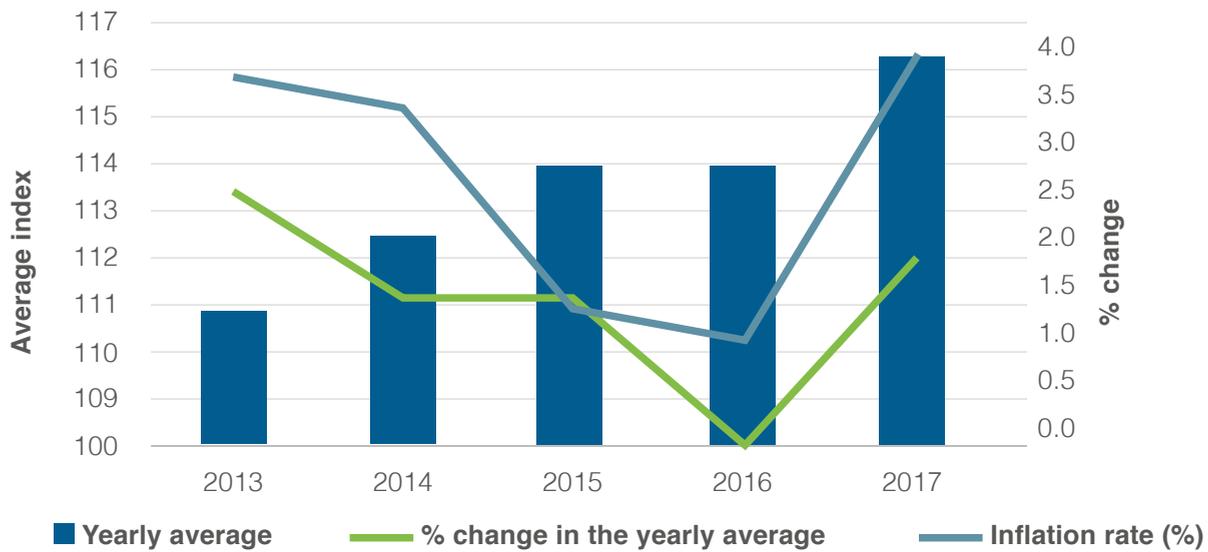
In Mauritius, prices of construction materials, including that of cement, aggregates, blocks and iron and metals, are not controlled by the Government.

### **Construction Price Index**

The Statistical Office of Mauritius regularly publishes the Construction Price Index (CPI). This index measures the change in the level of construction prices relative to the base year. The CPI consists of four main items, namely labour, hire of plant, materials and transport. Materials which include cement, iron bars, aggregates and blocks represent the highest weight in the CPI (64.2), followed by labour (28.2), transport (4.3) and hire of plant (3.3). It may be noted that cement and iron bars have the highest individual weight in the CPI of 12.7 and 10.6, respectively. The construction price indices therefore give an indication of the change in the level of prices of construction works. They are also useful for evaluating cost fluctuations in contracts regarding construction works.



**Diagram 5: Evolution of Construction Price Index**



Source: Statistics Mauritius

From Diagram 5, it can be observed that construction prices, as measured by CPI<sup>24</sup>, have increased between 2013 and 2017. However, the rate of increase fell from 2.4% in 2013 to 1.8% in 2017 and with no increase registered in 2016. In comparison with the inflation rate, it is found that the

increase in construction prices has been lower than the inflation rate over the period 2013-2017.

An analysis of the increase in prices of construction items reveals that four items, namely, cement, paint and ceramic tiles

have registered the highest increase over the period 2013 -2017 in the range of 12.4% - 18.5%. Labour cost have also followed the same trend. Table 7 illustrates changes in price of the various items in the CPI for the period 2013-2017.



**Table 7: Construction Price Index for the period 2013 - 2017**

Input Categories	Weight	Percentage increase in the construction price index						
		2013	2014	2015	2016	2017	Total	Average
LABOUR	28.2	2.7%	3.7%	4.5%	1.1%	0.9%	12.9%	2.6%
HIRE OF PLANT	3.3	3.4%	1.1%	0.0%	0.0%	0.0%	4.5%	0.9%
MATERIALS:	64.2	2.4%	0.5%	0.2%	-0.5%	0.7%	3.3%	0.7%
Hardcore	1.8	2.0%	0.6%	0.0%	0.0%	0.7%	3.3%	0.7%
Cement	12.7	8.9%	1.2%	1.5%	0.8%	0.0%	12.4%	2.5%
Sand	4.2	1.3%	0.4%	0.0%	0.0%	0.8%	2.5%	0.5%
Aggregate	3.4	2.3%	0.7%	0.0%	0.0%	1.0%	4.0%	0.8%
Block	5.2	3.7%	4.5%	0.0%	0.0%	2.3%	10.5%	2.1%
Steel bars	10.6	-3.0%	-3.2%	-3.8%	-6.7%	1.3%	-15.4%	-3.1%
Galv. corrugated cast iron sheeting	0.6	0.0%	-2.2%	-2.4%	0.4%	0.1%	-4.1%	-0.4%
Timber:								
(a) Carpentry	3.9	2.2%	0.9%	2.8%	0.9%	0.7%	7.5%	1.5%
(b) Joinery	1.6	2.2%	0.4%	0.5%	0.6%	0.7%	4.4%	0.9%
Aluminium openings	4.1	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%
Metal openings	2.7	0.3%	0.2%	0.2%	-0.1%	-0.1%	0.5%	0.1%
Ceramic tiles	0.8	7.3%	4.1%	4.4%	2.3%	0.4%	18.5%	3.7%
Adhesive	1.7	0.6%	0.2%	-0.2%	0.4%	1.0%	2.0%	0.4%
Paint	2.5	4.2%	2.7%	2.3%	3.7%	0.9%	13.8%	2.8%
Plumbing	1.5	0.4%	-0.2%	0.0%	0.1%	0.0%	0.3%	0.1%
Sanitary installation	2.2	0.7%	1.5%	2.3%	0.2%	3.3%	8.0%	1.6%
Electrical installation	4.7	0.5%	1.1%	0.3%	0.3%	-0.8%	1.4%	0.3%
TRANSPORT	4.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>100</b>	<b>2.4%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>0.0%</b>	<b>0.7%</b>	<b>5.9%</b>	<b>1.2%</b>

Source: Statistics Mauritius

### Indicative prices of key construction materials

A comparison of the current level of prices of cement, aggregates, concrete and iron has been carried out on the basis of informal information gathering. Table 8 provides the price range for the various products.

**Table 8: Indicative price range of key Construction Materials**

Price of cement (Rs/ bag)					
CEM-I 42.5		CEM II 32.5		MC 22.5	
50 kg	25 kg	50 kg	25 kg	10 kg	25 kg
Rs 220 – Rs 230	Rs 110 – Rs 115	Rs 230	Rs 115	Rs 65	Rs 115

Price of construction blocks (Rs/unit)					
4 inch		6 inch		8 inch	
Rs 19 - Rs 20		Rs 21 – Rs 23		Rs 26 – Rs 27	

Price of Aggregates / Rocksand (Rs /ton)					
0 – 2 mm	0 – 4 mm	6 - 10 mm	10 – 14 mm	14 – 20 mm	20 – 31.5 mm
Rs 710 – Rs 760	Rs 628 – Rs 678	Rs 440 – Rs 465	Rs 434 – Rs 483	Rs 434 – Rs 483	Rs 425 – Rs 507

Ready-mix concrete (Rs /m3)					
Grade 15	Grade 20	Grade 25	Grade 30	Grade 35	
Rs 3,750 – Rs 3,800	Rs 3,800 – Rs 4,000	Rs 4,000 – Rs 4,200	Rs 4,100 – Rs 4,350	Rs 4,250 – Rs 4,500	

Source: compiled from various sources

In course of information gathering on the various items for construction materials, it was observed in most cases prices of the products (with the exception of cement which are sold at hardware stores) were mostly available on request. As such, customers have to search for the competitive source of supply.

In terms of the price of iron bars, it ranges between Rs 22,000 to Rs 24,000 per ton. It is should be noted that bulk purchasers of construction materials bargain with suppliers and normally benefit from lower prices.

Moreover, the finishing of buildings can account up to between 20% - 30% of the project cost. Some industry players have highlighted that although there are many registered contractors for mechanical, electrical and plumbing services (MEP) on the market for the supply of MEP, only a few companies have been winning the majority of public and private contracts.

### Pricing of professional services

The CCM understand that the fees for professional services are determined on the basis of the scope and the complexity of the work and the time spent on the project. This fee is normally negotiated between the client and the service providers. It has been submitted that the fees for quantity surveyor vary between 1%-1.5% and for architects between 4% and 10%. As for large construction projects, a competitive bid exercise is normally organized in the public sector.

### PUBLIC PROCUREMENT

Public procurement is the process of purchasing goods, services and works by government and state-owned enterprises (referred to as 'public bodies'). As stated in OECD (2011)<sup>25</sup>, "the primary objective of an effective procurement policy is the promotion of efficiency, i.e. the selection of the supplier with the lowest price or, more

generally, the achievement of the best "value for money". Both public and private organizations often rely upon a competitive bidding process to achieve better value for money in their procurement activities. Low prices and/or better products are desirable because they result in resources either being saved or freed up for use on other goods and services."

The objective of any procurement policy is to mainly promote efficiency, avoid mismanagement and waste of public funds and Mauritius is no exception. In Mauritius, public procurement is governed by the Public Procurement Act 2006 ('the Procurement Act').

### The legal framework

The Procurement Act came into force in January 2008. Section 61 of the Act provides for the basic principles and procedures to be applied by public bodies, and regulates, the public procurement of

goods, public works, consultant services, and other services. The Procurement Act is in line with the procurement procedures and principles of the United Nations Commission on International Trade Law Model Law on Public Procurement.

The Procurement Act defines a public body as 'any Ministry or other agency of the Government'. It applies to a total of 204 public bodies, comprising of Ministries, Departments, Local authorities and Parastatal organisations. The public bodies are heterogeneous in terms of administrative structure and value of procurement.

Public procurement is regulated by three institutions namely the Procurement Policy Office (PPO), the Central Procurement Board (CPB) and the Independent Review Panel (IRP).

### Procurement Policy Office

The Public Procurement Office (PPO) is the procurement policy making and monitoring body set up under the Procurement Act and is under the aegis of the Ministry of Finance. It is responsible inter alia, for the formulation of policies relating to public procurement, the issue of Standard Bidding Documents (SBD), forms of contracts to be used by public bodies, issue of directives, compliance monitoring and training in procurement activities. The PPO has amongst others the main functions of:

- issuing instructions to public bodies concerning the coordination of their actions with the Policy Office, the Board and the Review Panel;
- formulating policies relating to procurement, including directives, procedures, instructions, technical notes and manuals, for the implementation of the Act;
- issuing standard forms of contracts, bidding documents, pre-qualification documents, requests for proposals

and other similar documents for mandatory use by every public body implementing procurement;

- collecting from the Board, the Review Panel and public bodies information on procurement activities and monitor their compliance with this Act;
- recommending, and facilitating the implementation of, measures to improve the functioning of the procurement system,
- preparing and conducting training programs for public officials, contractors and suppliers concerning procurement;
- communicating and cooperating with international institutions and other foreign entities on matters of procurement; and
- advising on and monitoring foreign technical assistance in the field of procurement;

### Central Procurement Board

The Central Procurement Board (CPB) is responsible for approving the award of major contracts by public bodies, the values of which exceed the prescribed amounts. Section 2 of the Procurement Act defines a "major contract" as a contract for the procurement of goods or services or the execution of works - (a) to which a public body is or proposes to be a party; and (b) the estimate of the fair and reasonable value of which exceeds the prescribed amount.

The public body is responsible for itself carrying out its procurement proceedings for procurement values below its prescribed amount, as specified in the Schedule to the Procurement Act whereas for procurement above its prescribed amount, whilst the public body prepares the bidding documents, floats the Invitation for Bids it is the CPB which is responsible for vetting the documents, receipt of the bids, evaluation

of bids and recommending award of the related contract by the public body.

The functions of the CPB as listed at Section 11 of the Procurement are inter alia to:

- vet bidding documents and procurement notices submitted by public bodies;
- receive and publicly open bids;
- select persons from a list of qualified evaluators maintained by it to act as members of Bid Evaluation Committees and oversee the examination an evaluation of bids;
- review the recommendations of a Bid Evaluation Committee and approve the award of the contract; or require the Evaluation Committee to make a fresh or further evaluation on specified grounds;
- review the recommendations of a public body with respect to an amendment that increases the contract value and approve the variation or amendment proposed, require the public body to make a fresh recommendation or reject the variation or amendment proposed (post reporting period change in Procurement); and
- award public-private partnership/build operate transfer projects.

The CPB vets bidding documents and conducts the bidding process of all contracts exceeding the amount prescribed in the schedule. For example, the CPB will only conduct bidding process for contracts exceeding Rs 50 million in ministries/government department, Rs 15 million for local authorities among others, Rs 100 million for Central Water Authority, Mauritius Housing Company Ltd, National Transport Authority among others. The whole list is available schedule of the Public Procurement Act<sup>26</sup>.

The Procurement prescribes the composition of the CPB is as follows: a Chairperson, two Vice-Chairpersons and three Members having wide experience in legal, administrative, economic, financial, engineering or technical matters. The day to day administration of the CPB is entrusted to a Chief Executive who is supported by administrative staff and a technical team of professionals comprising, amongst others, engineers and procurement officers.

### Independent Review Panel

The PPA provides a review mechanism to an unsatisfied bidder. The Independent Review Panel (IRP) is established under the PPA to review applications from unsatisfied bidders, who have in a first instance challenged the procurement proceedings by a public body. The IRP has the responsibility of reviewing the procurement proceedings where an unsatisfied bidder submits an application for review. If it considers there is merit in the case, it orders and recommends remedies as provided in the PPA. In case of no merit, it dismisses the application.

### Procurement Methods listed under the Procurement Act

The PPA lists the following procurement methods to public bodies for the procurement of goods, other services and works: open advertised bidding; restricted bidding; request for sealed quotations and direct procurement; community or end-user participation; or departmental execution<sup>27</sup>. The public body, may in relation to the procurement of consultancy services under the Procurement Act, opt for request for proposals (on the basis of quality, quality and cost, quality and fixed budget or least cost and acceptable quality) and direct procurement.

The Procurement Act prescribes open advertised bidding as a general rule in

respect of the choice of procurement method by public bodies for goods, other services or works, adding that equal access should be provided to all eligible and qualified bidders without discrimination. The PPA provides that any *other* prescribed method of procurement may be used only if the public body has reason to believe that open advertised bidding - (i) will not be efficient or practical for the procurement in question; or (ii) will be too costly to apply given the value of the procurement<sup>28</sup>.

When using open advertised bidding method, a public body may opt for open national bidding, i.e., 'limit participation in open advertised bidding proceedings to citizens of Mauritius or entities incorporated in Mauritius only where such limitation is stated in the invitation to bid or, for prequalification, in the bidding documents and is otherwise in accordance with such criteria as may be prescribed'<sup>29</sup>.

Section 18 of the PPA further allows the public body to use open international bidding, where:

- (a) the estimated value of the procurement exceeds the prescribed threshold;
- (b) the goods, works or other services are not available under competitive price and other conditions from more than one supplier in Mauritius; or
- (c) there is no response to open national bidding and the goods, other services or works must be obtained from international bidders'.

Circular No 4 of 2014 as issued by the PPO provides guidance on the manner according to which public bodies may use open advertised bidding method:

- (i) Open National Bidding  
The Circular provides that this method may be used where the estimated value of the procurement is of Rs 200 million or less. Participation to the bidding process is limited to citizens

of Mauritian or entities incorporated in Mauritius where such limitation is stated in the invitation to bid or, for prequalification, in the prequalification document.

- (ii) Open Advertised Bidding Method  
Public bodies may choose to open participation to all eligible and qualified suppliers (including overseas suppliers) for procurements with estimated value of Rs 200 million or less.
- (iii) Open International Bidding  
It is mandatory for public bodies to use open international bidding for procurements of goods, works and other services, with estimated value exceeding Rs 200 million subject to section 19(1)(a) (relating to restricted bidding) and Section 21 (relating to emergency procurement) of the Public Procurement Act. For procurements with estimated value of Rs 200 million or less, public bodies may have recourse to international bidding where it is known that the requirements cannot be met by the local market, or in view of the contract amount opening to foreign suppliers might foster competition.

Section 19 of the PPA provides that a public body may use restricted bidding where,

- (1) (a) where [it] has reason to believe that the goods, other services or works are only available from a limited number of bidders;
- (b) where the time and cost of considering a large number of bids is disproportionate to the value of the procurement, having regard to such thresholds as may be prescribed; or
- (c) by limiting the participation in a particular procurement to those suppliers included on preapproved supplier eligibility lists drawn up and maintained by the public body, in such manner as may be prescribed, so as

to ensure that suppliers of specialised goods and services have and maintain the necessary technical and financial capability to provide them.

- (2) (a) Where restricted bidding is used on the ground referred to in subsection (1)(a), all known suppliers capable of supplying the goods, other services or works shall be directly solicited.
- (b) Where restricted bidding is used on the ground referred to in subsection (1)(b), the public body shall, as far as reasonably possible, directly solicit bids from a minimum of 5 bidders'. The PPA provides limits the use of 'request for sealed quotations' as a method of procurement only for the procurement of:
- (a) readily available commercially standard goods not specially manufactured to the particular specifications of the public body;
- (b) small works; or
- (c) small other services, where the estimated value of the procurement does not exceed the prescribed amount'.

The public body is required by the PPA to request for sealed quotations from a minimum of three suppliers, unless the number of suppliers which supply the required good is less than three.

### Margin of Preference in public procurement

The Directive No 5 of 2012 issued by the PPO provides for a margin of preference for procurement of works from small and medium enterprises. The aim of the directive is to encourage the participation of small and medium enterprises (SME) in public procurement. The relevant parts of the directive read as follows:

- For low value procurement up to Rs 500,000 undertaken through informal quotation under Section 25(2)(a) of

Public Procurement Act 2006, the number of suppliers to be solicited should include at least two SMEs, as far as reasonably possible.

- For procurement up to Rs 5 Million, at least two SMEs, as far as reasonably possible, should be included in the shortlisting of bidders under the Restricted Bidding Method. Similarly, for Request for Sealed Quotations, the short list should also include, as far as reasonably possible, at least two SMEs.
- Non-inclusion of two SMEs under the Restricted Bidding, Request for Sealed Quotations and Low Value Procurements should be fully justified and properly recorded.

Directive 12 of 2012 issued by the PPO provides for a revised margin of preference for procurement of Works to promote the employment of local manpower in works contracts as follows:

- A margin of preference of 10% in respect of International Bidding to a bidder, incorporated in the Republic of Mauritius and employing local manpower for 80 % or more of the total man-days deployed for the execution of a works contract.
- A margin of preference of 20% in respect of national bidding, to a local SME, having an annual turnover not exceeding Rs 50 million or a joint venture consisting of local Small and Medium Enterprises having an aggregate annual turnover not exceeding Rs 50 million and employing local manpower for 80 % or more of the total man-days deployed for the execution of a works contract.
- A margin of preference of 10% in respect of national bidding to a non-SME bidder employing local manpower for 80 % or more of the total man-days deployed for the execution of a works contract.

### Framework Agreement

A framework agreement refers to an agreement between one or more public bodies or a lead organisation and one or more suppliers, which establishes the terms and conditions under which the supplier will enter into contract(s) with the public body. In other words, a framework agreement is an agreement between public bodies and shortlisted suppliers, which enables the public bodies to procure, as and when required under certain conditions, from these suppliers.

The Government has announced a measure to the effect that all construction contracts which value does not exceed Rs 5 million will be allocated exclusively to SMEs. It is highlighted that this measure has not been adopted formally and is as at date not a Government policy nor decision. While it is evident that the aim of this measure is to encourage the participation of SMEs in the construction industry of the country, it is however stated that this measure can be problematic. This is so because the measure despite being a positive measure, it remains a discriminatory measure. Barring larger companies from participating in such contracts might result in the loss of efficiencies which are associated with the large scale work of larger companies. It is also highlighted that, in practice, the implementation of this measure might be problematic in that larger companies may incorporate sister companies, with a smaller turnover only to be able to bid for these contracts. A framework agreement is ideal for the repetitive procurement of goods, works and services.

The total value of contracts awarded for the year 2016-2017 amounted to approximately Rs 7 billion in respect of 44 projects. Building projects accounted for around 60% (Rs 4 billion) of the total contract value awarded.

Table 9 provides information for the period 2013-2017 on the total value of contracts awarded and the number of projects approved by the CPB.

**Table 9: Value of contracts and number of projects approved by CPB**

Year	Value of contracts awarded (Rs billion)	No. of projects approved
2013-2014	16	46
2014-2015	7	40
2015-2016	15	39
2016-2017	7	44

Source: CPB Annual reports for year 2015-2016 and 2016-2017

Table 10 provides information on the number of public openings, bids received from 2013 to 2017.

**Table 10: Number of bids received for the period 2013 - 2017**

Year	No. of Public Openings	No. of Bids received	Average No. of Bids per Bidding Exercise
2013-2014	47	300	6
2014-2015	52	366	7
2015-2016	38	331	9
2016-2017	73	381	5

Source: CPB Annual report reports for year 2015-2016 and 2016-2017

An analysis of the bid response rate on public procurement exercises related to construction works and reported to the PPO as at June 2016 is shown in the Table 11.

**Table 11: Analysis of bid responsiveness**

Details	2013	2014	2015	Jan – June 2016
Number of bids analysed	465	145	204	266
Approved contract value (Rs billion)	5.4	2.3	1.1	1.3
Bid Response rate (%)*	65.8	61.1	68.9	67.7
Maximum number of responsive bidders	10	11	8	7

Source: Public Procurement Office; \*Estimated by the CCM on the basis of information provided by PPO

It is observed that over the period 2013 – 2016, the bid response rate (as measured by the proportion of responsive bids over the total bids invited/submitted) has been fluctuating over the years while remaining below 70%. In addition, the average maximum number of responsive bids fell from 10 in 2013 to 7 in 2016.

Some industry players have submitted that bidding documents are complex and that small contractors may find it difficult to correctly fill in these documents. This could be one of the reasons for the low bid responsiveness.

### **Competition concerns in public procurement**

The overarching concern with public procurement is that, because formal rules governing public procurement generally make communication among rivals easier, they can promote collusion among bidders and therefore reduce rivalry, with detrimental effects on the efficiency of the procurement process.

Collusive agreements are very difficult to detect since they are secretive in nature. Only the participants have knowledge of the anti-competitive conspiracy and members continuously devise creative methods to keep the collusive enterprise undercover. Very often the evidence of the collusion are destroyed making it further difficult to detect bid rigging. Moreover, proving bid rigging cartels is a tough task that requires a combination of vigilant monitoring by the procurement bodies and this essentially involves ubiquitous active monitoring and detection from procurement officers.

In view of facilitating detection of anti-competitive concerns and issues in public procurement, the Competition of Mauritius has entered into a Memorandum of Understanding (MoU) with the Public

Procurement Office. This MoU has helped in promoting co-operation and coordination between the CCM and the PPO when dealing with bid-rigging case in public procurement. It also facilitated the treatment of cases of bid rigging within the public sector.

Moreover, section 52(3) of the Procurement Act prohibits bidders to engage in collusion before or after a bid submission, designed to allocate procurement contracts among bidders, establish bid prices at artificial non-competitive levels or otherwise deprive a public body of the benefit of free and open competition. Section 53 (1) (d) of the Procurement Act further allows the PPO to suspend or debar potential bidders or suppliers on, inter alia, ground of collusion – price fixing.

### **ASSESSMENT OF POTENTIAL COMPETITION ISSUES**

In this section, an assessment of potential competition concerns arising from the structure, pricing conduct and regulatory framework underlying the construction industry is provided.

#### **Market structure**

An analysis of the various markets for the supply of construction materials reveals high degree of concentration and existence of vertical linkages.

#### **Vertical integration in the construction industry**

The shareholding structure of the firms involved in the supply of construction materials is illustrated in Figure 6. It is found that some major players in the industry are vertically integrated. They operate at more than one level in the construction supply chain.

Cement suppliers are vertically integrated with companies which are active in the downstream markets for the supply of ready-mix concrete, aggregates, and blocks. Some of these companies are also active in the supply of construction contracting services. This may give them a certain competitive advantage with respect to their competitors who are not vertically integrated. Such advantage generally results in benefits for consumers in terms of price and innovative products and services. In some cases, however, these vertically integrated companies may be involved in restrictive business practices such as refusal to deal/supply to gain unfair advantage over their competitors or the exercise of their market power by exploiting customers.

Upstream producers integrate with downstream distributors to secure a market for their output. Firms are then better able to control access to inputs and control the cost, quality and delivery times of the inputs. Vertical integration describes the ownership or control by a firm of different stages of the production process.

When two companies are vertically integrated such as Lafarge (Mauritius) Cement Ltd and Pre-mixed Concrete Ltd among others, this implies that they will have easier access to inputs and be able to control the output, and therefore gain a competitive advantage over their respective horizontal competitors.

They may also be able to price their output cheaper than their competitors as they can absorb costs better. Upstream suppliers who are vertically integrated might margin squeeze their competitors, since the former can control more effectively their costs, through their subsidiary downstream companies and be better able to compete in the downstream market.

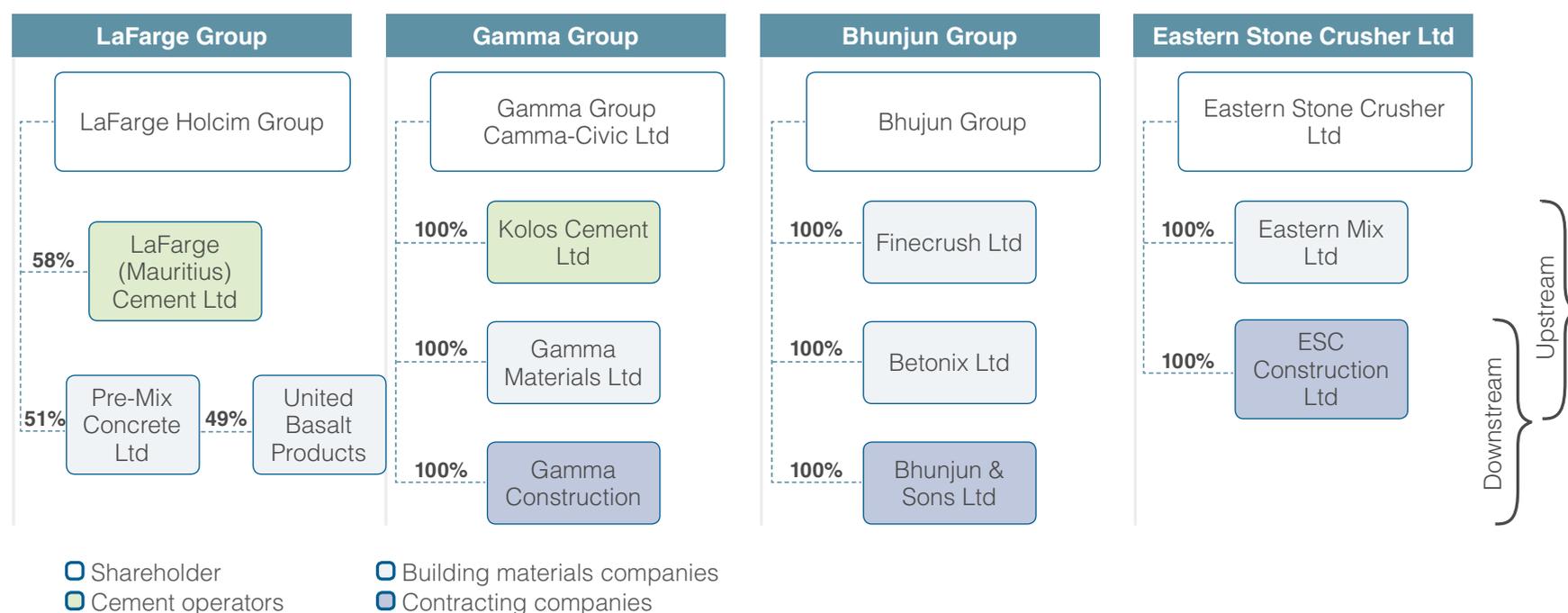
In certain cases, vertically integrated companies might use their position to foreclose access to inputs to their competitors. For instance, by refusing to deal with competitors or by giving competitors more unfavourable terms of sales or businesses, than they would have given to their subsidiary companies.

Some of the stakeholders have submitted that vertically integrated companies may not necessarily act in such a manner or have the objective of foreclosing small contractors and restricting competition. These companies are likely to have the ability to invest in innovation and improve the quality of its products to the benefit of the consumers.

In a previous investigation conducted by the CCM, on the Holcim/Lafarge merger and the subsequent divestment of Holcim Ltd to Gamma-Civic Ltd, the Executive Director expressed some concerns about the vertical links of Gamma-Civic Ltd in the construction market, through its presence in the sub-markets as identified in the sections above. The Executive Director was particularly concerned that Gamma-Civic Ltd, through its acquisition of Holcim Ltd, would consolidate its vertical links in the construction industry, by becoming an integrated player (from cement supplier to the finished construction project contractor).

Gamma-Civic Ltd proposed undertakings or commitments to the CCM to address those concerns. In the said undertakings, Gamma-Civic Ltd, through its subsidiary, Kolos Cement Ltd, cement supplier, undertook to deal with all its clients and potential clients at arm's length and will not apply any discriminatory policy in relation to the supply of cement, and to the terms and conditions of supply of cement in favour of entities related to Gamma-Civic Ltd, without the prior approval of the CCM. Gamma-Civic Ltd has also maintained that it will not discriminate against its rivals with regards to the price of cement, the supply of cement and the terms and conditions of supply of cement.

**Diagram 6: Vertical Integration in the construction industry**



By virtue of vertical relationship, cement companies are therefore in the market for ready mixed concrete and aggregates (materials) and ready-mixed concrete and are also active in the contracting services segment.

Some companies are not active on the cement market but are present in the aggregates (materials) and ready-mixed concrete market have shares or ownership in contracting services companies. A few concerns have been expressed in relation to the supply rocks for the production of aggregates. It has been submitted that there is a high degree of concentration in terms of ownership of quarries and supply of rocks. It has also been claimed that there may potentially be vertical restraints which may be affecting the markets for aggregates and concrete. However, such claims have not been substantiated but could potentially be a matter for further investigation. Given the high degree of market concentration and vertical linkages that exist between the players within the construction industry, markets in this industry may potentially be more prone to anti-competitive conducts. A constant review of the construction material markets would enable the CCM to identify potential vertical restraints and other forms of impediments to competition in the concerned markets.

## Regulatory Framework

### *Grading of contractors*

Like in many countries, the CIDB in Mauritius has put in place a grading system for contractors. The contractors are categorised between Grade A and Grade H according to their work and financial capabilities. The rationale of the grading system is to have an effective classification method for the proper regulation of the industry. The benefits of having a grading system cannot be ignored

since it is the grading system itself which allows an efficient procurement process whereby the right contractors for the project amount can be easily identified. This can therefore expedite the procurement process.

However, on a broader perspective, some stakeholders have raised some concerns in regard to the grading system of contractors. Property development companies have suggested that grading of contractors should be done in a stricter manner and not be mainly based on their turnover and value of projects performed. According to them, work experiences, quality of the work and the guarantee for completion of projects are other key factors that need to be taken into consideration.

Smaller contractors have raised concerns in relation to the non-possibility of joint ventures between contractors of same grades, in particular between contractors of lower grades. They submitted that this can potentially act as a barrier to expansion to smaller contractors. For instance, if there is a project for which a single contractor of a particular grade is unable to bid for, a joint venture among contractors of the same grade can allow them to bid and deliver for that particular project. For example, two grade F (up to Rs 25 million) contractors forming a joint venture to bid for a grade E project (Up to Rs 50 million). Although together both contractors (grade F) will have the capacity to perform the grade E project, under the current grading system, they will not be allowed to bid for this project.

The CIDB explained that the rationale for imposing such restriction is that lower grades contractors may not have the required project management and administration skills required to undertake projects of higher grades. For example, a joint venture among 10 firms in grade H i.e Rs 5 million bidding for a project of Rs 50 million may not have capacity and resources

to undertake the project as a Grade E contractor.

The CIDB however highlighted that one grade of contractors may move up the ladder and bid for a higher grade of projects by joint venture with a contractor in the same higher grade. With such contracts, lower grades contractors will be able to acquire necessary skills and experience to enable them to move to higher grades. Alternatively, small contractors can also merge, work together for a period of time, expand and then request for an upgrading. Moreover, in view of promoting more competition especially among the lower grades contractors, the CIDB has review the scale of the gradings since 1st March 2017 increasing the grading limit of Grade H contractors from Rs 1.5m to Rs 5m.

In relation to public procurement for construction works, it is found that as the value of projects increases, the number of registered local contractors qualified to perform the job decreases. For example, as at August 2017, out of the 587 contractors registered for building construction works, only 16 were registered as Grade C, qualifying to bid for projects up to Rs 150 million and 4 contractors as Grade B, qualifying to bid for projects up to Rs 150 Million.

Moreover, in view of promoting small and medium enterprises (SME) participation in public procurement, the Mauritian Government has also announced that contracts of a value of up to Rs 5 million will be reserved to SME. While the merits of this measure is in line with the Government's policy to democratise the economy, the measure has the immediate effect of excluding contractors of upper grades from participating in the procurement process. Nevertheless, by giving a boost to the SME to enter in the public procurement market, they are likely to expand in the long run and hence make the market more dynamic.

## Registration of Professionals

The registration of professionals of the construction industry, engineers, quantity surveyors and architects is subject to stringent conditions of age, academic qualification and post qualification experience.

The degree of diligence and responsibility required is very high for construction works given the nature of work and the amount of money involved, the hazard that a faulty work represents to the lives of people and the damage that a faulty work can cause. It is for these reasons that the licensing criteria by professional bodies are essential in order to ensure that quality works are delivered. It is therefore submitted that the licensing requirement should be considered as a barrier to entry in the respective profession but are essential to ensure that the quality of work delivered meets the required quality.

## Associations

Associations currently active in the construction industry includes:

- The Mauritius Association of Architects
- Mechanical and Electrical Engineering Contractors Association
- Association of Consulting Engineers
- The Mauritius Association of Quantity Surveyors
- Building and Civil Engineering Contractors Association

Associations benefits its members in a number of ways. For example, it performs an important information gathering function that would be difficult for its members to perform individually. It may also help in the establishment of standards, promotion of innovation and representation of its members before legislative bodies.

While a large majority of trade association activity can be pro-competitive or

competitively neutral, they may sometimes fail to take account of anti-competitive issues which can result in their engaging in illegal conduct. These associations may sometimes be used by competitors as a platform to meet and discuss about pricing and business strategies. Common examples of such conducts are price fixing, bid-rigging and market sharing.

## Standard and Norms

Compliance for the majority of the standards and norms set in the construction industry are voluntary. Adherence to few standards, like those for cement and iron bars, are mandatory for safety and consumer protection. As such, there are no major barriers to entry arising from norms and standards setting in Mauritius.

## Conflict of Interest

The Construction Industry Development Council comprises of members which are representatives from the different sectors of the construction industry, which by virtue of their registration are subjected to the regulatory control of the CIBD. It is fairly represented by both the public and private sector and is composed of representatives from various ministries, construction professional associations, small and medium enterprises of the construction sector and a person having a wide experience in the construction industry.

A common issue that very often arises is the conflict of interest when taking decisions. Council members, by virtue of their position may unjustly favour their enterprises at the detriment of the other stakeholders of the industry. While any potential conflict of interest might not amount to a restrictive business practice as defined by the Competition Act 2007, this might be hindering competition in the construction sector by putting stakeholders

not represented at the Construction Industry Development Council at a competitive disadvantage and/or constitute a corruption issue.

Nevertheless, in Mauritius, internal procedures has been put in place for the Construction Industry Development Council to mitigate the potential conflict of interest concern. The CCM has been informed that the members of the Construction Industry Development Council are provided with the agenda of the council meeting prior to the meeting on which they are expected to base themselves to determine whether they would be in any potential situation of conflict of interest for any decision. Where any conflict of interest is declared, this is recorded by the Council secretary in the minutes of the Council meeting and the member who has declared the interest does not take part in the proceedings or decision in relation to that matter.

## Pricing of construction materials

The pricing of the construction materials has been found to be mainly available on request to consumer. Such prices are normally obtained through a phone call to the hardware store. Out of the various construction companies, only one company active in the supply of aggregates and blocks has its price list published on its website. Given that prices of construction materials are made available to customers on request, consumers should be encouraged to shop around before purchasing materials from a particular supplier to take advantage of the competitive prices prevailing on the market.

## Public procurement issues

An analysis of the tender exercises carried out by public bodies in Mauritius over the period 2013-2016 shows that the majority of such bidding exercises occurred via restricted bidding. While restricted bidding

can be less burdensome, help in cost and time savings, reduce the danger of low quality bids and produce better value for money, it is likely to hamper competition in the procurement process due to the limited number of private participants. Thus, one issue that may arise is the criteria of selection of bidders to send request for bids. It is important that the public sector strikes the right balance between keeping the necessary tension among participants and avoid any confidentiality issue.

In a view to increase bid responsiveness, contractors have suggested that the process of invitation to bid for restrictive bidding could be done in two stages. In the first stage, the concerned public body can send an email to prospective bidders and request them for their interest for the bids. Bidders can then be shortlisted only based on those expressing their interest to bid.

Small and medium contractors have pointed out that timeframe for disbursement of funds causes them to have cash flow problems. They do not receive any advance payment for projects worth below Rs 5 million. There are also certain public bodies which also delay the disbursement of claims and can take up to 6 months before they are paid. These may limit their ability to compete and grow and consequently have the effect of distorting competition. It is, therefore, necessary for the public entities to adhere to the financing schedules that have been agreed under the contract to allow contractors to effectively undertake projects.

One of the proposals in relation to addressing the issue of cash flow problem face by small contractors is to facilitate them in obtaining advances to meet the project costs. This could be done through advances granted by government-owned financial institutions against the contracts that have been awarded to them.

Another issue raised by contractors is the appointment of district contractors across Mauritius. Each district council normally annually launch an open tender for 3 district contractors. Once the 3 contractors are allocated, the work is shared among the 3 contractors. It is claimed that only 12 contractors in Mauritius are operating across the 10 district councils whereas the same work could have allocated to 30 contractors (3 per district).

### Government to Government Business

As part of its projects financing strategy, the government of Mauritius often signs G-to-G agreements with countries such as India and China. While such agreements can widely benefit Mauritius in terms of finance, transfer of expertise and know-how, various trade associations within the construction industry have raised certain concerns in relation to consequences of such agreements on local operators.

The association of architects has expressed concerns that local architects are completely excluded from G-to-G projects. They submit that their involvement in such projects, especially those related to the renovation of historical and public buildings, would bring value given that they have better knowledge on historical and local aspects. Moreover, it would be an opportunity for them to learn from these foreign firms, develop their skills and expertise. Thus, increase participation and competitiveness of bids for future contracts. As highlighted in the strategy paper from the CIDB<sup>30</sup> and by the association of architects in Mauritius, one way of promoting competition and innovations for prestigious and mega public infrastructure projects would be to have recourse to architectural design competition.

Associations of contractors have also raised concerns in relation to the international

contractors operating in Mauritius. For example the difference between the requirements for local contractors and international contractors over international tenders. Domestic employment laws do not apply to international contractors in the same way as it does to local contractors. While international contractors are allowed to house their foreign employees on the site of construction, local contractors are not allowed to do so. Moreover, local contractors claimed that they have to pay wages in compliance with the law, which have been claimed to be higher than that paid to foreign workers by the international contractors. As a result, local contractors have to incur higher labour costs and are disadvantaged vis-à-vis international contractors. This consequently affects their ability to compete for public contracts.

### Other issues

Another issue raised by certain contractors is the need to balance project risks in contracts. It has been claimed that project risks which are beyond the control of the contractors are imposed on them. An example are risks pertaining to the weather conditions. Exceptional circumstances only cover (i) 30mm rainfall or above recorded in 24 hours at the nearest rain station, (ii) an official declaration of torrential rain by the Mauritius Meteorological Services and Cyclone warning class III or above. Heavy rains or floods which may cause delays in project execution are not covered. Contractors consequently have to factor these aspects in the tender price. While larger contractors may to some extent absorb such risks, it is more difficult for small contractors to be able to do same. This situation is consequently likely to cause distortion in the competition process among contractors.

Some property developers have expressed concerns in terms of the shortage of skilled

labour on the local market. The CCM has been given to understand that the cost of hiring international workers may be twice of that of hiring local ones. While they have to be paid the same wages as the Mauritians, there are additional costs such as air tickets, visa costs, housing, food among others. Nevertheless, property developers have ascertained that foreign workers may also be more skilled and reliable and consequently be more productive than local workers.

## CONCLUSION

The study reveals high degree of concentration across the various markets within the construction sector. Some major players are also vertically integrated. While concentration and vertical integration may not be an issue in itself, such markets may be more prone to anti-competitive conduct and a constant monitoring of the sector may be warranted.

The prices of construction materials are not regulated but are determined by the

market players. It is found that prices for construction inputs (labour, hire of plants, materials and transport) have overall increased by around 6% over the 5 years period 2013-2017. Prices of key items such as cement, construction blocks and ceramic tiles increased by 12% , 10% and 13%, respectively whereas that of steel bars decreased by 15% over the last 5 years. The fees for professional services are determined on the basis of the scope, complexity of the work and the time spent on the project.

The study also revealed that the construction industry is subject to various norms and standards. The norms are set by the MSB and the CIDB is responsible for grading of contractors and consultants. Prevailing norms and standards which in certain cases are voluntary, have not been found to be a major barrier to entry or expansion within the construction sector.

With regards to procurement of construction works by public bodies, it is found that the average number of responsible bids have been decreasing. It may useful to better

understand the causes of decrease in the number of responsible bids so as to further promote competition in public procurement. Moreover, industry players have submitted, inter alia, that local contractors should get the opportunity to work on G-2-G projects and the terms of employment of foreign and local construction workers should not be discriminatory which give foreign contractors an edge over local ones.

*Disclaimer:*

*CCM's current views on the market study shall not in any way restrict or confine the CCM's ability to carry out its duties and functions as set out in the Competition Act. In particular, the CCM reserves the right, when examining any alleged anti-competitive activity that may come to its attention, to carry out its own market definition exercise or competition assessment, which may deviate or differ from those or findings expressed by the CCM in relation to this study.*

## Endnotes

- 1 The restrictive business practices covered under the Act are collusive agreement (comprised of horizontal agreements, bid rigging and resale price maintenance), non-horizontal agreements, other vertical agreements, review of monopoly situations and control of merger situations.
- 2 National Accounts Estimates (2014 – 2017), Statistics Mauritius [http://statsmauritius.govmu.org/English/Publications/Documents/EI1359/NAE\\_Dec%2017.pdf](http://statsmauritius.govmu.org/English/Publications/Documents/EI1359/NAE_Dec%2017.pdf)
- 3 See [http://statsmauritius.govmu.org/English/StatsbySubj/Documents/Digest/National%20Accounts/Digest\\_NA\\_2015.pdf](http://statsmauritius.govmu.org/English/StatsbySubj/Documents/Digest/National%20Accounts/Digest_NA_2015.pdf)
- 4 Case No Comp/M.7009-Holcim/Cemex West. Regulation (EC) No.139/2004: Merger procedure. Date published: 05.06.2014
- 5 Ordinary Portland Cement (OPC) is made by blender clinker with gypsum and used in construction where high initial strength is required. Portland Pozzolana Cement (PPC) contains gypsum and fly ash in the tune of 25-30%. Addition of fly ash reduces the per ton cost of cement. The long-term strength of PPC is higher than OPC, and Portland Slag Cement (PSC) contains gypsum and blast furnace slag. It is used where structures are susceptible to attack of chloride and sulphate (Marin, Water treatment plants).
- 6 See Annual digest of statistics, 2015.
- 7 See CCM investigation CCM/INV/028: Merger between Holcim Ltd and Lafarge S.A
- 8 See CCM investigation CCM/INV/028: Merger between Holcim Ltd and Lafarge S.A
- 9 [www.lafarge.mu](http://www.lafarge.mu)
- 10 <http://reports.lafargeholcim.com/2015/annual-report/financials/notes-to-the-consolidated-financial-statements/notes-31-39/39-principal-companies-of-the-group.html>
- 11 Shares held through Associated International Cement Ltd (29.18%) and Cementia Holding AG (29.18%)
- 12 [www.koloscement.com](http://www.koloscement.com)
- 13 [www.koloscement.com](http://www.koloscement.com)
- 14 <http://www.koloscement.com/our-business>
- 15 The HHI is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers, and can range from close to zero to 10,000.
- 16 Top 100 Companies ranking for the year 2015
- 17 See <http://www.stockexchangeofmauritius.com/downloads/archives/25092013UBP.pdf>.
- 18 <http://www.businessmag.mu/article/le-partenariat-en-beton-de-premix-concrete-avec-lafarge>
- 19 <http://www.gamma.mu/gamma-at-a-glance.html>
- 20 Top 100 Companies ranking for the year 2015.
- 21 The details of the fees to be paid are available in the CIDB (Registration of Consultants and Contractors) (Amendment) Regulations 2015 at <http://cidb.govmu.org/English/Consultants-Contractors/Documents/Fees%20for%20Registration%20as%20Contractor%20in%20Building%20and%20Civil%20Engineering%20Construction%20Works.pdf>
- 22 The full set of standards is available on the following link: [http://msb.intnet.mu/English/Documents/MSB/Standards/latest\\_cat.pdf](http://msb.intnet.mu/English/Documents/MSB/Standards/latest_cat.pdf)
- 23 Ministry of Industry, commerce & Consumer Protection (Commerce Division), Guidelines on Import and Export Procedures. Available at <http://commerce.govmu.org/English/Documents/news/leaflet1.pdf>.
- 24 Computed by Statistics Mauritius, using 2009 as base year.
- 25 See 'Competition and Procurement, Key Findings 2011', by Competition Committee, OECD. Available at: <https://www.oecd.org/daf/competition/sectors/48315205.pdf>
- 26 The public Procurement Act 2006 is available on the following link: <http://publicprocurement.govmu.org/Pages/default.aspx>
- 27 Section 15(1)(a) PPA
- 28 Section 15(2)(d) PPA
- 29 Section 17 PPA
- 30 See " A strategy paper for the construction industry" by the Construction Industry Development Board dated July 2013. Available on: <http://cidb.govmu.org/English/Publication-Reports/Reports%20on%20Construction%20Industry/Documents/Download%20Strategy%20Paper%20for%20the%20Construction%20Industry.pdf>





# CHAPTER 6

THE CONSTRUCTION INDUSTRY IN  
SWAZILAND



## INTRODUCTION

Swaziland is classified as at 2017 by the World Bank as a middle income country. The country is still a developing country relying on the output of its different sectors of the economy for its development. The construction sector is one of the important sectors in the development of the economy of the country even though it contributes only approximately three percent (3%) to the country's GDP. The sector as noted by the OECD (2008) is responsible for the building and maintenance of the entire physical infrastructure that other sector relies on. This includes; houses, apartments, factories, offices, schools, roads, bridges, ports, railroads, sewers and tunnels<sup>1</sup>.

In Swaziland the construction industry has become more important because of the country's vision of becoming a first world country by the year 2022. The vision 2022 shifted the focus to improving infrastructure. The Swaziland Government's plan of action for 2013 to 2018 articulates that government will undertake a number of projects to improve the roads and bridges around the country as well as continue with urban development projects. This sector also plays a crucial role in the reduction of unemployment rate. The Labour Force Survey statistics for this sector reveals that in 2010 the buildings industry had employed a total of 6 863 employees, civil engineering industry employing 1 826 and the specialised construction services industry 3 937 people (Swaziland Integrated Labour Force Survey, 2010).

### Recent Government and Private Construction Projects

#### Large government projects include:

- The upgrading of a road between Mbabane and Ngwenya from a single carriage to dual carriage way and

the construction of 46.8km of service roads, a project which was completed in 2003 and valued upon completion at E358 Million;

- The construction of a dam known as the Maguga Dam completed in 2001 at a value of E420 Million;
- The construction and rehabilitation of the of the Maguga access road completed in 1998 at a value of E50 Million;
- The construction of a bypass road (Mbabane – Ngwenya) which was completed in 2009 at a value of E1.05 Billion;
- The completion of a Judges complex at Dalrich Mbabane in 2014; and
- The construction and completion of an inter-ministerial building;

#### Large private sector projects include:

- The completion of MTN head offices at Ezulwini Valley in 2012;
- Construction and completion of a building for the Public Service Pensions Fund;
- The construction and completion of Shopping malls such as the River stone mall in Manzini and the Corporate Place in Mbabane.

Due to the fact that a lot of government funds are now channelled to this industry, there is a need to assess the state of competition in the country.

### Objectives of the Study

The study seeks to identify competition bottlenecks that constraint outcomes in the construction sector with a view to establish strategies that can improve efficiency in the sector. The objectives of the study are to-

- (i) assess the market structure of the of the construction industry;
- (ii) identify how the conduct of players affects competition in Swaziland;

- (iii) identify barriers to entry existing in the construction industry;
- (iv) assess the effects of existing regulations on competition in the construction industry; and
- (v) make recommendations for enhancing competition in the construction industry.

### Methodology

The study adopted the structure, conduct and performance (SCP) analytical framework to assessment the state of competition in Swaziland. Using qualitative data analysis, the study assesses the extent to which market structure and conduct of market players influence market outcomes.

This paper is structured as follows-

- Section 2: assess the general state of competition;
- Section 3: assess price determination;
- Section 4: provide an analysis on procurement policies;
- Section 5: assess the regulatory/legislative framework;
- Section 6: analyse the impact of state support;
- Section 7: assess the effects of trade restrictions; and
- Section 8: Conclusions and Recommendations.

## GENERAL STATE OF COMPETITION

### Supply chain/value chain

In Swaziland the value/supply chain for the construction industry is defined in the context of five tendering methods introduced by the Construction Industry Development Board (CIDB), South Africa (2006). The Construction Industry Development Board (CIDB) (2006) identifies the following contracting methods:

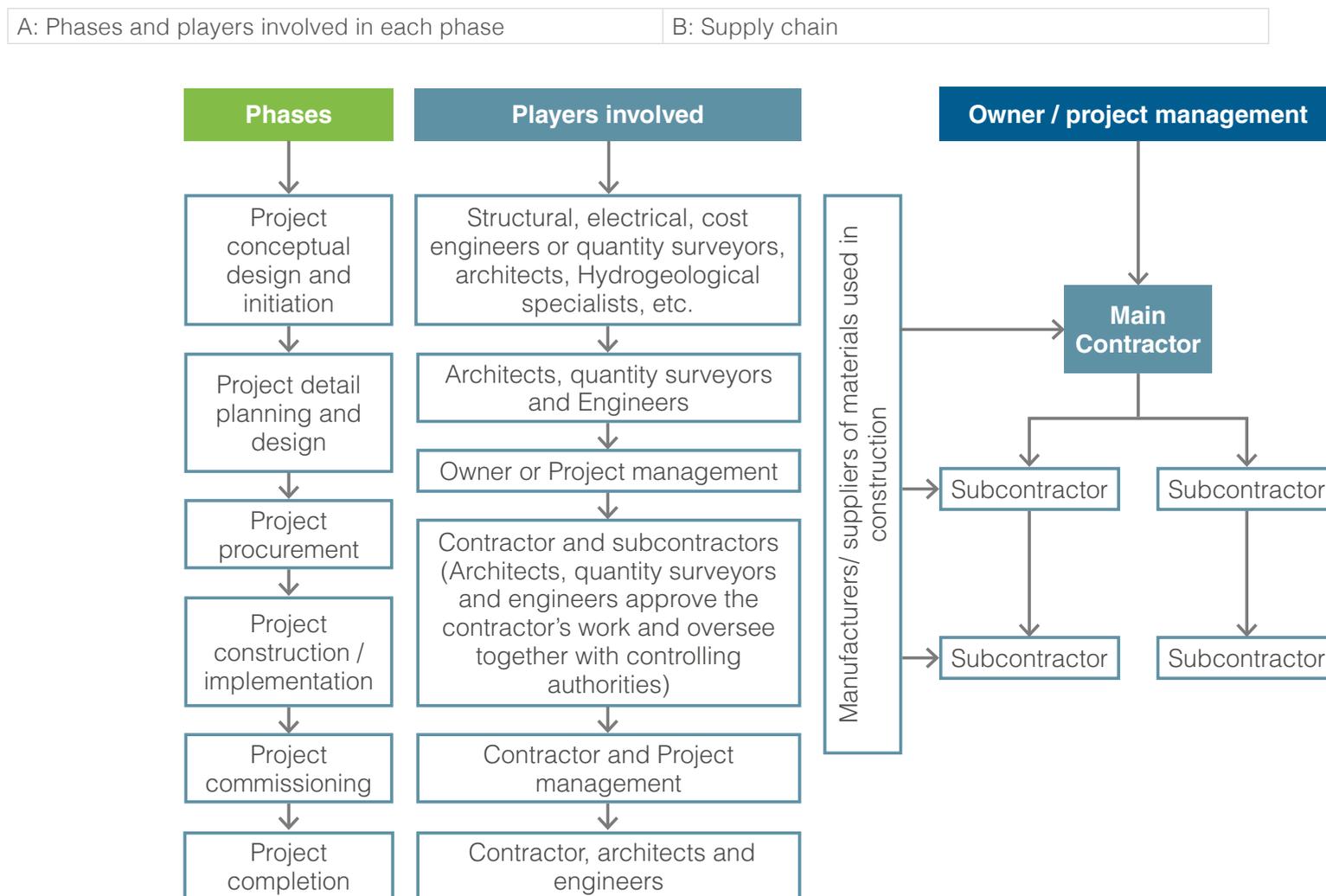
- *Design by employer* - the contractor undertakes only construction on the basis of full designs issued by the employer;
- *Management contract* - a management contractor is appointed to engage and manage a number of contractors to carry out construction based on designs issued by the employer as and when they are completed; and
- *Design and build* - the contractor undertakes most of the design and

all construction in accordance with the employer's brief and his tender submission.

- *Construction management* - this is similar to a management contract, the main difference being that the trade contracts are between the employer and various trade contractors;
- *Develop and construct* - this is similar to design and build except that the employer issues a concept design on which tenders are based;

The most common contracting method used in Swaziland is the design by employer contracting method. This method is normally used by government for most of her construction projects. Figure 1 below provides a summary of the supply chain for Swaziland construction industry as well as the phases and players involved at each phase of the construction process.

**Figure 1: General construction phases and supply chain**



Source: Researchers' own formulation

## Description of the phases

### *Project conceptual design and initiation*

- conceptualising the infrastructure to be constructed and obtaining the mandate to commence with the project. This phase involves the following management processes: the establishment of the project scope; confirmation of the project feasibility; preparation of the project execution plan; and a decision on the procurement methods.

- (i) *Establishment of project scope:* the project budget, conditions of approval, available contracting methods, project outcomes, performance specifications, available resources and capacity to manage the engineering and construction works contract as well as the type and extent of the project;
- (ii) *Confirmation of the project feasibility:* a feasibility study is done to demonstrate technical, social and economic viability of the project;
- (iii) *The project execution plan:* this plan should detail amongst other things the project scope, targets, budgets, procurement method, contracting arrangements, quality management, risk management, communications and project controls; and
- (iv) *Decision on the procurement methods:* the owner must select the contracting, pricing and targeting methods to be used as well as the procurement procedure.

### *Project detail planning and design*

- designing the project to sufficient detail in order for the project to be tendered and constructed. This phase commences with the outputs of the project initiation process being consolidated into a project briefing used to brief the professional team and ends

when the buildings are completed and are free of identified defects. The professional team comprising of; architect(s), quantity surveyor(s) and engineer(s) is required to initiate the design process, develop the conceptual design as well as finalise and document the design. Architects and engineers are mostly responsible for the design drawings whilst quantity surveyors are responsible for the preparation of comprehensive estimates of construction costs and the provision of other cost advice as required.

*Project procurement* - procuring the services of a suitably experienced contractor for the construction of the infrastructure. This takes place once the design has been approved and it involves: the solicitation of tender offers in terms of set procedures; evaluation of tender offers in terms of undertakings and parameters established in procurement documents; and finally entering into a contract with the successful tenderer/bidder. At this phase the professional team would have prepared at least in part some of the procurement documentation which includes: working drawings; technical specifications; management specifications; scope of works; and other documents relating to the tender process and formation of the contract.

*Project construction / implementation* - construction in accordance with the designs and specifications. This takes place only after the contract has been concluded with the selected contractor and the site is handed over to the contractor to perform the scope of work as the contract articulates. The contractor at this phase is responsible for:

- (i) The provision of construction camps, offices, storage facilities and workshops facilities for the due and proper fulfilment of the contract and those facilities for use by the employer (owner) and his agents;

- (ii) Provision of temporary and permanent works;
- (iii) Provision of plant, equipment, labour and materials;
- (iv) Protection of existing services;
- (v) Testing and correction of defects;
- (vi) Quality control;
- (vii) Implementation of quality assurance programmes;
- (viii) Preparation of interim progress reports and payment claims;
- (ix) Employ, where applicable, community labour in terms of the community resource plan approved by the project steering committee;
- (x) Maintaining daily records; and
- (xi) Maintaining health and safety measures

The team of professionals which comprises of architect(s), quantity surveyor(s) and engineer(s) is responsible for;

- (i) Handing over the site to the contractor;
- (ii) Approving the contractor's work programme, procedures and methods;
- (iii) Overseeing liaison with controlling authorities;
- (iv) Evaluating variations to the contract. Variations to the contract that can affect the completion time and costs of the project include; changing requirements by the employer, design changes made by the professional team, unforeseen events that impact on the project, weather and unforeseen conditions that affect the works or the method of executing the works;
- (v) Issuing written instructions to change the scope of the contract;
- (vi) Obtaining approval for changes in time and cost;
- (vii) Administering interim payment claims, including the certification thereof;
- (viii) Implementing controls to confirm compliance with requirements;
- (ix) Monitoring progress through site meetings, site visits and interim reports

- and payment claims prepared by the contractor;
- (x) Ensuring that design intent is achieved during construction;
  - (xi) Monitoring that specific goals relating to preferences are monitored or requirements in poverty relief programmes for the employment of labour;
  - (xii) Undertaking completion inspection; and
  - (xiii) Issue certificate of practical completion and final completion

*Project commissioning* - handing over the completed infrastructure to the client and/or parties responsible for the ongoing operation and maintenance of the constructed facilities. This phase involves the: preparation of the operation and maintenance guidelines; and capacitating the department responsible for the ongoing operation and management as well as preparing and archiving the drawings. The testing of the works under the normal (and

sometimes above normal) working load can also be done.

*Project completion* - attending to defects and closing out the contract. The contract is completed, documentation archived and the completion report is compiled. The professional team also do their inspection of the infrastructure and provide the owner with record drawings and manuals as may be required for the operation and maintenance of works.

### Market Structure

Our analysis for the construction industry structure entails the construction firms; and suppliers of construction materials.

### Market Structure of the Construction Firms

The construction industry comprises of the following constructors:

- Building contractors;
- Civil contractors;
- Electrical contractors;
- Specialist contractors;
- Mechanical works service providers;
- Consultants;
- Allied professionals; and
- Suppliers of construction materials

### Building contractors

In the financial year 2015/16 the total number of building contractors registered with CIC to do construction works in the country were 309. Out of these only a few contractors have the capacity to do construction works for large projects. The category BF is for foreign building contractors who can take project that are above E120 million. Table 1 provides building contractors under each category.

**Table 1: Building contractors**

Category	Aggregate value of contracts (E)	Number of firms
BF	120M and above	10
B1	25-120M	17
B2	10-25M	25
B3	5-10M	42
B4	2-5M	40
B5	0.5-2M	55
B6	0-0.5M	120

Source: Construction Industry Council Swaziland

### Civil contractors

As at March 2016 civil contractors registered with the CIC were 150. Similar to the building construction the number of contractors capable of taking on large projects is smaller compared to the other categories. Table 2 below indicate that only foreign contractors can take projects worth more than E120 million.

**Table 2: Civil contractors**

Category	Aggregate value of contracts (E)	Number of firms
CF	More than 120m	8
C1	25-120M	7
C2	10-25M	13
C3	5-10M	22
C4	2-5M	13
C5	0.5-2M	13
C6	0-0.5M	74

Source: Construction Industry Council Swaziland

#### Electrical contractors

Electrical contractors registered with the CIC as at March 2016 were 102. Similar to building and civil contractors the number of contractors capable of taking larger projects is smaller compared to the number of contractors that can take smaller projects. The categories for the electrical constructors is shown below in Table 3.

**Table 3: Electrical contractors**

Category	Aggregate value of contracts (E)	Number of firms
CF	More than 10M	3
C1	4-10M	13
C2	2-4M	11
C3	1-2M	12
C4	0.5-1M	63

Source: Construction Industry Council Swaziland

#### Specialist contractors

Table 4 presents the number of the specialist for each category/field at the end of the financial year 2015/16.

**Table 4: Specialist contractors**

Category/field	Number of firms
Air conditioning and refrigeration	16
Landscaping contractors	10
Fencing Specialists	16
Tree Cutting contractors	6
Painting contractors	3
Electronic Systems Contractors	15
Plumbing/Irrigation Systems/Water Systems contractors	9
Flooring contractors	2

Category/field	Number of firms
Waterproofing contractors	5
Mechanical and Ventilation contractors	14
Aluminium/Partitions & Ceiling works contractors	5
Road Signage and Marking	2
Pest Control contractors	1
Electrical Works contractors	1
Carpentry and Joinery / Shop fitting	28
Borehole drilling works	3

Source: Construction Industry Council Swaziland

#### Mechanical works

Under mechanical works there are two foreign companies that can do mechanical works of any size and there are also two domestic contractors under category 4 in the list of categories for mechanical works.

**Table 5: Mechanical works contractors**

Category	Aggregate value of contracts (E)	Number of firms
MF (Foreign)	Above E4 000 000.00	2
M1	Above E4 000 000.00	0
M2	Up to E4 000 000.00	0
M3	Up to E2 000 000.00	0
M4	Up to E1 000 000.00	2

Source: Construction Industry Council Swaziland

#### Consultants

Consultants in the construction industry include: quantity surveyors, structural engineers, architects, electrical engineers, mechanical engineers, environmental consultants and civil engineers.

**Table 6: Consultants**

Category/field	Number of firms	
	Domestic	Foreign
Quantity surveyors	11	-
Structural engineers	19	7
Architects	15	5
Electrical engineers	9	1
Mechanical engineers	8	1

Source: Construction Industry Council Swaziland

### Allied professionals

Professionals in the construction industry include: project managers, interior designers, urban planners, property developers, property valuer, geotechnical professionals, hydrogeological professionals as well as professionals in the field of land surveying and mapping. As shown in Table 7 below, most of the professional fields have only one firm; and for interior designers there is also one foreign registered firm.

**Table 7: Allied professionals**

Category/field	Number of firms	
	Domestic	Foreign
Project Managers	12	3
Interior Designers	2	1
Urban Planning	3	-
Property Developer	1	-
Property Valuer	1	-
Land Surveying & Mapping	2	-
Geotechnical	1	1
Hydrogeological		1
Environmental consultants	6	-

Source: Construction Industry Council Swaziland

### Suppliers of inputs

The inputs that the construction industry needs include amongst others: timber; steel; cement; and other related products.

**Table 8: Suppliers of construction materials**

Category	Number of companies	
	Domestic	Foreign
1-> annual turnover above E10 Million	9	5
4-> annual turnover above E7.5 M but less than E10 M	2	1
5-> annual turnover above E1 M but less than E2.5 M	6	0

Source: Construction Industry Council Swaziland

**Table 9: List of construction materials suppliers**

Category	Name of company	Domestic/foreign
1	Build It	Domestic
1	Ellies Electronics Swaziland	Domestic
1	Hub Hardware	Domestic
1	J &E Hardware t/a Mica Hardware	Domestic
1	KS Distributors	Domestic
1	Mix Solutions	Domestic
1	Star paint	Domestic
1	Steel & Wire International	Domestic
1	T & S Enterprises	Domestic
1	Aveng Swazi	Foreign
1	Bergvik Flooring	Foreign
1	Cashbuild Swaziland	Foreign
1	Clear Creek t/a Wire force	Foreign
1	Razorbill Properties 127	Foreign
4	Acrylon Paint	Domestic
4	CM Concrete	Domestic
4	Mar & Dar Swazi GRC	Foreign
5	Bo's Investment	Domestic
5	Banner Investment	Domestic
5	Eco-Max Africa	Domestic
5	Home Base Investment	Domestic
5	Manzini General Suppliers	Domestic
5	Multibuild Investment	Domestic

Source: SCC generated

### Market shares

As noted in our introduction above, the construction industry in Swaziland is better defined in the context of two main categories (large and small firms) with different levels. With regards to large firms Inyatsi Construction has a largest market share followed by Du-van developers then Kukhanya Construction. These companies are dominating the construction industry because of their capacity to do any projects and they offer advance equipment which the lower categories cannot afford<sup>2</sup>.

### Concentration

Figure 2 below shows that the building contractors, civil contractors and electrical contractors is highly concentrated for categories BCEF, BCE1 and BCE2 when compared to the lower categories BCE3, BCE4, BC5 and BC6. Worth noting is that some firms provide more than one service.

**Figure 2: Number of building contractors, civil contractors and electrical contractors by category<sup>3</sup>**



### Ownership patterns

Accurate information on the ownership of the construction sector in Swaziland is difficult to establish due to the scarcity of comparable statistics, differences in reporting format and the sensitive nature of the information especially for the procurement segment of the sector.

The ownership pattern in Swaziland varies according to the levels at which the construction company is at as per the categories given by the Construction Industry Council. Small companies at the lowest levels are in most cases owned by a few individuals or even one individual whereas large companies capable of undertaking large projects may be owned by a group of shareholders who have been in the construction business for a very long time and financial muscle. In some cases, some companies may be partly or wholly owned by another company. An example of this is the Construction Associates Company

which is wholly owned by the Inyatsi Group which also owns Inyatsi Construction Swaziland.

Statistics received from the Micro-Project Office in Swaziland also does not provide a clear picture on ownership patterns because there are many players and the policies in place emphasizes on fair distribution of tenders to small firms.

### Market Structure of construction material suppliers

This sub-section analyse the supply of construction materials.

#### Cement:

There is only one producer of cement, namely; Afrisam Swaziland. Afrisam is a wholly owned subsidiary of Afrisam South Africa. Afrisam Swaziland does not manufacture cement but rather imports Portland cement which is blended with other

raw materials such as Pulverised Fuel Ash to produce various strengths of cement. Afrisam therefore produces two types of cement which are described below:

- (i) All Purpose Cement (APC 32N): this type of cement is supplied to retailers, which are mainly the general suppliers of construction materials. It is used for general purposes including the construction of beams, walls, girdles, kerbs, bricks, paving and interlocking slacks.<sup>4</sup>
- (ii) High Strength Cement (HSC 42.5N): is of higher quality and strength compared to the APC 32N. Its unique properties include being vibration and fire resistant, having heat retention properties, weather protection, sound and acoustic insulation and urban cooling capacity. The HSC cement is normally delivered directly on-site to customers who purchase this cement in bulk with the minimum being thirty tonnes.

Afrisam is both a company name and a brand of the cement produced and sold by the company. Despite that it is the only producer of cement in the country, Afrisam cement is not the only brand of cement that is found in the country.

There are other cement brands which are imported mainly from the Republic of South Africa, such as Sephaku cement, Pretoria Portland Cement (PPC)<sup>5</sup>, the Best Brand Cement (BBC) and Star cement<sup>6</sup>.

The market shares for the different suppliers of cement in the country could not be calculated due to lack of data. However information gathered suggest that the best-selling cement is Afrisam followed by Sephaku cement<sup>7</sup>. According to Cashbuild their best customers who include

construction companies and the general public, prefer these brands because of its quality.

#### *Cement Import Competition*

There are a number of players who are importing cement in Swaziland. In 2012, Afrisam once applied for protection from the Ministry of Commerce, Trade and Industry, against its competitors. The application was rejected due to the fact that it was likely to impede competition. Afrisam Swaziland remains a dominant player in the industry, but the other imported brands are also exerting competition pressure.

#### *Steel, iron and metal construction inputs*

Steel and iron is not produced in Swaziland as the country does not have blast furnaces

for extracting the products from their basic ores. As such, companies in Swaziland import rods and bars of steel and iron from the Republic of South Africa for further processing. There are three major manufacturers and suppliers of products of steel, iron and metal. These are: Swazi Wire industries; Steel and Wire Swaziland; and KS Distributers. The products that are produced by these firms include: beams; reinforcing steel; window sections; guard rails; reinforcing sheets and rebar; gabion baskets and geotextiles; netting wire; reinforcing weld mesh; and many other products including corrugated iron<sup>8</sup>.

Other suppliers of construction materials and iron products include Cashbuild, Hub Hardware, Batchet and Build-it. Table 10 below show steel, iron and metal products that are imported into the country.

**Table 10: Iron, steel and metal products imported to Swaziland**

Semi-products of iron or non-alloy steel, $\geq 0.25\%$ carbon
Flat/hot-rolled iron/steel, width $\geq 600\text{mm}$ (including further worked than hot-rolled)
Hot-rolled iron or non-alloy steel bars & rods, in irregularly wound coils
Angles, shapes and sections of iron or non-alloy steel
Bars and rods, hot-rolled, in coils, of alloy steel
Bars and rods of alloy steel
Ropes & cables of wire not plaited, coated or clad
Ropes and cables, of wire which is plated, coated or clad with zinc

Source: Swaziland Revenue Authority

#### *Aggregates*

The aggregates used in the construction industry include plaster sand, river sand, gravel and crushed stone. Aggregates such as plaster sand, river sand and gravel have multiple uses. There are quite a number

of businesses who sell plaster and river sand. These include SMMEs and large construction companies. SMMEs normally dig and sell plaster and river sand to the general public, that is, to individuals who are building their houses, typically in the rural areas. Construction companies also

use these two aggregates for their own construction projects. Some of the major firms involved in digging and/or supplying river sand, plaster sand and gravel are shown in Table 11 below.

**Table 11: Extractors of river sand, plaster sand and gravel in Swaziland**

No:	Name of user/company	Location	Commodity mined at various sites around the country		
			River Sand	Plaster Sand	Gravel
1.	Du-Van Developers (Pty) Ltd	Matsapha	X		X
2.	Inyatsi Construction (Pty) Ltd	Manzini	X		X
3.	Kukhanya Civil Contractors (Pty) Ltd	Moneni	X		X
4.	Cm Concrete (Pty) Ltd	Zulwini	X		
5.	Nkonyeni Pre-Cast (Pty) Ltd	Sidvokodvo	X		
6.	Stefanutti & Stocks Swaziland (Pty) Ltd	Matsapha	X	X	X
7.	Infrasets Swazi (Pty) Ltd	Matsapha	X		
8.	Roots Civils (Pty) Ltd	Bethany	X		X
9.	Mix Solution (Pty) Ltd	Zulwini	X		
10.	Total Concrete Solutions (Pty) Ltd	Nkwalini	X		
11.	Pot's Construction (Pty) Ltd	Mbabane	X	X	X

Source: Ministry of Natural Resources, Mining department

According to the Ministry of Natural Resources both SMMEs and large companies involved in digging and/or supplying the above mentioned three aggregates need to acquire a Minerals Dealers Licence from the Ministry. The Minerals Dealers Licence is granted after the player intending to dig the specific aggregate has applied and adhered to all the necessary conditions necessary and these include paying the required licence fees. The licence fees for SMMEs who are extracting river sand and plaster amounts

to E450.00 per truck owned per year. For large scale extractors which are mainly construction companies the fee ranges from E3000.00 to E5000.00 per year<sup>9</sup>.

The licence fee is set at E6000.00 for quarry mining. Quarry extractors are expected to adhere to the following terms and conditions for their licence to be renewed-

- (i) submit monthly returns;
- (ii) declare gross production sales/figures; and
- (iii) adhere to rehabilitation plans.

Unlike the plaster and river sand extractors, there are few suppliers of crushed stone in Swaziland. The three main quarry stone producers are Kwalini Quarry; Sikhuphe quarry owned by Inyatsi construction; and the Mbabane quarry. As shown in Table 12 below, AT & T has been the smallest producer over the years with NDI Investments and Kuthula Road Works being new players.

**Table 12: Quarry producers and related production volumes in Swaziland**

Name	Location	Production volumes in cubic metres (m <sup>3</sup> )			
		2013	2014	2015	2016
Kwalini Quarry	Bethany-Manzini Region	150 256	147 645	114 926	148 066
Mbabane Quarry	Mahwalala – Mbabane	50 234	62 385	47 725	67 908
AT & T Quarries (PTY) LTD	Mphaphati Sidvokodvo	2 732	6 390	1 603	3 689
Sikhuphe Quarry (Inyatsi)	Malindza – Sikhuphe	89 481	104 239	174 325	142 887
NDI Investments (PTY) LTD	Sicunusa Shiselweni	-	-	--	41 147
Kuthula Road works	Piggs Peak – Hhohho	-	-	-	-
<b>Aggregate Total</b>		<b>292 703</b>	<b>320 659</b>	<b>338 579</b>	<b>403 697</b>

Source: Ministry of Natural Resources, Mining department

## Bricks

There are a number of firms that are involved in brick making most are not registered. The suppliers of construction materials such as Cash- Build and *Build It* sell bricks of different types and purposes to their customers. Bricks can be used for building walls, pavements and decorating yards amongst other purposes. The basic key inputs necessary for the production of the different types of bricks include mainly water, cement, and river sand. The major producers of bricks in Swaziland include the following:

- (i) Nkonyeni Precast;
- (ii) Brickon (Pty) Ltd;
- (iii) Langa Bricks (Fortis Enterprises);
- (iv) Mangweni Bricks;
- (v) INO Investment
- (vi) DA GONG Precast; and
- (vii) Infraset Swaziland (the Aveng Group)

## Timber

During the construction process, building and civil contractors often need timber pillars for either flooring or roofing purposes. The construction industry uses both imported and locally produced timber. Firms that are producing timber and timber products in the country include amongst others: Montigny Swaziland; Tonkwane; Peak Timbers; and Swazi Plantations.

Peak timbers and Montigny are the main players in the manufacture and supply of timber and timber products. Montigny supply approximately 40% wet-off-saw to the Southern African regional timber market. It is estimated that Montigny exports a diverse range of timber products to SADC member states<sup>10</sup> and Japan.

The timber products that are manufactured by local players in this industry include: pallet timber; timber for packaging; mining timber for under-ground support (can be

used in the building process as well); finger-jointed floor planks for indoor use; and planks.

In a nutshell both the market structure of the constructing firms and suppliers of inputs are oligopolistic in nature especially the higher levels.

## Barriers to Entry and Exit

### Entry dynamics

Entry requirements in this industry constitute regulatory requirements as well as other requirements such as the availability of start-up capital and the availability of qualified personnel. The construction industry is capital intensive therefore start-up capital serve as a substantial barrier to entry. The amount of start-up capital depends on the market or industry field in which the new entrant intends to enter. For example, if a firm wants to enter as a building contractor, the amount of funds which will be needed to purchase or rent equipment will be much higher compared to a firm that only intends to enter into the market for painting buildings.

Also to enter a specific fields of the industry require special skills or expertise which tends to create a barrier to qualify for some projects. Noteworthy is that, it is easy for new firms to enter the construction industry at lower levels as per the categorisation of undertakings in the construction industry by the CIC. These lower levels or categories are less concentrated compared to the higher categories, showing that entry and expansion to higher categories may not be easy.

The regulatory requirement for firms<sup>11</sup> to pursue only projects that they have registered for remains an expansion barrier, especially for both civil and building contractors, firms are not allowed to tender

or bid for projects at higher categories in terms of their value.

Furthermore, the CIC requirement for foreign firms to partner with local firms in order to do construction works in Swaziland can be considered as a barrier. This requirement has resulted to perpetual joint ventures with cartel's features.

In addition, most construction companies have developed ties with their clients such that it would be difficult for new firms lacking experience to enter any market in the construction industry and be successful. Firms that have successfully completed projects usually stand a better chance of being awarded large projects.

### Exit dynamics

According to the CIC factors that stimulated exit of firms in this industry include:

- *Delay in payment by government:* government is by far the biggest customer for most construction firms. Firms commit themselves to doing government projects with the hope that they will get paid as soon as they finish the project only to find that there are delays in government payment processes. This affects mostly the small and medium enterprises which end up not being able to service their loans and pay staff salaries. This problem was also identified by Thwala and Mvubu (2009). Thwala and Mvubu (2009: 354) posit that the delay in payment as a result of government financial constrains is a common challenge that often results in firms being liquidated.
- *Decline in the number of capital projects:* As it has already been stated, most firms rely on government projects, therefore any adverse movement on government projects

has a ripple effect on the performance of firms in the construction industry. The most affected are the small and medium enterprises.

- *Lack of commitment from owners of construction firms:* according to the CIC some owners/directors of SME construction firms have permanent jobs. Therefore, since the focus is not only on their construction firms, the firms eventually fail, hence exit.
- *Poor project management skills:* the CIC also cited poor project management skills as a major factor that undermines the effort of SME in

construction. For example, once firms are paid they fail to plan and budget for future projects.

- *Lack of access to credit:* for small and medium firms this creates cash-flow problems and leads to incomplete work and even liquidation.

In addition, some factors identified as barriers to entry and/or expansion challenges can also be considered to be leading factors in the exit of firms in this industry. For example, the categorisation of firms and the requirement for firms to tender only for the projects for which they are registered means that when the number

of projects for those specific categories decline some firms would have no choice but to exit the market. Also the fact that firms that are categorized under BCE1 has a comparative advantage to tender for projects in the lower levels which is not the case for firms in other levels.

Tables 13 and 14 provide evidence on the number of firms that have exited the construction industry. Some of the firms that have exited include consulting firms, building and civil contractors. As articulated above the reasons behind the exit is mixed for all levels/markets within the construction industry.

**Table 13: Swazi consultants in 2012/13 against consultants in 2015/16**

Consultants	Number in 2012/2013	Number in 2015/2016	New entrants <sup>12</sup>	Firms that have exited
Quantity Surveyors	9	11	5	3
Structural Engineers	15	19	11	8
Electrical Engineers	7	9	5	3
Civil Engineers	17	19	8	2
Project managers	14	15	8	7
Mechanical engineers	5	9	5	1
Architects	10	21	14	2
<b>Total</b>	<b>77</b>	<b>103</b>	<b>56</b>	<b>26</b>

Source: Ministry of Public Works and Transport; and Construction Industry Council

**Table 14: Contractors in 2007 against contractors in 2015/16**

Contractors	Number in 2007	Number in 2015/2016	Difference	Increase/decrease
Civil contractors	198	150	-48	24% decrease
Building contractors	156	310	154	99% increase
Road marking specialists	4	2	-2	50% decrease
Electrical works specialists	6	1	-5	83% decrease
<b>Total</b>	<b>364</b>	<b>463</b>	<b>99</b>	<b>27%</b>

Source: Ministry of Public Works and Transport; and Construction Industry Council

## The impact of the grading system set by the CIC in detail

The grading system used by the CIC in Swaziland can be construed as a barrier to entry and expansion. It is a barrier to expansion because firms registered at a lower category are prohibited from bidding for projects at higher categories and as such they are always used as subcontractors of the major firms that win the tenders. This may be a contributing factor to some existing collusive arrangements in the industry.

According to the Construction Industry Council (CIC) the categorisation is determined by the following three factors<sup>13</sup>:

- Financial capability – this is determined by the best turnover over a period of 3 years. The best turnover is calculated as 50% of the upper limit in the specific category. For an example the best turnover for category B1 (building contractors) companies should be at least E60 Million since the upper limit in that category is E120 Million.
- Works capability – this is determined by the largest contract undertaken and completed during the three years immediately preceding the application by a specific company in its class of construction works. The largest contract is calculated as 20% of the upper limit of the specific category. For example, for B1 the works the largest contract should be at least E24 Million.
- Available capital - this is the sum of total equity and retained income or any form of surety from recognised financial institutions. It is calculated as 10% of the upper limit of the tender value range.

All these factors are taken into account before a company is classified under a certain category. Of note is that companies at the lower categories which include B6, C6, E4, and M4 are not required to bring proof of works capability<sup>14</sup>. All that is required according to the CIC is for the companies to submit all company registration certificates, trading licences and valid tax clearance certificates.

## Cross-shareholding and vertical integration in the construction industry

There is no sufficient evidence to conclude that cross-shareholding is common in the construction industry. However, the Commission found that two construction companies, Du Van Developers and Afrotim Swaziland have “associated companies” or “partners”. Firms that are usually sub-contracted by Du-van Developers include: Build-Tech; Brickon, Unison Concrete and Mega Electrical<sup>15</sup>. Build-Tech supplies building materials such as roofing materials, floor materials, finishing materials and other specialist materials. Brickon supplies all masonry products such as blocks, precast concrete elements, and paving items amongst others. Unison Concrete supplies ready mix concrete to various sites where Du Van works and is also available to other independent contractors; and Mega Electrical is in the business of electrical installations and services.

Afrotim Swaziland works in partnership with Swaziland Truss and Timber Products Company. Swaziland Truss and Timber Products Company exclusively supply Afrotim with timber for roofing<sup>16</sup>.

Based on the information gathered Du-Van Developers and Afrotim are vertically integrated with their “associated companies” and/or “partners”. These remain a cause for concern because for any tender won by Du-Van Developers and Afrotim, the

other players have zero chance of being sub-contracted except for the partnering companies.

## Sub-contracting and quality

Sub-contracting plays a vital role in the construction sector of Swaziland as it has been an economical way of project delivery; previous studies show that about 80% to 90% of projects in the country are sub-contracted (Mashwama and Musondi, 2014). Despite that sub-contracting may yield positive results, there are instances where it has resulted to poor workmanship, material wastage, high level of rework and disputes and conflicts, delays in construction and poor quality of materials used for construction.

It was established that poor workmanship is a result of late payments and lack of common understanding between main contractors and subcontractors<sup>17</sup>.

## PRICE DETERMINATION

Economic theory suggests that every firm price its goods and/or services (hereinafter “products”) with an aim to maximise profit. There are a number of factors that a firm need to be taken into account when pricing its products. These include amongst others the costs of inputs (cost based pricing) as well as the pricing behaviour of competitors (market based pricing). Mochtar and Arditi (2000) assert that pricing decisions need to be in line with market dynamics such as: rapid technological progress; growing number of new products; wider and more insistent foreign competitors; new and stronger foreign competitors; and legal restrictions<sup>18</sup>. In competitive markets where all firms are price takers there can be cases where firms exit the market because the market price is below the firms’ average costs of production.

Price determination is the most important aspect in the construction industry because it serves as an indicator whether or not to accept an offer. Most pricing strategies in the construction industry are cost-based as opposed to market-based. Sub-section 3.3 provides a summary on national pricing in Swaziland.

### National pricing

In Swaziland price determination in the construction sector at the national level is influenced by the following factors:

- *The value of the project:* The higher the value of the project, the lower the number of firms that will actually bid for the project. Since there are few companies that are registered for high value projects, they have a leeway with regards to their price setting.
- *Costs of inputs:* Almost all inputs for construction in Swaziland are imported from neighbouring countries such as South Africa. Therefore, during the bidding process, a construction firm needs to factor in the costs of inputs such as cement, steel, and bricks amongst others. There is a need to consider these costs and their possible fluctuations in the future.
- *Estimated costs of subcontracting:* where the main contracting firm envisage the need for subcontractors to do specific works; costs for the services of those subcontractors should also be taken into account.
- *Other price determinants:* local firm also consider the cost of importing machinery and expertise to fix the machinery in the event it develops mechanic problems.

### Regional pricing

Literature on regional pricing for the construction industry is scarce. Gabor (1977) classified pricing strategies in the

construction industry into two, namely: the cost-based pricing and market-oriented pricing. The cost-based pricing approach incorporates profit oriented and government-controlled prices, while market-oriented pricing approach entails customer-oriented and competitive-oriented pricing. Studies such as Fellows and Langford (1980) and Skitmore (1987) suggest that pricing strategies in the construction industry have evolved in line with three underlisted major strategies identified by Kotler (1976) and Assael (1985).

- Cost-oriented - methods based on cost plus mark-up, break-even, and target rate of return.
- Competition-oriented – aligning price to the prices of competitors. This involves pricing in relation to competitors' expected reactions
- Demand-oriented - pricing based on the going price or customers perceived value.

Worth noting is that construction firms within the SADC region are largely using Skitmore (1987)'s approach in determining price. Skitmore (1987) posit that the structure of the construction industry and the nature of the process is more to market-oriented pricing than cost-oriented pricing. Therefore, price determination in the SADC region is largely influenced by the following:

- Cost based: This approach includes cost estimate plus variable mark-up or cost estimate plus flexible mark-up. This approach takes into consideration the importance of market conditions on mark-up values.
- Market-based: This involves perceptions of the construction firm on the 'going price' of a project considering the general level of competition, workload in the industry; clients bid price consciousness, etc.
- Standard rate table based: This is based on a standard construction

price books like Spon's, Laxtons, Wessex database, etc.

- Historical price based: The construction firm use previous bid prices and the prices are adjusted for effects of time, location, current economic conditions, variations in design and construction, etc. This is more relevant to serial tendering where a firm is bidding for a similar project executed for the same client in the past, at the same or different site location(s).
- Sub-contractors' bids based: The contractor treats sub-contractors' bids as a cost upon which to base his mark-up. In this case if a contractor can guarantee the quality and integrity of his subcontractors, and the ability to adhere to schedule and stay within estimates, subcontractor bids may constitute a huge proportion of the prime contractors bid price.

## PROCUREMENT POLICIES

Procurement is defined as the procedures that are utilized by agencies to evaluate and select designers, contractors, and various consultants. Evaluation and selection is based on the following factors: price, technical qualifications, or on a combination of price, technical qualifications, time, and other factors.

### Types of procurement

The following are the popular procurement methods:

- **Traditional Sealed Bidding:** this method is commonly used by the public sector. It typically involves price fixing and open bidding.
- **Sole Source Selection:** this approach is used by the private sector and it involve negotiating the target price by players.

Since large construction projects in Swaziland are owned by government the traditional sealed bidding approach is used.

### Public Procurement policies in Swaziland

The procurement of all public sector projects is regulated by the Swaziland Public Procurement Regulatory Agency (SPPRA) which was established through the Public Procurement Act of 2011 (hereinafter “Procurement Act”).

The Procurement Act defines procurement as, “the acquisition, by purchase, lease, hire purchase, licence, franchise or any combination of goods, works, services or assets”. Public procurement is then defined by the Act as “procurement using public funds, whether wholly or partially, in accordance with the Procurement Act”.

The Procurement Act provides for the establishment of the SPPRA and the Swaziland Government Tender Board (section 25(1)). The Swaziland Government Tender Board (hereinafter “Tender Board”) is an authority responsible for the approval of tenders for the Swaziland Government. SPPRA is superior to the Tender Board and it has the power to allow different public entities to formulate their own tender boards (section 27(1)).

Therefore, the role of the Tender Board is limited to authorizing tendering procedures in accordance with the law, the actual opening of tenders; and disputes resolution of tenderers and suppliers.

As enshrined in Section 9(2) of the Procurement Act, SPPRA is responsible for policy, regulation, oversight, professional development and information management and dissemination in the field of public procurement.

### The impact of Public Procurement Act on Competition

Through Section 3(2) of the Procurement Act, SPPRA has been able to reshape the construction industry by:

- Ensuring transparency and accountability in public procurement whilst maintaining appropriate accountability of information;
- Facilitating efficiency and maximum competition in all categories in the construction industry.
- Promoting diverse private sector participation through fair and non-discriminatory treatment of tenders;
- Developing economic capacity in Swaziland, through the provision of opportunities for Swazi companies to participate in public procurement;
- Promoting regional and international trade in accordance with agreements entered into by the Government of Swaziland.
- Monitoring compliance with the provisions of the Act (procuring entities, tenderers, service providers and tender boards). This includes publishing circulars in line with Act provisions such as: Circular No.: 1/2015 on contracts awards which are above the market prices; Circular No.: 2/2015 on submitting reports related to procurement plans and proceedings to the SPPRA; and Circular No.: 3/2015 on the submission of notices of intention to award of a contract.
- The Act has also compelled participants in this sector to align their prices with prevailing market prices which thus increasing competition in the industry. This has significantly contributed in eliminating government loses that previously emanated from unfair pricing.

### Do these policies facilitate collusive outcomes?

Like in other countries, the construction industry in Swaziland is susceptible to collusive arrangements for the following reasons: high concentration levels especially for the higher categories; high barriers to entry; and joint ventures particularly between large companies. Other factors that are likely to cause collusive arrangement include: the lack of price sensitivity, subcontracting of rivals and transparent bidding procedures.

The Procurement Act provides that before a company is awarded a tender three applications are considered for purposes of comparing prices. If submitted tenders are above market prices and the board is suspicious that some firms have colluded in the bidding, another invitation to tender is published now eliminating the firms who had submitted collusive tenders as per Section 56(c) of the Act.

Even though no study has been undertaken to establish whether or not the preference given to domestic companies for project facilitate collusive arrangement or not, these barriers may lead to such. The increase in joint ventures in this industry remains a cause for concern. As stated above for foreign firms to get tenders they are compelled to form joint ventures with Swazi firms.

The high level of transparency through the continued release of bidding results and details on major construction projects in the country makes it easier for firms to predict the possible moves of their rivals in future bidding rounds. This increases the likelihood of gentlemen's/collusive agreements in the industry especially for the higher categories which are highly concentrated.

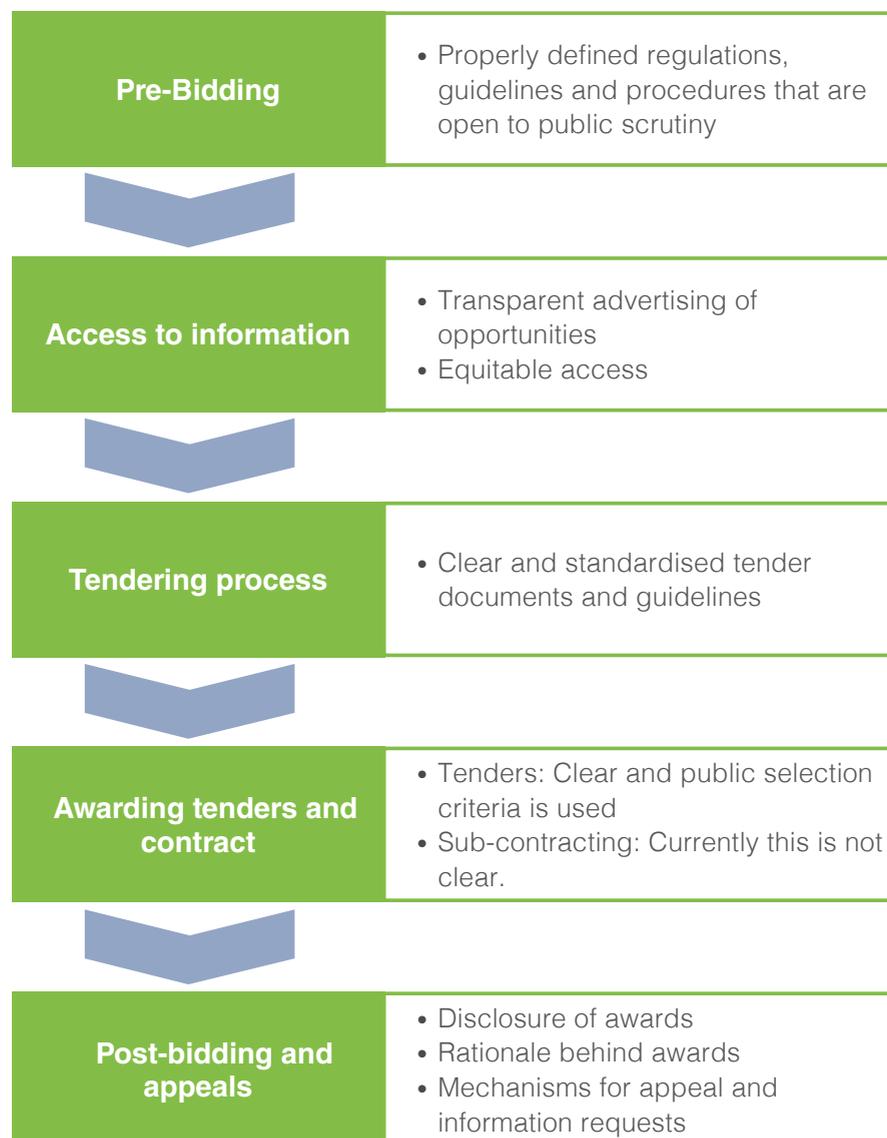
## The positives and negatives of procurement transparency in Swaziland

The Public Procurement Act of 2011 has specific transparency requirements in Section 38 of the Act. It provides that all procurement shall be conducted in a manner which promotes the economy, efficiency and transparency for all goods and services in the public sector. These include construction services and inputs used in construction.

### Benefits derived from the existing transparency

Benefits derived from the existing system maybe linked to tangible results such as saving time and money on finding and processing bids, reducing corruption and increased competition among players. Figure 3 below illustrates the benefits derived from the existing approach.

**Figure 3: Benefits derived from existing transparency**



Source: SCC generated

## Negatives of the procurement system

Similar to other methods this method has a number of limitations. This approach entails lump sum bidding where a contractor is provided with a set of bid documents that do not contain detailed quantity tables to assist in pricing the project. Based on the bid documents the contractor develops quantity take-offs and estimates a lump sum price based on this take-off. The limitations of this approach are-

- it is not appropriate for relatively large projects since they require a well-defined scope;
- it is associated with high risk of unforeseen conditions;
- it has high possibility for changes in scope during design and construction;
- contractors may add more contingency to bid prices, particularly if there is uncertainty in the estimated quantities for the lump sum items;
- potential that the agency will pay the lump sum price when total quantities under run estimated amounts;
- less control by the agency over quality and safety when the contractor's primary focus is on cost and schedule;
- changes that affect lump sum price require more effort than simply adjusting the quantity of a unit-priced item; and
- it affords players an opportunity to speculate future pricing base on previous bids.

Despite the negatives, we conclude that the positives far outweigh the negatives. Therefore, strengthening the current system will yield numerous benefits for the country.

## **CONSTRUCTION REGULATORY FRAMEWORK AND ITS IMPACT ON COMPETITION**

### **Regional trade policy**

#### **Southern African Customs Union (SACU):**

Similar to other member states, Swaziland's foreign trade on construction equipment, cement and other inputs are affected by the Southern African Customs Union (SACU) tariff policy. SACU imposes a common tariff (customs and excise duties) on goods imported from third countries, while goods circulate duty free within SACU members. Therefore, Swaziland also as a member of SACU also imposes a SACU duty on all goods coming from non-member states.

#### **The Southern African Development**

**Community (SADC):** Swaziland has been a member of SADC since inception in 1980. SADC was established to promote regional cooperation and integration towards a single regional market. Its main objective is to progressively eliminate barriers to free movement of capital, labour, goods and services (trade) and to mobilize support for national and regional projects. In 2000 a SADC Trade Protocol was developed that seek to establish a Free Trade Area (FTA) in the SADC region and provides for intra-SADC trade liberalization, with the removal of non-tariff barriers. Swaziland's trade policy also emphasis on trade liberalization, which essentially encourages competition within the Swaziland market.

#### **Swaziland Construction Regulatory**

**Framework:** The regulation of the construction industry in Swaziland can be traced back to 2001 when the Construction Industry policy came into effect. Through the construction policy Swaziland had managed to achieve the following goals –

- to meet the economic demands and socio-political needs of the country in the provision of construction services;

- to achieve co-ordination and synergy between the activities of the public and the private sectors;
- to rectify any imbalances by promoting and optimising the participation of local companies in the industry;
- to promote and ensure safety in the sector;
- to take due consideration of environmental influences on industry activities and to minimise negative impacts on the environment;
- to ensure transparency in the procurement of construction services; and
- to adopt uniform standards throughout the industry.

As a result of the implementation of the construction industry policy the following developments were realized-

- the establishment of a National Industry Council representing all stakeholders to drive the industry;
- the establishment of an agreed and accepted contractor and consultant registration / classification system including a clear definition of a "local" contractor to maximise the participation of Swazis in the industry; and
- the commitment of capacity building and training initiatives to increase the human resource pool for construction;
- the establishment of the Procurement Act of 2011; and
- the establishment of the Construction Industry Council of Swaziland

### **The Construction Industry Council in Swaziland**

The current legislation for the construction industry in Swaziland is the Construction Industry Act of 2013 (hereinafter referred to as the "Construction Industry Act") which provided for the establishment of the Construction Industry Council (CIC).

The Construction Industry Council started operating in September 2014. The main objectives of the Construction Industry Council are to<sup>19</sup>-

- promote the construction industry in meeting national construction demand;
- provide strategic leadership to construction industry stakeholders to stimulate sustainable growth, reform and improvement of the construction sector;
- determine and establish best practice that promotes-
  - industrial sustainability;
  - industry performance, efficiency and effectiveness;
  - procurement management reform;
  - public and private sector delivery management;
  - national social and economic objectives, including: growth of the emerging enterprise; labour absorption in the construction industry; improved labour relations; positive safety, health and environmental outcomes; and
  - human resources development in the construction industry.
- promote best practice through the development and implementation of appropriate programmes and measures aimed at best practice and improved performance of public and private sector clients, contractors and other participants in the construction delivery process;
- promote uniform application of policy with regard to the construction industry throughout all spheres of the industry including Government, parastatals and the private sector;
- promote, establish or endorse uniform and ethical standards that regulate the actions, practices and procedures

of parties engaged in construction contracts;

- promote sustainable growth of the construction industry and the participation of the emerging enterprises;
- promotes appropriate search on any matter related to the construction industry and its development;
- implement the policy on construction industry development;
- facilitate the attachment on internship bases of persons who have completed training in construction or activities related to construction;
- advice the Minister on policy and programmes which impact on construction industry growth and development; and
- promote any other related objective.

#### Other relevant pieces of legislations

**The Country's constitution, 2005:** the constitution of the country is above all other legislations in the country. The constitution provides for the protection of workers with regards to their treatment and work conditions (Sections 14 (e) and (f), Section 18 and Section 32 (4) (a) and (b)).

The constitution also provides for the protection of the country's natural resources which includes: water and river sand used in the construction industry (Section 210 to 218). Construction companies are expected to apply for a permit to dig river sand from the Ministry of Natural and Energy. In addition, both individual and firms who wants to dig and sell river sand and/or plaster soil used in construction has to be approved in the relevant chiefdom.

**The Employment Act of 1980 and the Industrial Relations Act of 2000:** this Acts speaks to the expected conduct of firms in the industry regarding the treatment of employees whilst they are employed and the

termination of their contracts. Since 1980 the country's labour law has significantly contributed in the development of the construction industry, ensuring that workers are well treated and minimizing strikes in Swaziland.

**The Buildings Act of 1968:** this Act stipulates the steps that need to be taken before the approval of any new building. In large towns such as Mbabane and Manzini the municipalities and the Ministry of Housing and Urban Development are responsible for approval of plans before any construction is undertaken. An application for a construction project includes: an application form; application fee; working drawings; site plan showing access to public road, existing buildings and plot boundaries; a location map; and all sewerage, drainage and water plans. These requirements ensure that buildings are well constructed and they are safe.

**Prevention of corruption Act of 2006:** The Anti-Corruption Commission through this Act ensures that there are no corruption practices in the industry. Such practices include bribery (Section 21); fraudulent on transactions by or with public or private bodies (Section 23); corrupt activities relating to contracts and tenders (Section 22); and corrupt activities relating to auctions (Section 25).

**Public Finance Management Act of 2009:** this Act is being enforced by the Ministry of Finance which is responsible for the dissemination and management of public funds in Swaziland. The Ministry of Public Works and Transport have a responsibility of reporting on the usage of funds including funds used for specific construction projects. This Act has major implications for the construction industry because government remains the major client in this industry. Even though it does not directly affect construction firms, it does affect

the flow of funds to different government ministries for the implementation of different projects some of which are construction projects.

### The impact of the regulatory framework on competition

The enforcement of the Construction Industry Act offers both negative and positive effects on competition in the construction industry. Through the existing legislation the Construction Industry Council has managed to realize the under listed achievements.

#### Positive effects of the regulatory framework on competition

- (i) Improved registration of new and existing contractors.
- (ii) Yearly renewal of certificates for firm in the sector in line with Section 27(1));
- (iii) The process of awarding contracts is review by an independent team;
- (iv) Swazi firm are given a priority in the construction industry before foreign owned;
- (v) Quality standards on: construction, contract documentation, codes of practice, procurement processes, legal and contractual processes;
- (vi) Information is disseminated to stakeholders on best practice, industry performance and improvement and other matters affecting the construction industry; Safety standards in the construction industry as well as ensuring best practice by industry participants; and
- (vii) Monitoring and evaluation the capacity and progress of industry participants.

#### Negative effects of the regulatory framework on competition

The negative effects of the Construction Industry Act on the state of competition are summarized below:

- The categorisation of firms compels firms to compete only for a specified category. As a results the highest categories are oligopolistic in nature with too much transparency and the possibility of either explicit or tacit collusion; and
- The requirement for foreign firms to form joint ventures with local firms if they intend undertake construction in certain projects in the country is a cause for concern. As stated above before a foreign company is awarded a tender the CIC has to ensure that there is no domestic firm/company that is capable to do that work first. Whilst this is done to promote the Swazi firms, this has a negative impact to competition. The requirement that foreign firms should form joint ventures with Swazi firm may result to permanent cartels.

It is the view of the Commission that the effect on competition of the regulatory framework in Swaziland is yet to be realized since these legislations and the relevant enforcing authorities are fairly new.

### Associations in the construction industry

The players in the construction industry are part of the different associations and as such they adhere to standards of their respective associations. These associations include:

- **The Swaziland Association of Indigenous Construction Consultants (SAICC):** this is an association for indigenous Swazi consultants who include engineers,

surveyor, electrical engineers and others. The association has been functional since the formulation of the Construction Industry Policy in 2001. The main role of the association is to campaign for its members to be considered for projects such as the government's millennium development projects. Also the association has a representative in the Construction Industry Council and is obligated to submit its membership information to the CIC.

- **The Swaziland Association of Architects, Engineers and Surveyors (SAAES):** this is an association of architects, engineers and surveyors. The association has existed for more than 25 years and has been strongly advocating for the formulation of the Construction Industry Council in order to have a regulator who will have the "teeth" to deal with consultants who do not follow the appropriate standards. The main role of the association is to advocate for the interests of its members and supply members with information on projects. This association is also obligated to submit its membership information to the CIC and it represented in the CIC.
- **The Swaziland Contractors Association (SCA):** this is a supporting body for all contractors in Swaziland. It is responsible for capacity building and sharing information to members. This association was established in 1991 with the objective of empowering Swazi Contractors in the industry. At its inception, there were 30 members of the association. In 2007 an interim committee was elected which work tirelessly with the consultants to have the Construction Industry Council (CIC) established in Swaziland. In

2014, when the CIC was gazetted, the SCA committee co-opted new members, who altogether formed the current executive committee. Three committee members were to represent SCA on the CIC board to ensure the interests of the members were represented.

### Efforts of Reducing Prices in Swaziland

There are some provisions in the Construction Industry Council Act and Procurement Act that address issues of anticompetitive and corruption such as inflating prices.

Prices in construction industry are generally exorbitantly high. The Procurement Act requires that a comparison of three bidders be made before a tender is awarded. This has served as a main tool to control prices from escalating in this industry.

Sub-contracting is also used in the construction industry to reduce prices. Gonzalez, Arrunanda and Fernadez (2000) in the CIBD (2013; 3) suggest that sub-contracting reduces direct costs and overheads and allows main contractors to use more competitive local firms, with their lower overhead costs and better knowledge of the local market conditions, practices and procedures.

### Effects of the composition of the CIC Board

There are concerns regarding the composition of the board in the Construction Industry Council. The board of the Construction Industry Council comprise of members of the different associations in the construction industry who are potential to influence prices. These associations have different goals and objectives such as to promote local firms without taking into consideration the importance of foreign

firms to ensure competition in the industry. The effect of the presence of the association members in the Construction Industry Council has not yet been investigated in Swaziland but it remains a cause for concern.

### Conflict of interest

A conflict of interest can arise either from regulation or from procurement. Both the Construction Industry Act (Section 14) and the SPPRA Act (Section 17 and 60(1) & (2)) recognise the possibility of employees and board members having conflict of interest. The SPPRA Act in Section 60(2) further provides that public officers and politicians shall not participate as tenderers in public procurement. Section 27(1) of the Prevention of Corruption Act of 2006 on conflicts of interest provides that:

*“A member or an employee of a public body commits an offence of corruption where that member or employee or an immediate member of the family of that member or employee has a direct or indirect interest in any company or undertaking with which that public body proposes to deal, or that member or employee has personal interest in any decision which that body is to make, and that member or employee, knowingly fails to disclose the nature of interest, or votes or participates in the proceedings of that public body relating to that dealing or decision.”*

The fact that some directors of construction firms are board members of the CIC, that create a room for manipulation of decision in favour of their personal gains. The flipside of the composition is that, board members from different associations serve as resource persons in the board when there are critical issues to be resolved.

Concerning procurement the study established that despite having clear provisions which even prohibits public officers and politicians from participating in tenders, there have been cases whereby politicians or other individuals who have direct interest in certain transactions have participated<sup>20</sup>.

The CIC Act provides for severe consequences in cases where firms are found to have engaged in collusive conduct or corrupt practices.

## STATE SUPPORT AND THE IMPACT OF THE INTERVENTION

### State support

Despite that the construction industry is one of the key drivers of the economy state support remained minimal especially for big projects. In other developing countries players in this sector receive state support in the form of tax breaks, subsidies or other pecuniary incentives.

In Swaziland there is minimal or no support afforded to large companies. With regards to SMMEs, most players are receiving support from the Swaziland Development Company (SEDCO). SEDCO is a public enterprise under the Ministry of Commerce, Industry and Trade established in 1970 to awaken, promote and support entrepreneurial talent.

It's vision and prime focus is to create jobs and sustainable employment within the Small, Micro and Medium Sized Enterprises (SMME's) and thus make meaningful contribution in the larger socio-economic development of the country. Among other activities SEDCO is providing loan guarantees known as the Small Scale Enterprise Loan Guarantee Scheme (SSELGS) administered by the Central Bank of Swaziland (CBS). The SSELGS offers loan

guarantees of up-to 95% for start-ups and 85% for existing fully operational businesses with an annual turnover of at least E8 Million. The maximum credit limit is E500 000.00 and funds should be for working capital<sup>21</sup>.

### The impact of government intervention

Conclusions of past research and reviews on the impact of government intervention are mixed. Positive impact in this industry should be measured by its impact to economic growth. Since no study has been undertaken to establish its impact this remains a grey area to explore in Swaziland. Technical assistance to SMMEs include inter alia-

- business training: bookkeeping, cash management, costing, marketing and customer care;
- business planning;
- marketing;
- legal counselling– providing legal advice;
- assistance and guidance with company registration; and
- business mentoring.

As a result of the state support the number of SMME construction firms have grown compared to the 1990s; and new domestic firms have emerged in higher categories.

Despite the government effort to develop SMMEs, there are few firms that have graduated from the lower levels to the high levels and this remains a cause for concern.

### Constraints in the construction industry

The following are the most prominent challenges faced by players in the construction industry.

- Well established contractors are able to get preferential treatment from suppliers of crushed stone and timber in the country compared to small contractors.

- Inadequacy of technical and managerial skills required in project implementation. A study by Thwala and Mvubu (2007) assert that due to lack of management skills and capacity, SMMEs fail to adhere to management principles and construction practices<sup>22</sup>.
- Lack of human and capital resources for large construction work. Large projects are packaged in such a way that some contractors are excluded, especially those who require funds from the banks before they kick-start a project.
- Insufficient information for tendering. As a result of insufficient information constructors turn to under estimate when pricing a project. This sometimes leads to poor workmanship.
- There is evidence that governments delay in paying contractors has led to the failure and exit of some SMMEs firms. SMMEs are significantly affected because they highly depend on borrowed funds, which attracts interests and penalties if payments are honoured on time. This also undermines the credibility of the contractors to the bank.
- There is lack of commitment from owners of SMME construction firms. We established that some of the firms are owned by Directors who have other full time jobs which compromise the success of the projects once they win a tender.
- Inability to provide securities, raise insurance and obtain professional indemnity.

## TRADE RESTRICTIONS

Trade restrictions in the construction industry can be looked at in terms of:

- (i) Restrictions in the trade of constructions services offered by construction firms and/or professionals; and

- (ii) Restrictions in the trade of inputs used in construction works.

### Trade restrictions in terms of construction services

Trade restrictions in terms of construction services are mostly prescribed in the construction industry Act and Regulations. These restrictions include-

- (i) the requirement that foreign firms intending to provide construction services in the country have to form a joint venture with a Swazi firm;
- (ii) High registration fees for foreign firms and joint ventures;
- (iii) Need to proof that no construction firm in Swaziland can do specific construction works in a case where the project owner wishes to award a tender to a foreign firm.

### Imports trade restrictions

Suppliers of construction materials are by law obliged to register with the Construction Industry Council. This on its own can serve as a restriction for unregistered firms that may want to import construction materials for the purpose of on-selling them to contractors.

An importer is required to have a licence to import, a trading licence and must be registered with the Swaziland Revenue Authority.

The importation of construction materials from countries within the Southern African Customs Union (SACU) attracts a Value Added Tax (VAT) amounting to 14% of the value of the products being imported. Imports of construction materials from outside the SACU Region attracts a relatively high tax. About 85%<sup>23</sup> of Swaziland imports originate from South Africa.

### Export trade restriction

Similar to the importation of construction materials, exporters must have a licence to export construction materials. An exporting firm also must be registered with the Swaziland Revenue Authority.

Table 15 and Table 16 presents some of the construction materials that are imported and exported into the country respectively.

In a nutshell there are no export restriction in Swaziland.

## CONCLUSION AND RECOMMENDATIONS

### General state of competition

The study found that the construction industry has limited competition at some levels. There are few firms who are capacity to undertake big construction projects. Inyatsi, Du-Van, and Kukhanya construction companies are the leading firms in the construction industry.

The grading system used by the CIC in Swaziland can be construed as a barrier to entry and expansion since it restricts firms registered at a lower category from bidding for projects at higher categories and as such they are always used as subcontractors of the major firms who normally win tenders. Despite that there is no evidence of cartels found in our analysis there are concerns regarding persistent joint ventures and sub-contracts of some players in the industry.

### Price Determination

We conclude that prices in the construction industry are largely determined by the following factors: the value of the project; costs of inputs: estimated costs of subcontracting. Other price determinants

include the cost of importing machinery and expertise.

### Procurement policies

The limitations of the procurement system presented under sub-section 4.16 result to over and under estimation of prices. The approach used to invite bidders does not provide details on quantities.

### Regulation of the construction industry

The study established that there are concerns regarding the composition of the board in the Construction Industry Council. The board of the Construction Industry Council comprise of members of the different associations in the construction industry who are also owning construction firms. The fact that some directors of construction firms are board members of the CIC, that create a room for manipulation of decision in favour of their personal gains. On the flipside, these board members serve as resource persons in the board when there are critical issues to be resolved.

### State Support and impact

We conclude that there is minimal or no support afforded to large companies. SMMEs receive state support through the Swaziland Development Company (SEDCO). Comparing the benefits and constrains faced by SMMEs the challenges outweigh the support afforded by government to SMMEs.

### Trade Restrictions (imports and exports)

Other than statutory obligations (tax), Swaziland does not have imports and exports restrictions.

### Recommendation

Government should ensure that payments are honoured in time to minimize challenges that are faced by firms due to delays.

There is a need for the government to intervene more in the sector and ensure that small firms graduate to be large firms in Swaziland.

Swaziland can realize more benefit by creating countrywide, public, online database providing information about government procurement, including notice of planned procurement, procurement method, value of procurement, contracts awarded, names of contractors (and subcontractors for major contracts), number of procurement challenges, appeals and decisions on procurement challenges and debarred contractors; and

There is a need for the appointment of members from the civil society to monitor government procurement.

## APPENDIX 1: IMPORTS AND EXPORTS OF CONSTRUCTION MATERIAL IN SWAZILAND

Table 15: Imports – construction materials

Year	2011	2012	2013	2014	2015
HS \ Period	E'000	E'000	E'000	E'000	E'000
32081000:Paints... based on polyesters, in a non-aqueous medium	8 792 502.6	6 024 267	4 152 921.8	2 033 067.1	7 815 958.1
32082000:Paints... based on acrylic or vinyl polymers, in a non-aqueous medium	4 679 106.5	6 412 263.3	3 975 879.8	3 134 852.6	3 628 606.3
32089090:other paints & varnishes based on synthetic/chemically modified natural polymers n.e.s.	9 731 099	8 476 331.6	5 568 426.4	9 548 157.6	9 550 937
39173300:Tubes, pipes and hoses, not reinforced, with fittings attached, nes	1 420 738	2 201 927.5	948 018.03	1 036 325.4	735 507.81
39252000:Doors, windows and their frames and thresholds for doors, of plastics	315 777.88	4 459 578.1	310 415.33	353 851.37	64 652.54
39252010:Windows and their frames	0	0	0	0	79 857.89
39259000:Builders' ware of plastics, nes	3 739 586.3	4 553 069.3	6 708 197.7	6 308 723.5	8 588 902.5
40094200:tubes,pipes,hoses reinforced or combined with other materials, with fittings	765 764.12	358 042.99	268 065.15	933 720.07	451 699.11
44031000:Wood in the rough..., treated with paint, stains, creosote, etc.	4 800 413.5	5 170 518.8	2 201 077	4 934 645.1	4 738 560.4
44072900:Other tropical wood specified in Subheading Note 1 to Ch44 sawn lengthwise...>6mm nes	1 042 108	449 160.62	3 702 396.3	2 837 051.5	1 204 453
44079100:Oak wood (Quercus spp.), sawn or chipped lengthwise, sliced or peeled, >6mm thick	860 351.24	214 507	3 096.36	25 152.04	0
44092915:other wood continuously shaped...not assembled	1 632 208	3 669 806.5	2 847 897.8	3 484 727.4	2 570 001.3
44121000:Of bamboo	109 855.47	6 515.88	114 205.41	147 820.99	153 049.47
44182000:Doors and their frames and thresholds, of wood	19 358 169	19 470 456	21 989 983	25 347 179	25 752 349
44184000:Shuttering for concrete constructional work, of wood	1 977 980.8	902 528.41	1 243 835.7	1 434 059.1	996 639.93
44187910:other assembled flooring panels; other parquet panels	66 356.97	98 904.15	5 057.83	41 665.55	0
44187990:other assembled flooring panels; other n.e.s	193 576.58	227 547.83	85 286.49	274 043.04	608 092.69
44189000:Builders' joinery and carpentry, of wood, nes	2 161 171	1 438 991.4	2 592 591.5	3 846 171.9	8 390 099.4
44190000:Tableware and kitchenware, of wood	723 397	300 485.53	712 657.57	390 510.47	854 441.48
45041000:Blocks..., tiles of any shape, solid cylinders, of agglomerated cork	286 458.46	1 153 698.2	368 273.08	669 700.5	152 962.94
64061025:Other parts of iron or steel	47 591.14	55 990.6	104 287.56	22 736.42	49 321.16

Year	2011	2012	2013	2014	2015
HS \ Period	E'000	E'000	E'000	E'000	E'000
69010000:Bricks, blocks, tiles... of siliceous fossil meals or earths	2 232 540.6	1 666 814.8	2 168 112.8	3 503 930.2	3 291 173.9
69060000: Ceramic pipes, conduits, guttering and pipe fittings	787 125.7	377 138.68	163 536.35	391 617.1	114 429.47
69089000: Glazed ceramic flags and paving, hearth or wall tiles, etc., nes	6 384 974.7	2 227 327.4	3 847 117.2	3 828 995.2	3 094 310.7
69119000: Household and toilet articles, nes, of porcelain or china	1 226 425.3	461 042.2	1 967 732.8	602 660.51	270 417.38
72072000: Semi-products of iron or non-alloy steel, >=0.25% carbon	105 624.74	5 047.4	240 631	5 543	22 996.45
72089000: Flat/hot-rolled iron/steel, width >=600mm nes (incl. further worked than hot-rolled)	3 300 287.2	2 748 259.5	2 087 373.1	3 065 195.4	4 619 608.8
72139900: Hot-rolled iron or non-alloy steel bars & rods, in irregularly wound coils, nes	18 780 694	11 302 838	13 243 039	9 299 027	8 889 921.3
72169900: Angles, shapes and sections of iron or non-alloy steel, nes	1 966 581.2	2 127 766.5	2 348 020.7	5 405 624.7	3 974 247.2
72279000: Bars and rods, hot-rolled, in coils, of alloy steel, nes	976 657.63	827 472.62	1 306 997.6	710 567.56	631 207.87
72286000: Bars and rods of alloy steel, nes	3 888 501.5	1 171 475	1 596 263.8	2 584 379.1	1 208 786.8
73121025: ropes & cables of wire not plaited, coated or clad	246 821.95	466 270.7	69 617.36	261 931.31	904 857.58
73121040: Ropes and cables, of wire which is plated, coated or clad with zinc	706 363.86	572 121.33	57 793.9	54 127.87	422 951.43

Source: Swaziland Revenue Authority

**Table 16: Exports - construction materials**

Year	2011	2012	2013	2014	2015
HS \ Period	E'000	E'000	E'000	E'000	E'000
44031000:Wood in the rough..., treated with paint, stains, creosote, etc.	1 467 295.9	4 234 522.9	11 121 319	27199058	48 523 201
44032000: Untreated coniferous wood in the rough...	6 677 365.1	2 780 261.2	470 531	580 109.82	1 095 047.5
44071000:Coniferous wood sawn or chipped lengthwise, sliced or peeled, >6mm thick	7 453 659.1	7 444 459.5	7 316 759.4	61 909 446	204 032 745
44072900:Other tropical wood specified in Subheading Note 1 to Ch44 sawn lengthwise...>6mm nes	140 828 442	189 737 421	229 831 899	266 449 753	321 442 758
44091000:Coniferous wood, continuously shaped along any of its edges or faces	56 929 608	98 223 370	135 510 275	119 378 325	17 734 416
44092915:other wood continuously shaped...not assembled	1 323 251.2	6 130	90 291	59 331	48 526
44101100:Waferboard, including oriented strand board of wood	253 486.14	12 711 842	66 999 487	48 145 147	61 649 541
68101100:Building blocks and bricks, of cement or artificial stone or concrete	741 941.32	8 569 060	9 681 677.3	326 580.77	1 393 810.3
68109900:Articles of cement, concrete or artificial stone, nes	8 660 573.3	16 357 540	34 893 390	27 143 126	19 454 612
68111000:Corrugated sheets of asbestos-cement, of cellulose fibre-cement, etc.	714 056.58	16 522.5	20 707.2	0	0
69010000:Bricks, blocks, tiles... of siliceous fossil meals or earths	12 631 517	7 123 619	6 570 580.4	16 764 716	15 711 548
69029000:Refractory bricks, blocks, tiles, etc., nes	85 455.4	93 147.5	294 355.2	801 392.64	972 022.32
69119000:Household and toilet articles, nes, of porcelain or china	252 126.16	141807.19	85 842.11	30 356.8	3 505
72042100:Waste and scrap of stainless steel	3 206 202.8	2169832.2	1 995 979.4	2 271 633.9	1 191 904.5
72042900:Waste and scrap of alloy steel (excl. stainless)	16 114 689	30960248	25 533 735	27 513 983	16 408 590
76020000:Aluminium waste and scrap	4 889 480.5	2 446 238.4	2 355 881.3	1 788 277.6	1 559 417.7

Source: Swaziland Revenue Authority

## Endnotes

- 1 OECD, 2008. Policy Roundtables: Construction Industry
- 2 Interview with CIC on the 26th July 2016
- 3 On the x-axis: B is for Building; C is for Civil; E is for Electrical; and F is for Foreign.
- 4 Internal study
- 5 OASIS Swaziland is one supplier of PPC cement
- 6 Supplied or represented by ALIKI Enterprises based in Matsapha Swaziland
- 7 This is according to Cashbuild and Build it.
- 8 <http://www.swaziwire.co.sz/steel.html> Accessed 20th March 2017
- 9 Face to Face conversation with Mr Biyela the Chief Mining Engineer. 21 April 2016.
- 10 South Africa, Mozambique, Namibia, Angola, Zambia
- 11 Excluding firms under BCEF and BCE1 categories.
- 12 The firms which appear only in the list of firms in 2015/16 and not in the list of firms in 2012/13 are listed as new entrants. However, we note that the firms may have been in existence even though they were not registered in 2012/13.
- 13 <http://www.cic.co.sz/registration/categories/index.php> Accessed 20th March 2017 at 0830 hours
- 14 B- Building contractors; C- Civil contractors; E- Electrical contractors; M – Mechanical contractors
- 15 [http://www.duvan.co.sz/associated\\_co.html](http://www.duvan.co.sz/associated_co.html) Accessed at 0856 hours on 22nd March 2016
- 16 <http://afrotim.co.sz/Partners.html> Accessed at 0919 hours on 22nd March 2017
- 17 Mashwama and Musonda (2014) An investigation on the impact of sub-contracting system on the eventual quality of construction facilities in Swaziland an explanatory study.
- 18
- 19 Accessed: <http://www.cic.co.sz/aboutus/objectives/index.php> [ 10 October 2016]
- 20 Examples of the cases include:
- 21 Nomthandazo N (2014), 'Over E70m disbursed to SMEs through CBS Scheme', Swazi Observe, 04 August 2014, Available: <http://www.observer.org.sz/business/64648-over-e70m-disbursed-to-smes-through-cbs-scheme.html> [21 October 2016]
- 22 Thwala W.D. & Mvubu M. (2007). 'An evaluation of small contractor development program in Swaziland'. CIB World Building Congress
- 23 <http://www.worldbank.org/en/country/swaziland/overview>



# CHAPTER 7

ASSESSMENT OF THE STATE OF  
COMPETITION IN THE CONSTRUCTION  
INDUSTRY IN MALAWI



## INTRODUCTION

### Background

The Competition and Fair Trading Commission (CFTC) is a statutory body established under the Competition and Fair Trading Act (CFTA), Cap 48:09 of the Laws of Malawi. The mandate of the organization is to regulate, monitor, control and prevent trade practices that are likely to adversely affect competition and fair trading in Malawi. The enactment of the CFTA and the subsequent establishment of the CFTC was a culmination of regulatory process envisaged in the Competition Policy which the Malawi Government adopted as an accompanying policy to the market-based economic reforms embraced in the 1990s. Therefore, the objectives of CFTA are:

- (a) Encourage competition in the economy by prohibiting anti-competitive trade practices;
- (b) Regulate and monitor monopolies and concentrations of economic power;
- (c) Strengthen the efficiency of production and distribution of goods and services;
- (d) Secure the best possible conditions for the freedom of trade;
- (e) Facilitate expansion of the base of entrepreneurship and to provide to matters incidental thereto or connected therewith; and
- (f) Protect the consumers from unfair trade practices.

In line with these objectives, the CFTC undertook a study to assess the state of competition in the construction sector. The study was motivated by the importance that the construction industry plays to Malawi's social and economic development. Because of its high importance, the industry consumes a huge outlay of public resources. Therefore, every effort has to be made to ensure that public resources are not used to pay for market inefficiencies. This study is part of the regional competition

research programme that is facilitated by the Africa Competition Forum (ACF). The objective of this programme is to identify national and cross border competition bottlenecks that prevent competitive outcomes in African economies. These bottlenecks may result from, regulatory frameworks, structure of the market, but also the conduct of players on the market.

### Objectives of the Study

The overall objective of this study was to identify possible competition bottlenecks that constraint outcomes in the construction sector, and identifying strategies that can enhance efficiency in the sector. To this effect, the specific objectives of the study are as follows:

- (a) Assess the market structure of the of the construction industry;
- (b) Identify how the conduct of key players in the construction industry affect competition;
- (c) Identify barriers to entry existing in the construction industry in Malawi;
- (d) Assess the effects of existing Regulations on competition in the construction industry; and
- (e) Make recommendations for enhancing competition in the construction industry.

### Methodology

The study used the structure, conduct and performance (SCP) analytical framework to assessment the state of competition. The framework involves assessing the extent to which market structure and conduct of market players (including those that perform regulatory roles) influence market outcomes. The study used concentration ratio as a measure for market concentration. The study was predominantly based on qualitative analysis of the data.

Information used in this study was obtained from a number of sources, including requests for written submissions from relevant stakeholders as well as interviews with selected stakeholders in the industry. The stakeholders that were requested to provide information include the construction industry regulator (the NCIC), Government departments, construction firms, construction contracting entities (both public and private).

However, not all stakeholders responded to the requests for information that the Commission made. Among others, the Commission received responses from: the NCIC, Department of Buildings, the Roads Authority, Northern Region Water Board, Southern Region Water Board, Mzuzu City Council, and Office of the Director of Public Procurement. In addition to the requests for information, the Commission also used secondary data from various sources including relevant studies and the internet search.

### Limitations of the Study

The construction industry consists of diverse related activities which include construction of physical infrastructure, electrical services, architecture, and construction related consultancy services. Due to time and resource limitations this study focused on construction contractors, particular building contractors (buildings) and civil contractors (roads construction). Therefore, the analysis in this study has been limited to the two sectors, and not the whole construction industry. The other limitation is in terms of inadequacy in data used in the analysis. Due to finance resource constraints, the Commission relied on sending information request to stakeholders in the industry. However, few responses were received. The responses that the Commission received were complemented by information sourced from secondary sources such as

previous reports and data bases of some stakeholders.

### The Construction Industry and its Importance to the Economy

The National Construction Policy<sup>1</sup> defines the construction industry as a sector of the economy that transforms various resources into physical, economic and social infrastructure. The industry includes processes and stakeholders involved in the planning, designing, procurement, construction/ production, alteration, repairing, maintenance and demolition of various physical infrastructures. The infrastructures may include:

- i New or existing commercial, industrial or domestic buildings or structures;
- ii Any preliminary site preparation work (including pile driving) for the construction or erection of such building or structure;
- iii Transportation systems and facilities such as airports, harbours, highways, subways, bridges, railroads, transit systems, pipelines and transmission and power lines;
- iv Energy generation and transmission structures;
- v Structures for containing, controlling and distributing fluids, such as water treatment and distribution, sewage collection and treatment distribution systems, sedimentation lagoons, dams, and irrigation and canal systems;
- vi Underground structures, such as tunnels and mines; and
- vii Electrical or metal work associated with other engineering projects.

The construction industry in Malawi is segmented into three broad categories<sup>2</sup>, and these are contractors, consultants and material manufacturers and suppliers:

- (i) *Construction Contractors* - firms that undertake the actual construction of

various infrastructures. Construction contractors are further divided into building contractors, civil contractors, electrical contractors and miscellaneous contractors;

- (ii) *Construction Consultants* - firms provide the various construction professional services to the clients in the construction industry. These are further divided into: architectural consultants, engineering consultants, quantity surveying consultants etc; and
- (iii) *Construction Material Manufacturers and Suppliers* - these include the manufacturers and suppliers of various types of construction equipment, raw materials and intermediate products that are used in the construction industry.

The construction industry in Malawi is also classified based on ownership of the firms, but also the origins of the capital. Under this classification, there are three categories of construction firms<sup>3</sup>:

- (i) *Foreign firms* - firms operating in the country but belonging to a person who is not a Malawian national and having 51% or more of its capital originating from outside Malawi;
- (ii) *Local firms* - firms operating in the country having 51% or more of its capital originating from within Malawi but belonging to a person who is not a Malawian national; and
- (iii) *Malawian firms* - firms operating in the country and having 51% or more of its capital belonging to a Malawian national. It should be noted, however, that in broad categorisation, and the categorization to be used in this study, "local firms" include those categorized as "Local" as well as those categorized as "Malawian" firms.

The construction industry is key to the socio-economic development of the country, particularly through infrastructure

development. The construction industry is important for, among others, the following factors. The construction industry is one of the sectors that make enormous contribution to national output. Contribution of the construction has been ranging from 2% to 4% of GDP in the past 15 years. The construction industry is very critical to infrastructure development in the various sectors of the economy. Some of the sectors that greatly benefit from the construction industry are: transport (roads, bridges, railways, ports, airports etc.); communication (towers, premises); Trade (shopping malls, warehouses etc); agriculture (dams, irrigation infrastructure, storage facilities etc); energy (energy generation and distribution infrastructure) and many others.

Employment is another contribution by the construction industry. The sector employs a lot of people, both as technical staff as well as support staff. Construction industry also contributes to investment in the economy. The industry is one of the sectors that attract a lot of investments, both domestic investments as well as foreign direct investments (FDI). Statistics indicate that over time, there has been a steady increase in the number of construction firms in the country, both local and foreign. The construction industry is also critical in that it brings infrastructure necessary for the Government to provide the essential services to the public. Among others, these include: education, health, social amenities, relief and social welfare services etc.

Studies that have been conducted to assess the performance of the construction industry have established that the cost for construction services in Malawi is very high. Some studies, for example, Chilipunde and Khombeza (2012)<sup>4</sup>, have put costs for construction services in Malawi as the highest in the SADC region. The study identified that, the cost of cement, shoddy

workmanship on some projects by some contractors, and low uptake of technology as some of the reasons for the increased cost of construction services in Malawi.

Studies have also shown that construction projects in Malawi are largely associated with poor standards. For example, a study by Kulemeka et al (2015) highlighted that delivery of approximately 27% of projects executed particularly by small and medium contractors between 2007 and 2011 was affected by poor quality of work. On the other hand, it has also been noted that there are enormous delays in the completion of construction project, normally taking even two times the initial project period. For example, a study of construction projects by Kamanga et al (2011) indicated that out of all the projects reviewed, only a third (33%) were completed within the original contract duration. There are many reasons for the delay in the completion of the projects, some of which border on competition framework of the market. This study, therefore, intended to assess these phenomena and contextualize them in the framework of looking at the structure of the market, plus the regulatory framework, procurement policies and procedures etc; and how these affect conduct of players on the market, but also competitive outcomes/performance of the market.

## **REGULATORY FRAMEWORK OF THE CONSTRUCTION INDUSTRY**

The construction industry in Malawi is regulated by the National Construction Industry Council (NCIC). The NCIC was established under Section 3 of the National Construction Industry Act, Cap 53:05 of the Laws of Malawi, with mandate to regulate, promote and develop the construction industry in Malawi. The NCIC is an autonomous regulator, however, it reports to the Secretary for Transport and Public Works, in the Ministry of Transport

and Public Works. The Ministry is merely the policy holder, but the actual enforcement of the NCI Act is done by the NCIC. On the regulatory front, the NCIC is responsible for registration of construction firms, registration and monitoring of construction projects, monitoring the conduct of construction firms with respect to the standard operating procedures etc.

### **National Construction Industry Act (NCI Act)**

The National Construction Industry Act is a piece of legislation that was passed in 1996, and its objective is to promote and develop the construction industry in Malawi. The Act has various provisions that relate to the regulation of the construction industry. The act makes it mandatory for all contractors, consultants and construction material manufactures/suppliers to register with the NCIC before undertaking any construction works in Malawi<sup>5</sup>. Under the NCI Act, anyone who undertakes to carry out any construction work without registering as a registered firm or company with the NCIC commits an offence. Once registered, construction firms are required to renew their certificate of registration with the NCIC annually, otherwise they risk being de-registered.

### **National Construction Industry Regulations**

- (i) *Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers*<sup>6</sup>

Construction firms are registered based on ownership of the firm as well as origin of capital. Under this criterion, construction firms may register as: Malawian, Local, or Foreign<sup>7</sup>. Registration and membership renewal fees for each category tend to be different.

Construction firms are grouped according to their areas of specialization when it comes to undertaking construction works. The broader categorization of the construction firms groups the firms into three: construction contractors, construction consultants, and construction material manufacturers and suppliers<sup>8</sup>. Registered construction contractors are strictly prohibited from registering as consultants (and vice versa), to prevent conflict of interest in evaluation of projects. However, contractors may register in more than one branch of construction as long as long as they demonstrate capacity to undertake such works. For example, a construction contractor can register as both building and civil contractor, but cannot register as consultant. Similarly consulting firms may also register in one or more branches of construction but cannot register as contractor.

Construction contractors (building, civil or electrical) are further stratified into Classes based on their demonstrated capacities to undertake particular sizes of projects. In all, there are 9 classes for each sub-category, ranked from Class 1 to Class 9. The table below presents the classification of contractors based on demonstrated capacity.

**Table 1: Classification of Contractors based on Capacity**

Class	Category (based on size of project)		
	Building contractors	Civil contractors	Electrical contractors
1	5m	5m	2.5m
2	10m	15m	7.5m
3	30m	50m	15m
4	75m		30m
5	100m	100m	100m
6	200m	200m	200m
7	500m	500m	500m
8	1.0bn	1.0bn	
9	Unlimited	Unlimited	Unlimited

As can be observed from the table above, smaller contractors are in the lower classes (classes 1,2,3,4 etc) while the large contractors are in the upper classes (Classes 6,7,8 and 9). Each class has an upper bound on the size of projects it is eligible to undertake, where smaller contractors work on small scale projects while the large contractors operate on large scale development projects. Class 9 contractors are in the unlimited category that is eligible to undertake projects of any size. The Class 9 contractors are mostly involved in development projects while the other classes are illegible for maintenance projects. The classification criteria is largely premised on three factors:

- Technical expertise (qualification and experience of essential staff);
- Equipment/machinery the contractor possesses; and
- Financial capacity.

Contractors may upgrade from one class to the other after fulfilling upgrading requirements, tied to the three aspects above, which are inspected and verified by the NCIC.

(i) *National Construction Industry (Sub-Contracting and Joint Ventures by Foreign and Malawian Construction Firms) Order, 2014*

The objective of these Regulations is to build local capacity in the construction industry, but also increase participation of local construction firms in construction projects. The Regulations require that a foreign construction firm which intends to provide construction services in Malawi to provide those services in association or partnership with a Member Practice<sup>9</sup>. The Regulations require that the local partner is responsible for a minimum of 30% of the works by volume and value of the whole construction project<sup>10</sup>.

(ii) *National Construction Industry (Practice of Construction Consultancy Services by Foreign Consulting Firms) Regulations of 2010*

These Regulations were also developed to build local capacity, but also enhance participation of local construction consultants in construction projects. These Regulations require that a foreign consulting firm which intends to provide construction consulting services in Malawi to provide these services in partnership with a local consulting firm. The Regulations also require that the Malawian consulting firm fully participates in the project, by ensuring that it is responsible for a minimum of fifty one percent (51%) of the works<sup>11</sup>.

### Statutory Boards and Industry Associations

**Statutory Boards:** the construction industry is one of the highly regulated sectors in Malawi. Besides the NCIC, there are various Statutory Boards that are mandated to regulate and monitor the state of play in the industry. These Boards include: *Board of Engineers, Board of Registration of Land Economy Surveyors, Valuers, Estate Agents and Auctioneers, and Board of Architects and Quantity Surveyors*. These Boards are mandated to regulate the industry, particularly playing the role of professional Boards, with mandate to control entry of firms in the various subsectors under their jurisdiction. All applicants interested to venture into the construction industry are also vetted by these Boards, before the NCIC can register them<sup>12</sup>.

**Industry Trade Associations:** there are also various trade associations operating in the construction industry which also play a critical role in the implementation of the NCI Act. These trade associations include: *Master Builders Association, Malawi Building Contractors and Allied Trades Association, Electrical Contractors Association, and Institute of Engineers*. The trade associations have representation on

the Board of the NCIC, and play a significant role in the decision making process<sup>13</sup>.

### Impact of the Regulatory Framework on Competition and Market Outcomes

#### Classification/Grading of Contractors:

Classification of contractors is done as an assurance that contractors that are registered in particular categories indeed qualify to undertake particular types and sizes of projects. Contractors are firstly classified in terms of the kind of works they are specialized in, namely, whether they are building, civil, electrical contractors. Then contractors are also categorized based on the specific sizes of project which they can undertake in their respective area of specialisation. This categorisation sets the upper limit in terms of the size of projects that a contractor can bid for. Therefore, in terms of competition, there is potential for high competition in the lower categories than the higher categories.

As long as a contractor qualifies for particular types and sizes of projects, they are eligible to bid and be considered for such projects. However, some customers have expressed concerns regarding the quality of works and adherence to projects timeframes by some contractors, particularly by those registered in the lower categories. A study by Kamanga and Steyn, (2013) identified lack of technical expertise and financial constraints as some of the major reasons for these undesirable incidences.

**Registration and membership fees:** The NCI Act obligates all construction contractors to register with the NCIC, as well as renew their membership annually. This process involves the contractors paying registration fees and membership fees. Analysis of the fee structure indicates that contractors registered in the higher categories pay higher fees than those registered in the lower categories. Similarly, foreign contractors

pay high fees than local contractors in the same size category. In some categories, a foreign contractor pays up to 20 times as much in fees, for firms of similar category. The differentiation of the statutory fees takes into consideration the revenue that the contractors are expected to generate. Since small contractors can only participate in small projects, their returns are lower. Therefore, the fee structure does not seem to disadvantage any category of contractors.

However, the differentiation of the fees paid by local contractors and foreign firms does not embrace the principle adopted in the differentiation between the different size categories for local contractors. As can be seen from Appendix 1, the fees for foreign contractors are fixed at US\$ 2,500 across the size categories. Although the amount is not huge, it gives foreign contractors an 'incentive' to register in the high size categories. Although contractors registered in higher categories can bid for works in the lower categories, practically big contractors may not be interested to bid for projects of small value. Therefore, the differentiation of the fees between foreign and local, particularly in the lower categories, may be a way of shielding local small contractors from competition from foreign contractors of similar sizes. As it has already been observed<sup>14</sup>, in terms of market share, the market is largely dominated by foreign firms, particularly in large scale development projects. Studies conducted on the construction industry have established that cost for construction services, particularly for large scale projects are very high in the country. This could be a reflection of limited competition in the large scale construction project market segments.

#### Foreign-Domestic Firm Partnership

**Requirement:** It is a requirement under NCIC Regulations that foreign contractors (those not registered in Malawi) are supposed to partner with local firms if they

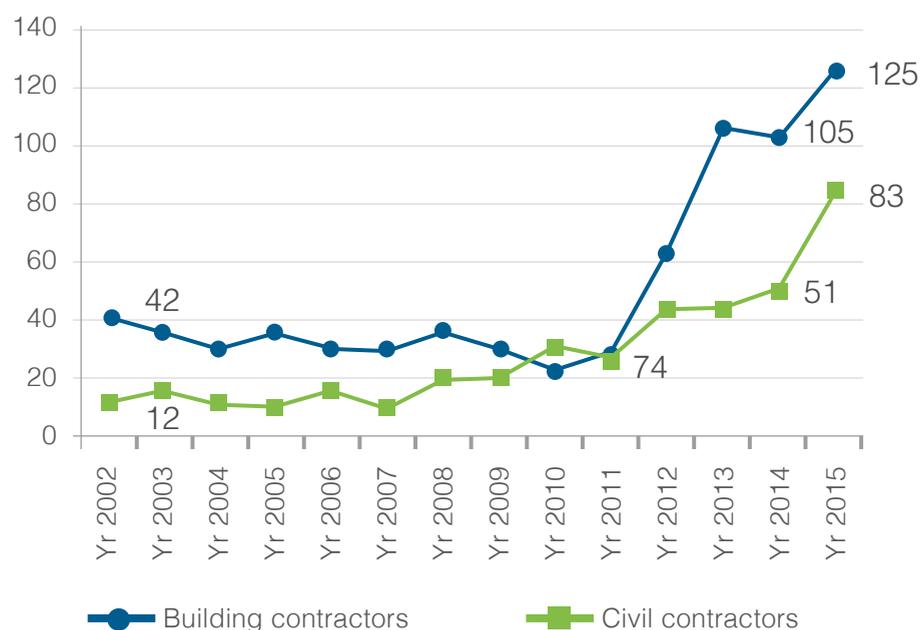
want to bid for projects in Malawi. The idea behind these Regulations was to increase participation of local firms in the construction industry, thereby, building local capacity. However, this requirement provides room for abuse of the vantage position by local contractors by over-charging when being engaged by foreign firms for partnership requirement. In one particular instance in 2014, the Competition and Fair Trading Commission received a complaint from a client who engaged a foreign firm for some construction consulting services. However, the foreign firm was barred from undertaking the assignment unless they partnered with a local firm. The local firm which was identified demanded exorbitant payment which the client had to shoulder. The client complained to the CFTC that the charges by the local firm in this partnership substantially bloated the overall budget for the project resulting in the costs being passed on to the consumer<sup>15</sup>.

It is claimed that these Regulations have boosted local capacity of the construction industry by increasing their participation in projects. Specifically, the Regulations are said to have resulted in:<sup>16</sup>:

- increase in the number of local contractors in the higher categories. Data sourced from the industry indicate that the number of local contractor upgrading into upper categories has been steadily increasing;
- increase in number of local contractor participating in the large scale development projects. Over the years, there has been a substantial increase in the number of local contractors undertaking large scale development projects including construction of major roads and large scale infrastructures.
- to some extent, there is a belief that the partnerships result in knowledge and skills transfer

The figure below illustrates the increase in the number of local contractor in the upper categories (Class 6 - MK200m; Class 7 – MK500m; Class 8 – MK1bn; and Class 9 – Unlimited) in the past 15 years.

**Figure 1: Trends in Number of Local Contractors in the Upper Categories (2002-2015)**



As can be observed from the figure above, the number of local contractors graduating or entering in the upper categories has increased in the period under analysis. In 2002, there were only 12 local civil contractors and 42 local building contractors in the uppermost 4 categories, figures which have increased to 83 local civil contractors and 125 local building contractors. This increase can partly be attributed to the intervention by the Government in ensuring participation of local contractors in large scale development projects<sup>17</sup>.

However, it has been observed that on the ground, the expected outcomes of increase in technical capacity are not fully being realized. This is due to several factors. First, the foreign-local contractor partnership requirement is not binding on the part of

the procuring entities prior to awarding of the contract. There are many construction projects, especially development contracts where the foreign firms are allowed to bid, and then awarded contracts individually. The foreign firm may be requested to find a local partner only after the contract has been awarded to them. Even the restriction on the minimum proportion of project works allocatable to the local partner is not binding on the ground. The major challenge in enforcing these Regulations is that they were passed without binding legislative backing (Act of Parliament)<sup>18</sup>, thereby having some foreign contractors bidding for and awarded contracts without necessarily partnering a local firm. Therefore, some institutions may recruit foreign contractors without necessarily ensuring that they partner with local contractors.

Secondly, most times, the local partners do not substantively participate in the major construction works. Most times, the local partner is recruited by the major contractor (foreign) after the award of the contract. The local partner is normally assigned some minor construction works, including finishing works<sup>19</sup>. As such, local contractors do not substantively benefit in terms of skills and expertise absorption. Thirdly, most of the local contractors are managed and operated by people who lack required technical expertise. Normally, after being awarded contracts, the local contractors hire mostly unqualified staff, lacking construction industry technical knowledge and experience (Kulemeka et al., 2015). Therefore, the recruited staff do not substantively benefit from the experience of working with technologically advanced foreign contractors. This is partly the

reason for the slow development of the local capacity in the construction industry in the country.

In terms of effect on competition, this requirement has potentially moderated competition between local firms and foreign firms. The requirement effectively neutralizes competition and facilitates collusion between local and foreign firms.

**Conflict of Interest on the NCIC Board:**

As can be observed from mandatory representation on the NCIC Board<sup>20</sup>, the majority of members are practitioners who are owners or managers/employees of some construction firms themselves. There is, therefore, a high likelihood that some of the Regulations adopted by NCIC may disproportionately favour the industry players and disadvantage consumers of

the construction services. A case in point is the adoption of the requirement to bar participation of foreign companies unless if the partner with local contractors. The dominant representation of contractors in the NCIC Board also raises the risk that NCIC may unintentionally aid competitors to collude.

**DETERMINANTS OF COMPETITION IN THE CONSTRUCTION INDUSTRY**

**Market structure**

This section presents the structure of the construction industry in Malawi. According to the NCIC data base, there are a total of 2,320 registered construction contractors in the country. These are distributed as follows: 889 building contractors, 1,158 civil

contractors, 152 electrical contractors, and 121 miscellaneous contractors<sup>21</sup>. However, as indicated above, this study will focus on building contractors and civil contractors.

**Building Contractors:** The NCIC classifies building contractors based on their capacity to undertake particular types of construction projects. Under this criterion, the NCIC groups the contractors into different classes. The smallest group of firms undertakes low cost projects with monetary value of MK5m or less. The contractors are classified in a continuum, with the largest contractors eligible to undertake projects with values of MK1.0bn and above. In all, there are 9 classes of building contractors based on their capacities<sup>22</sup>. The table below gives statistics on the number of companies in each category based on the capacity.

**Table 2: Distribution of Building Contractors by Category**

Class	Category (MK)	Number of Building Contractors			
		By Origin		Total (No.)	Total (%)
		Local	Foreign		
1	5m	375	0	375	42%
2	10m	106	0	106	12%
3	30m	126	0	126	14%
4	75m	71	0	71	8%
5	100m	72	0	72	8%
6	200m	53	0	53	6%
7	500m	33	0	33	4%
8	1.0bn	9	0	9	1%
9	Unlimited	30	14	44	5%
Total (No.)		875	14	889	
Total (%)		98%	2%		100%

Source: NCIC: 2016 State of Competition in the Construction Industry Report

The table above illustrates that the majority of the local contractors, are small sized firms. Statistics indicate that, of the 875 local building contractors, 42% are in category 1 (MK5m); and 12% in category 2 (MK10m); and 14% in category 3 (MK30m). This, therefore, implies that 68% of the local firms are only eligible to undertake projects with monetary value of MK30m and below. Of the 875 local firms, only 125 (14%) are qualified to undertake projects with monetary value

of above MK100m. However, most foreign constructors are large firms, eligible to undertake big construction projects. All the 14 foreign building contractors are all in category 9 (Unlimited). Foreign contractors account for only 2% while 98% of contractors are local.

**Civil Contractors:** The civil contractors are also categorized in terms of their capacity to undertake particular sizes of the projects.

The category for the smallest firms include those eligible to undertake projects with monetary value of MK5m or less, while the largest civil contractors can undertake projects with monetary value of MK1.0bn and above. In all, there are 9 categories of civil contractors. However, Class 4 is not defined. The table below presents the distribution of civil contractors based on category.

**Table 3: Distribution of Civil Contractors by Category**

Class	Category (MK)	Number of Building Contractors			
		By Origin		Total (No.)	Total (%)
		Local	Foreign		
1	5m	565	0	565	48.8%
2	15m	312	0	312	26.9%
3	50m	131	0	131	11.3%
4					
5	100m	55	0	55	4.7%
6	200m	27	0	27	2.3%
7	500m	23	0	23	2.0%
8	1.0bn	4	1	5	0.4%
9	Unlimited	29	11	40	3.5%
<b>Total (No.)</b>		<b>1146</b>	<b>12</b>	<b>1158</b>	
<b>Total (%)</b>		<b>99%</b>	<b>1%</b>		<b>100%</b>

Source of Data: NCIC: 2016 State of Competition in the Construction Industry Report

As can also be observed from the table above, the majority of the local contractors are low sized firms. Out of the 1,146 local contractors, 48% are in category 1 (MK5m), and 26% are in category 2 (MK15m). This means that about 75% of the local civil contractors are eligible to undertake projects with monetary value of MK15m and below. Statistics also indicate that only 83 local firms (7%) can undertake projects with monetary value of above MK100m. However, most of the foreign construction firms belong to the large firms' category. Out of the 12 foreign civil contractors, only one is in category 8 (MK1.0bn), while 11

are all in category 9 (Unlimited). Foreign contractors account for only 1% while 99% of contractors are local.

The building and civil contractors appear to be distinct and exclusive categories. However, the regulatory framework in Malawi allows construction companies to register in more than one sub-category. For example, a construction company that initially registered as a civil contractor can also register as a building contractor, and vice versa, as long as it demonstrates capacity to effectively undertake such projects. Therefore, there are horizontal

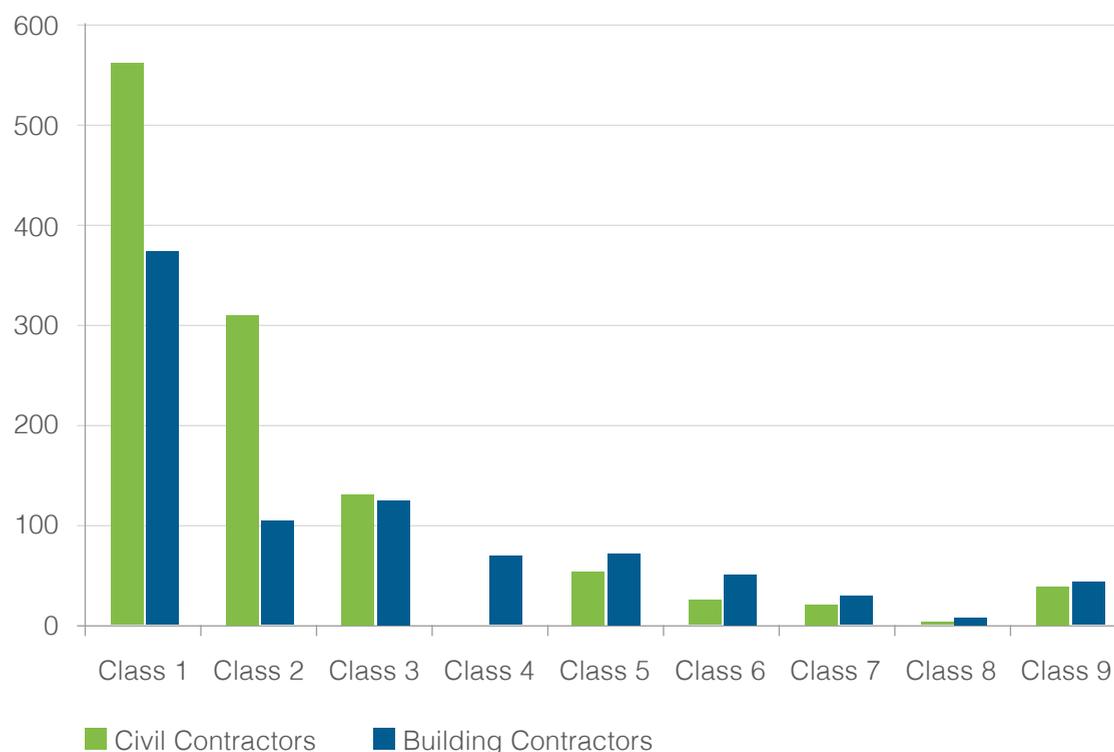
overlaps among some construction contractors. However, the regulatory framework strictly prohibits construction contractors to register as consultants. This is aimed at reducing incidences of conflict of interest in the evaluation of construction projects. It is observed that most of the prominent contractors are registered as building contractors as well as civil contractors. Some of the prominent contractors that trade in both categories include: Mota Engil, Terrastone, Hema Construction, Kharafi Construction, Fargo Limited, Mkaka Construction, PLEM etc.

## Competition Analysis and Concentration Levels

### General Competition Assessment

In terms of the number of players in each category, statistics indicate that market concentration increases as the category (size of the projects) increases. The figure below gives a pictorial presentation of the distribution of contractors in each category.

**Figure 2: Distribution of Building and Civil Contractors by Category/Class**



Source of Data: NCIC: 2016 State of Competition in the Construction Industry Report

As it can be observed from the figure above, the market for small scale contractors has more players as compared to large companies. On the overall, the number of firms decreases as the category “increases”. There are more contractors in categories 1, 2, 3 and 4 (small and middle sized firms) than there are in categories 6, 7, 8, and 9 (large firms). Therefore, based on the number of competitors, there appears to be more competition in the lower categories, while the market for higher categories is more concentrated. However,

in the assessment of competition in the construction industry sector, consideration should be given to these three aspects:

**Geographical coverage:** Most of the small firms tend to have limited capacity to undertake projects outside their localities. This, therefore, constrains the smaller firms to construction projects that are within their district of base, or at the most, region. In this case, the level of competition is based on the number of contractors that are within proximity of the procuring entity base. On

the other hand, large contractors, with their large capacity, can effectively participate in construction projects all across the country. In this regard, much as the lower categories exhibit higher competition levels, this may not be a true reflection on the ground, due to mobility capacity constraints. On the other hand, much as the market for big contractors appears to have relatively fewer players, competition may be high, since these firms compete at national level.

**Cross Category Competition:** It should also be noted that the category based markets are not necessarily exclusive of each other. There is some appreciable level of cross-category competition. The classification used by the NCIC restricts firms to projects with monetary value that does not surpass the upper limit for their category. Therefore, the lower category firms face added competition from firms that belong to the above categories. This is the case, both for small sized firms as well as the large contractors. This, therefore, makes it difficult to capture the exact levels of market concentration due to cross category competition dynamics. It should be noted, however, that contractors can be broadly be grouped into three: lower category (very small scale projects); middle category (for medium sized projects; and upper category (for large scale development projects). Normally a contractor in the upper categories will not bid for very small scale projects, since they are not as rewarding. Competition may, therefore, be restricted to particular sizes of the contractors contesting for particular types and sizes of projects.

**Competition in Bidding Markets:** the construction industry is predominantly a bidding market, where competing contractors submit bids to be considered for particular projects. Competition dynamics in bidding markets are different from

spot markets. OECD (2007)<sup>23</sup> highlighted that bidding markets are, among others, characterised by the following: (i) winner takes all, so each supplier either wins all or none of the order. There is, therefore, no smooth trade-off between the price offered and the quantity sold; (ii) lumpy competition, that is, each contest is large relative to a suppliers total sales in a period; (iii) every contest is a new contest, in other words, there is no lock-in by which the outcome of one contest importantly determines another; (iv) sometimes, entry of new suppliers into the market is easy; (v) involves a bidding process. It is, therefore, difficult to quantitatively estimate competition levels in a bidding market. Competition levels are not merely determined by the number of players in the industry, but by the number of contractors that are participating in the particular bidding, as well as, their competitive attributes. As such, existing market shares are not always informative and determining about competition in the future bidding.

OECD (ibid) presents two techniques that may be used to estimate competition in a bidding market. One such technique is the *Frequency Analysis* where one can conduct an analysis of the frequency at which, say one particular contractor or group of contractors win contracts; or come second, or third, or fourth etc. One can also conduct

an analysis of the frequency at which one particular contractor or group of contractors bid or do not bid for projects, and analyse competition in that regard. The other technique that may be used is the *Reduced Form Estimation*, where one is required to estimate the relationship between the prices (or discount) that are bid and the number of bidders, the identity of bidders and the characteristics of the buyer or product. This technique, however, is cumbersome and is likely to be affected by data scarcity. Information on individual contractors' prices, discounts or cost structure is difficult to get, whether from contracting entities or contractors themselves. This study used the frequency analysis mainly focusing on contract values (revenues) and contract volumes (frequency).

### Market shares and concentration levels

An analysis of competition among construction contractors indicates that foreign firms dominate the market, specifically, in terms of revenues generated. Based on the construction contract data that the NCIC has been collecting since 2013<sup>24</sup>, the total contract sum of the projects is **MK 1.234 Trillion**. The table below provides details on the values of projects in the 2015/16 financial year and cumulative values since 2013.

**Table 4: Contract Values for Registered Contractors since 2013**

Sub-Sector	2015/16 Contract Sum (MK)	%	Cumulative Contract Sum (MK) since 2013	%
Building	10,678,731,877.71	1%	123,459,731,509.43	10%
Civil	603,499,528,757.71	85%	987,675,220,932.98	80%
Electrical	99,853,389,582.54	14%	101,754,300,916.89	8.24%
Borehole and Drilling	139,162,584.84	0%	2,160,650,618.34	0.20%
<b>Total</b>	<b>714,170,812,802.80</b>		<b>1,234,559,336,062.29</b>	

Source: NCIC: 2016 State of Competition in the Construction Industry Report

As can be seen from the table above, the civil works construction is the busiest category followed by the building construction. Cumulatively (since 2013), civil construction projects accounted for 80% of the total value of contracts, building and electrical contractors were at 10% and 8% respectively.

(a) Market Concentration based on Revenue (Contract Values)

The cumulative statistics indicate that the construction contractors' market is dominated by the foreign firms. The Top 10 contracted firms share amongst them 89.3% of the industry total project values. The table

below presents the market shares based on contract value.

**Table 5: Market Shares based on Contract Values (2013-2015)**

No.	Name of Contractor	Proportion of Industry Total	Foreign/ Local
1	Mota Engil	58.81%	Foreign
2	M.A. Kharafi & Sons	15.17%	Foreign
3	Kalpataru Power Transmission Limited	2.83%	Foreign
4	Terrastone Limited	2.55%	Local
5	Andriz Hydro GmbH & Mota-Engil Consortium	2.36%	Foreign
6	S R Nicholas Limited	2.25%	Local
7	Larsen & Toubro Limited	1.79%	Foreign
8	Fargo Limited	1.39%	Local
9	PLEM Construction	1.10%	Local
10	Apollo International Ltd,	1.04%	Foreign
<b>Total</b>		<b>89.29%</b>	

Source: NCIC: 2016 State of Competition in the Construction Industry Report

The statistics indicate that, in terms of values of contracts, the construction contractors market is heavily dominated by foreign companies. Some of the dominant foreign contractors are Mota Engil and M.A. Kharafi & Sons. There are only four "Local" companies in the Top 10, and these are Terrastone (4), SR Nicholas Limited (6), Fargo Limited (8) and PLEM Construction (9). There are no "Malawian" firms in the Top 10. In the industry wide analysis, foreign contractors' share by contract value is 84%, whereas the combined share for Local and Malawian firms is only 16%.

In assessing concentration levels, this study used the Concentration Ratio (CR) model which gives a snapshot on the levels of market concentration. The CR is calculated as "CR<sub>n</sub>" where n is the number of the top

firms based on market shares. For example, CR<sub>1</sub> is the concentration ratio when the CR is calculated based on the market share for the one top firm. CR<sub>5</sub> is the CR when it is calculated using the market shares of the top 5 firms. The CR is calculated as:

$$CR_n = \frac{\text{market share of top } n \text{ firms}}{\text{total market share}}$$

Therefore, based on the above statistics, CR<sub>1</sub> = 58.8/100 = 0.58; CR<sub>2</sub> = 64/100 = 0.64; and CR<sub>10</sub> = 89.2/100 = 0.89.

CR figures range from 0 to 1. The CR value is interpreted based on the level of analysis. However, on the overall CR values tending towards 0 manifest highly competitive markets, while CR values tending towards 1 manifest highly concentrated markets. For a market of over 1000 firms, CR<sub>10</sub> value of

0.89 (top 10 firms accounting for 89%) is a clear indication that the market is highly concentrated.

It should be noted, however, that these statistics are calculated based on the cumulative value of contracts in the past 3 years (2013-15). On the other hand, the statistics are calculated based on contracts value (revenues generated). The exact market shares and concentration levels may not be as high as captured here if the timeframe was longer than 3 years, but also if statistics were calculated based on the actual number of contracts awarded to each firm.

(b) Market Concentration based on Number of Contracts

In terms of the frequency of contracts awarded during the five year period (2010-2015), statistics indicate that more contracts

are won by the medium sized firms, rather than the largest contractors. This is particularly because most of the contracts being awarded were maintenance contracts, rather than development contracts<sup>25</sup>. Analysis of the data provided by the Roads

Authority on the roads construction and maintenance, below are the statistics on some of the leading players, based on number of contracts won during the five year period under review<sup>26</sup>.

**Table 6: Market Shares based on Frequency of Contracts (2010-2015)**

S/N	Contractor	Number of Contracts	Share of Contracts	Origin
1	Chivundiko Civil Engineering	21	2.28%	Local
2	Andrew and Andrew Civil Engineering	17	1.84%	Local
3	SOS Constructions	15	1.63%	
4	Sitbec Construction	14	1.52%	
5	G & C Civil Engineering	12	1.30%	Local
6	CAS Civil Engineering	12	1.30%	Local
7	Maoni Civil Engineering	12	1.30%	Local
8	Wasi Civil Engineering	12	1.30%	Local
9	Tahit Networks	12	1.30%	
10	Northworks Limited	12	1.30%	Local
<b>Total</b>		<b>139</b>	<b>15.06%</b>	

Source of data: Roads Authority (roads contracts 2010-2015)

Analysis of the roads construction market based on number of contracts indicates that the market is very competitive. Out of the 923 contracts used in the analysis, the contractor that won most contracts accounted for just 21 contracts, representing 2.28% of the total. The Top 10 contractors based on numbers of contracts won got 139 contracts out of the 923 sample, representing 15.06%. Based on the findings, the roads construction market appears to be less concentrated, as compared to when contract values are used. Using concentration ratio as means of capturing concentration levels, findings indicate that:  $CR_1$  is at 0.02;  $CR_{10}$  is 0.15;  $CR_{20}$  is 0.25 and  $CR_{40}$  is 0.39. These values are all less than concentration ratio of 0.5 and closer to 0 than closer to 1.

Therefore, in terms on number of contracts won, the market appears to be fairly competitive.

The study also assessed data on building contractors submitted by the Department of Buildings in the Ministry of Lands and Housing, Office of the Director of Public Procurement, plus other procuring entities like local councils and other parastatals. The analysis also shows that in terms of number of contracts being won, the market is not very concentrated. There are a number of companies that lead in terms of the frequency of contracts won, however they cannot be regarded as absolute dominant players on the market. Some of the leading contractors in the buildings category are: Plem Construction, Terrastone Limited, Sitebec Construction, Northworks Limited, Nile Construction, and Donekis construction.

It should be noted, that most of the contracts that are captured here to be maintenance contracts and small scale development contracts. Most of these are construction projects that are undertaken by middle level contractors. In terms of the number of contracts won, most of the largest construction firms (Class 9 – Unlimited category) are not in the Top 10. These include: Mota Engil, M.A. Kharafi & Sons, Terrastone Ltd , Plem Construction, Fargo Limited etc. These contractors largely participate in large scale development contracts which are fewer in numbers. However, as indicated above, the cumulative contract revenue for the development contracts are substantially higher than the maintenance contracts.

Analysis of the data also portrays a regional dimension in the manner of the contracts

that are awarded. Most of the contracts undertaken by companies like Chivundiko Civil Engineering, Andrew and Andrew Civil Engineering, Sitibec Construction, SOS Construction, Tahit Networks and Northworks Limited were in the northern region. These companies are based in the northern Malawi. Whereas, contracts won by companies like CAS Civil Engineering, G & C Civil Engineering, Maoni Civil Engineering and WASI Civil Engineering were in the southern region. Again these companies are based in the Southern Malawi. It should be noted, however, that this is not in absolute terms, as there are many contractors that have undertaken construction projects all across the country.

### Impact of the market structure on competition and market outcomes

#### (a) Dominance of large scale development projects by foreign contractors

As indicated above, contracts for large scale construction projects are dominated by foreign contractors. Information sourced from the markets indicates that there are three major reasons for this:

- *Technical capacity:* most of the foreign contractors have technical staff which is equipped with qualifications and experience, but also advanced equipment/machinery necessary to undertake such projects as compared to local contractors. Kulemeka et al, (2015) identified technical expertise as one of the major factors inhibiting the performance of most contractors in the Sub-Saharan region, including Malawi.
- *Financial capacity:* large scale projects require huge financial resources. Most foreign contractors have adequate financial resources to enable them undertake projects to completion. As such, foreign firms are able to complete the projects with the stipulated timelines, while

local contractors barely have backup financial resources, and require to be paid on commencement of the project. Kamanga and Steyn (2013) identified financial constraints by contractors as one of the reasons for the delays in completion of construction projects.

- *Conduct of local contractors:* the conduct of local contractors, particularly on large scale development project is poor and inconveniencing on the part of the procuring entities. Despite the shortfall in technical and financial capacity, local contractors tend to be aggressive when it comes to abiding by terms and conditions of contracts. There are normally excessive delays, or even abandonment of projects that results from delays in disbursement of funds. Foreign contractors operate faster and may even complete the projects even if there were delays in disbursements of funds.

#### (b) Dominance of small to medium scale projects by local firms

The market for smaller scale construction and maintenance projects is dominated by local contractors, most of which are small to medium scale. This, of course, could be a positive development with consideration to boosting the local capacity. However, experience shows that the construction works undertaken by most of the local contractors fall far below the standards. There are many projects, both new structures, as well as, maintenance of existing structures, which have been of very poor standards.

As highlighted above, some of the major reasons for this development is lack of technical capacity of small and medium scale contractors, poor equipment used in construction projects, financial constraints, and others (Kulemeka et al, 2015). It has

been observed that most local contractors recruit staff which lacks relevant education, skills and experiences to undertake such construction works. Local contractors also use poor and sub-standard equipment/machinery, which is not appropriate for the particular sizes of the projects. A cross-cutting element that has also been observed is corruption, which has been attributed to the compromised standards, delays in completion of projects, but also the high costs for construction services<sup>27</sup>.

#### (c) High Costs; and Poor Performance on Construction projects

However, as highlighted above, competition in the large scale projects tends to be very low. There are fewer contractors that dominate the market, particularly on large scale development projects, and these constitute a very high percentage of market in terms of contract values. Despite the positive attributes of technical and financial capacity, these contractors tend to price the services very high. Most of the largely scale construction projects are reported to have been undertaken at exorbitantly high costs (Chilipunde and Khombeza, 2012). This situation is partly attributed to the lack of competition in the development projects' construction works.

Performance of the large scale contractors has also been found to be below the expected standards. There have been many projects undertaken by both local and foreign contractors that have failed to meet expected standards. One of the reasons identified for this poor performance is use of equipment that is not suited for undertaking these projects. For example, reports by Nyasa Times<sup>28</sup> and Malawi News Agency<sup>29</sup> highlighted that some of the contractors that were contracted to undertake some of the country's development projects have greatly underperformed, particularly resulting from lack of "heavy-duty machinery, but

rather using handheld tools like hoes ...”. The problem is particularly adverse for small and medium scale contractors. A study by Kulemeka et al, (2015) indicated that delivery of approximately 27% of projects executed by small and medium scale contractors between 2007/2008 and 2010/2011 was affected by poor quality of work.

Analysis of construction projects has also highlighted that most contractors in Malawi fare poorly on delivery through delayed completion of projects. Most construction projects delay in completion, a situation which negatively impacts on developments but also performance of the various other sectors. A study by Chirwa et al (2011), on timely delivery in education projects in education sector in Malawi established that, “out of all the ESSP projects reviewed, only a third (33%) were completed within the original contract duration. ... Out of all the contracts granted extension of time, less than a third (21%) of them were completed within the extend period. A study by Kamanga and Steyn (2013) identified financial constraints, poor equipment, delays in disbursement of funds by procuring entities, etc as some of the prominent reasons for the delays.

Corrupt practices in contracting and management of construction projects, has also been highlighted as one of the reasons for the underperformance of construction sector. For example, reports by Malawiana<sup>30</sup> and Nyasa Times<sup>31</sup> identified corruption, which involves contractors bribing responsible personnel at the procuring entities, as one of the major factors that result in compromised standards for construction projects. Corruption has also been identified to be the reasons for the observed high (inflated) costs for construction services in the country. Besides affecting the performance and costing by construction companies, colluding between

procurement officers at contracting entities and contractors appears to play a part in the dominance of some contractors in the industry. According to GAN Business Anti-Corruption Portal (2016)<sup>32</sup>, there are substantial corrupt practices that largely occur at procurement stage in Malawi. There have been some particular contractors that have been awarded new contracts despite underperforming on previous contracts. Therefore, corrupt practices carry a transitive competition element, particularly in terms of awarding contracts but also performance (quality and pricing) in the industry.

### Barriers to Entry

#### Entry and Exit Barriers

**Technical Requirements:** the construction industry is a very specialized field. The works that are undertaken by construction companies require specialized skills and equipment. For a company to be registered and allowed work on construction projects, the NCIC ensures that the key personnel in the company have the necessary qualifications and experience, but also the company possesses the necessary machinery for them to undertake particular projects. Each category of construction contractors has its own threshold of required skills and experience, but also type of equipment which has to be met before the firm can be registered<sup>33</sup>. Companies may be prevented for participation in particular types of projects based on failure to meet the minimum requirements. A study by Kulemeka et al (2015) identified technical capacity as a major constraint to performance of most small and medium scale contractors in Southern Africa.

**Financial Requirements:** construction industry is highly technical field that requires huge financial resources. As can be observed in the criteria for registration of

construction firms, one of the requirements is that the contractor should have adequate financial resources in their bank accounts, or at least demonstrate capacity to raise such resources. This is to ensure that the contracted firms indeed have the capacity to bankroll the project even with limited upfront payment made by the procuring entity. This, therefore, is one of the major constraints for potential entrants into the industry. Kamanga and Steyn (2013) identified financial capacity as a major factor resulting in the delays in completion of construction projects.

#### **Registration Procedures and Costs:**

firms that intend to undertake construction works in Malawi are required to register with the NCIC. This applies to both local and foreign firms, even though, the registration requirements and costs are different. Before the firms register with the NCIC, they have to apply with the statutory Boards that have jurisdiction in the various subsectors of the industry<sup>34</sup>. Having been cleared by the statutory Boards, the firms are assessed based on the NCIC thresholds as stipulated in the NCIC registration procedures<sup>35</sup>. After the firm has been cleared, it is required to pay registration fees, but also annual membership renewal fees. The registration and membership renewal fees for both local and foreign construction firms are determined by the NCIC and are reviewed from time to time.

#### **Foreign-Local Firm Partnership**

**Requirement:** In 2014, the government of Malawi passed new Regulations for the construction industry that require foreign construction firms to partner with local firms whenever they intend to undertake a construction project in Malawi. Foreign firms are required to submit their bids as a joint venture, in partnership with a local firm. This partnership arrangement also requires that the local partner (local construction firm) should undertake some substantial

part of the project. The Regulations stipulate that at least 30% (for the contractors) and at least 51% (for the construction consultants) of the technical works should be undertaken by the local partner. This negatively impacts on the foreign construction companies, because the arrangement gives unfair advantage to the local operators.

**Brand Loyalty:** The construction industry has manifested incidences of market dominance in almost all subsectors. There are a few firms which have significant market power that can enable them manipulate the market to their benefit, at the expense of competitive outcomes on the market. For a new entrant, it may be difficult to break into the market considering that some of the existing market players may already have established functional relationships with the prominent procuring entities. As it has been observed above, there are a few contractors that dominate in

winning contracts for construction projects in the country. Besides other factors, this is a sign of brand loyalty, which will affect the operations of new entrants.

**Access of Critical Inputs and Essential Services:** Lack of access to inputs is another potential barrier in Malawi. This lack of access may result from unavailability or shortage of the inputs. As it was established in a study by Chilipunde and Khombeza (2012), one of the contributing factors to the increasing costs for construction services is the high prices for cement. Cost for raw materials, as well as, other essential services in the construction industry can also act as a great hindrance to potential entrants. Some of the essential services and inputs required in the construction industry include: energy (electricity, liquid fuels); water; transportation; and labour. In Malawi, electricity is largely unreliable and expensive, prices for liquid fuels are very

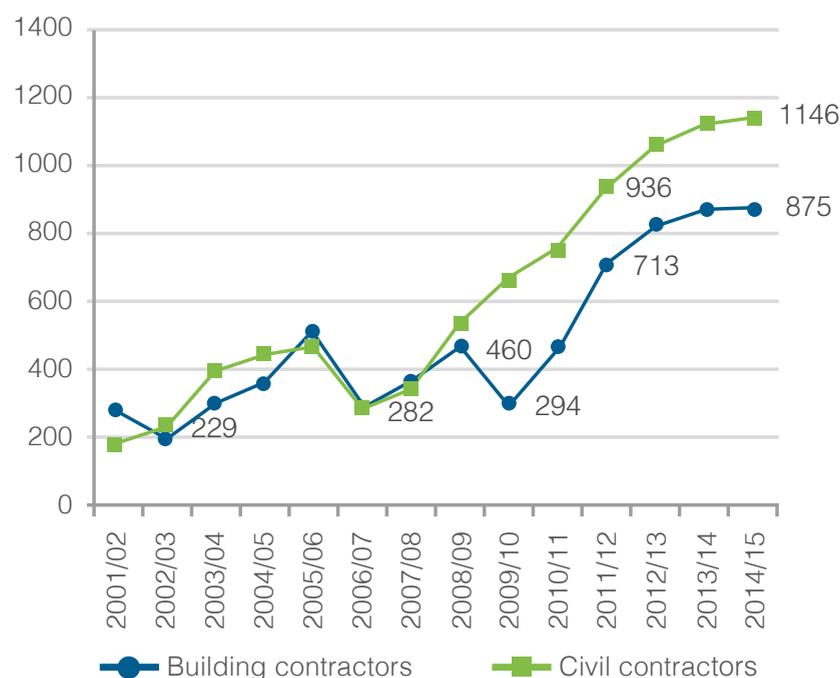
high, transportation costs are very high, water also tends to be a problem. A study by Kamanga and Steyn (2013) identified access to power (electricity) as one of the major constraints to timely completion of projects. Lack of access to such inputs will affect the operations of any new entrant.

#### Entry and Exit Dynamics

The construction industry in Malawi has been booming of the past 15 years, with the number of registered contractors showing an overall increasing trend over the period. This has been the case both for local as well as foreign contractors.

**Local Contractors:** There has on the overall been an increasing trend in the number of contractors over the past 15 years. The figure below presents the trends in number of local contractors in the three major categories.

**Figure 3: Trends in Numbers of Local Contractors (2001-2015)**



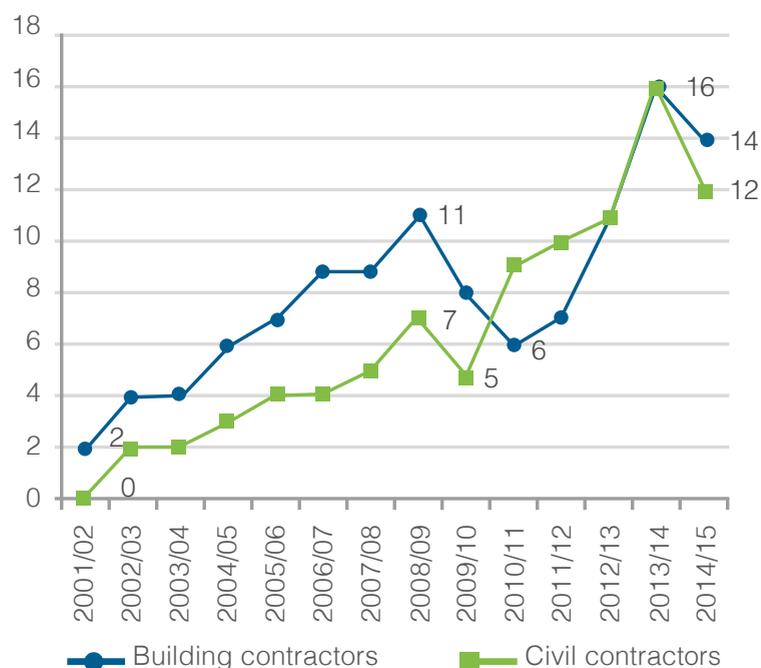
Source of Data: NCIC: 2016 State of Competition in the Construction Sector Report

Between 2001 and 2009, the numbers of building and civil contractors trended the same. However, thereafter, the number of civil contractors has been more than building contractors. This can be attributed to the observed increased civil works projects that have been undertaken during the period. Among others, these include construction and rehabilitation of various

roads, railways and the blossoming mining sector. Both categories of contractors exhibit an increase trend in numbers; though there was a sudden drop in 2006 for civil and building contractors and in 2010 for building contractors. Currently, there were 875 building contractors and 1146 civil contractors in the local category.

**Foreign Contractors:** The number of foreign construction contractors also exhibited an increasing trend, even though, there were also observed drops in the number of firms. The figure below illustrates the trends in the number of foreign contractors.

**Figure 4: Trends in Number of Foreign Contractors (2001-2015)**



Source of Data: NCIC: 2016 State of Competition in the Construction Sector Report

On the overall, the number of foreign contractors has shown an increasing trend. However, there was an observed drop in the numbers in the period 2009/10 for civil contractors, and 2009-2012 for building contractors. This observed reduction is partly attributed to the economic downturn observed across almost all sectors of the economy. Currently, there are 14 building contractors and 12 civil contractors in the foreign category.

## PRICE DETERMINATION IN THE CONSTRUCTION INDUSTRY

This section presents the mechanisms that apply in the determination of charges for construction services in the country. Unlike most of the sectors of the economy, the construction industry does not have structured units of measurement which can be quantified to determine the price. The infrastructures to be constructed have

varying characteristics and specifications which are not easily comparable. It is, therefore, not possible to generalize the standard costs for construction projects.

### Major cost items for construction works

The costing for construction services is determined by various factors. However, the prominent determining factors are: specifications of the construction works; and

the condition of the site where the works will be carried out, both of which determine the extent of the works and resources to be used. In the road construction projects, the procuring entity contracts a consultant to undertake an *ex-ante* project assessment. The Roads Authority is the major procuring entity in roads construction and maintenance. The other major procuring entities include the local authorities, particularly the city councils. The consultant evaluates the project in terms of the specific structures that will be constructed, for example, road stretch, bridges, culverts, junctions, roundabouts etc. The consultant also determines the type of equipment and amount of resources required on the project. These are quantified and aggregated in monetary value by the consultant and the costing is used as benchmark when the procuring entity evaluates the bids<sup>36</sup>. Normally the procuring entity considers bids which are within 15% of the pre-determined rates developed by the consultant. However, this is not absolute, since at times the procuring entity may consider bids that are outside the 15% bounds.

In the road construction, cost items are captured in stratified form depending on the specific activity to be undertaken. However, these are presented in the same bid document which is divided into several sections. The procuring entity issues a standard bid document (template) highlighting the particular cost items on the project based on the *ex-ante* project assessment. The major cost items are in the following areas<sup>37</sup>:

- i. Contractor's establishment on site and general obligations (land, housing, accommodation, transportation etc);
- ii. Drainage (drains, culverts, concrete channels etc);
- iii. Earthworks And Pavement Layers of Gravel or Crushed Stone;
- iv. Asphalt Pavement and Seals

- v. Ancillary Road-works (bus bays, sign posts, guardrails, road marking, landscaping etc);
- vi. Structures (bridges, fly-overs etc);
- vii. Day-works (labour, both technical and support).

Each cost item above has several sub-items with specific amounts and costs. In the bids, the contractors do their own costing for each sub-item under the major cost items using the standard bid document that is developed by the procuring entity. Each bidder determines its own cost for each item. The procuring entity does not, however share the findings of its *ex-ante* project assessment with the potential bidders, and also ensures that there is no contact between the *ex-ante* project consultant and the potential bidders. The competing contractors bid independently and without any prior information.

### Determination of prices for construction works

There are separate procurement procedures for development projects (construction of new structures) and maintenance projects (rehabilitation of existing structures). For development contracts, the procuring entity engages a consultant to undertake the *ex-ante* project assessment. No pre-bid meetings are held, however, the procuring entity organizes site viewing/visit for all potential bidders. On the other hand, for maintenance projects, the procuring entity does not undertake an *ex-ante* project assessment consultancy. They just call for bids, but organize pre-bid meetings for potential bidders. Site viewing may also be conducted.

In each case, the potential bidders individually determine their own rates. Pricing of the cost items is based on individual company's access to the required equipment, technical expertise, casual

labour and other resources. Contractors that have easy access to the required resources, but also at relatively lower prices, will bid lower than those with poor access. Foreign firms, but also local firms that are not based in the territory of the procuring entity, also factor in relocation costs, which includes haulage of equipment and staff. The prices may also be determined by other operational costs including statutory fees<sup>38</sup>.

The assumption in the industry is that each company determines its own pricing strategy. However, the setup of the industry, plus the procurement procedures creates the potential for collusive conduct due to the overly transparency on the market. Pre-bid meetings and site visits practically bring the potential bidders together, thereby allowing each bidder to know some of the potential competitors on that project. They can as such share information and collude in terms of pricing.

## PROCUREMENT POLICIES AND PROCEDURES

Procurement for construction services is largely managed by the procurement entities themselves. However, the procuring entities are required to involve the NCIC which is the sector regulator. Public procuring entities (Government ministries, departments and agencies) also the involve Office of the Director of Public Procurement (ODPP) which regulates procurement process by all public institutions. The NCIC is guided by the National Construction Industry Regulations while the ODPP is guided by the Public Procurement Regulations.

### National construction industry regulations

The Government has passed various Regulations under the National Construction Industry (NCI) Act, some of which

regulate the procurement procedures for construction services.

**Project Registration Regulations:** The fundamental requirement in the Project Registration Regulations is that procuring entities or their representatives should register any construction projects with NCIC. This enables NCIC to monitor the procurement process, but also assess performance of the construction firms individually and the industry in general. This allows the NCIC ensure that the contractors that participate in particular projects are registered and qualified for the type of projects. The NCIC also ensures that the contractors adhere to the construction industry rules, regulations and codes of ethics in their undertakings. Procuring entities, therefore, are obligated to recruit contractors in their respective categories. The NCIC ensures that construction projects are awarded to contractors that have the required capacity to undertake such projects.

**National Construction Industry (Sub-Contracting and Joint Ventures by Foreign and Malawian Construction Firms) Order, 2014:** the objective of developing these Regulations was to build local capacity in the construction industry, as well as, increase participation of local contractors and consultants in construction projects. The regulations require that a foreign construction firm which intends to provide construction services in Malawi to provide those services in association with a Member Practice (local construction firm). The local partner is also entitled to a certain proportion of the construction works<sup>39</sup>.

### Public procurement regulations

The Public Procurement Regulations were developed under the Public Procurement Act of 2003 with mandate to regulate and monitor public procurement in Malawi. The main objective is to enhance efficiency

and effectiveness of public procurement operations. Some of the prominent provisions in the Regulations that may result in prevention of competitive outcomes in the procurement for public works are:

**Competitive Tendering/Bidding:** one significant requirement in the public procurement Regulations is competitive bidding. Procurement procedures require that there should be at least three potential suppliers to have submitted their bids before the bids can be evaluated and contract can be awarded. The default procure by the ODPP is open tendering, however, at times selective tendering can also be used. This is meant to ensure competitive outcomes in the recruitment process.

**Pre-Bid Meetings:** the Regulations require that after issuing the invitation for bids, the procuring entities organize a pre-bid meeting which involves all the potential bidders. According to information sourced from the Roads Authority, Pre-bid meetings are conducted for maintenance contracts, while development contracts do not require that. However, the procuring entities organize site visits both for maintenance contracts as well as development contracts. After the pre-bid meetings, the procuring entity is required to prepare minutes for the meeting and subsequently share with all the potential bidders present<sup>40</sup>.

**Public Bid Opening:** the Regulations also require that bids are opened in a session open to the public, including bidders and their representatives, at the time and place indicated in the bidding documents. The name and address of each supplier whose bid is opened and the bid price, and the price of any alternative bids if they have been solicited or permitted, shall be announced to those persons present at the opening of bids, communicated on request to bidders that have submitted bids but that are not present or represented at the

opening of bids, and recorded immediately in the record of the tendering proceedings<sup>41</sup>.

### Impact of procurement policies on competition and market outcomes

The procurement policies and procedures highlighted above have various positive attributes. These ensure that the procurement process is fairly competitive and follows due process. It also ensures participation of local contractors in construction projects, while at the same time boosting the local capacity in the construction industry. It should be noted, however, that the procurement policies and procedures have the potential to adversely distort outcomes on the market as highlighted in Section 2 above.

**Classification and Registering of Contractors:** Classification of contractors is very beneficial to the procuring entities, since it allows them to recruit qualified contractors. Procuring entities can easily access information of which contractors belong to the categories that can undertake the projects. This, therefore, reduces incidences of recruiting relevant contractors in the relevant categories, but also prevents shadowy recruitments. However, as highlighted in Section 2 above, performance of some contractors falls below standards despite being in the relevant categories. Partly, this problem results from contractors using substandard equipment, unqualified staff, financial constraints, but also corrupt practices<sup>42</sup>.

**Foreign-local contractor partnership:** the requirement for foreign contractors to partner local contractors when bidding for and undertaking construction projects in Malawi has its benefits. However, this arrangement also has adverse effects on competition and outcomes on the market as discussed in section 2<sup>43</sup>.

### **Pre-bid Meetings and Bid-opening**

**Procedures:** the pre-bid meetings are meant to acquaint the potential bidders on the nature and specifications of the project, as well as highlight the procedures for the procurement process. Pre-bid meetings are very informative and beneficial, particularly to small scale contractors. A study by Kulemeke et al (2015) highlighted that out of 9,382 tenders from small and medium scale contractors under analysis, a total of 5,763 tenders were disqualified due to failure to respond to at least one bidding requirement or due to tender prices that fell outside the engineer's estimates bracket. They as such fail to bid competitively for construction projects, thereby, always faring badly against the large contractors. The pre-bid meetings, however, bring all the potential bidders together. Therefore, it has the potential for facilitating information sharing among the bidders, thereby providing conducive environment for collusive tendering.

The bid opening event involves publicly revealing the bid prices for all participating contractors. Much as this ensures transparency in the contracting process, it has potential for information sharing, particularly in incidences where there is a price or customer allocation cartel operating. This transparency allows competing contractors to identify any bidders who may not have complied with the agreed rates. The competitors involved in the cartel may, therefore, be able to sanction punitive measures on the non-compliant competitor(s).

These pre-bid meetings and public bid opening sessions also provide conducive environment to breed corrupt practices, inform of colluding between member of contracting institutions and contractors. According to GAN Business Anti-Corruption Portal (2016)<sup>44</sup>, there are substantial corrupt practices that largely occur at procurement

stage in Malawi. Since it brings the contractors in touch with the key staff at the contracting institutions, it cultivates a good ground for sharing information, including contact information which may incentivise individuals engage in corrupt conduct.

### **Use of standard templates for bidding:**

Procuring entities most times use standard templates for bidding, listing the specific cost items, plus the specific amounts required. The bidders therefore, just determine the cost they have to attach to each item. This is particularly applicable in the bid documents for large scale construction projects to serve as guide to potential bidders on how to structure their bids<sup>45</sup>. However, these have the potential to facilitate uniform pricing, since all the cost items are listed, which gives a picture on possible bid prices. However, it is important to note that the use of these standard bidding documents is beneficial for ensuring standards, but also help small scale players bid competitively for construction projects. According to a study by Kulemeke et al, (2015), inability to compete with bigger construction companies, which was related to unfair competition, was a major hindrance for them to win contracts. Part of the problem was the non-compliant bidding, a situation which may be addressed by using the standard templates where cost structure and items are already identified.

## **STATE SUPPORT**

Malawi adopted a liberalised system of economy since early 1990s where the market is more or less self-regulated. There is minimal Governmental intervention on the market, particularly on matters relating to production costs, production procedures as well as price strategies. The Government only intervenes in just a few of strategic sectors of the economy. The Construction industry in Malawi is not heavily characterized by Government

intervention on the market, particularly on subsidies or directly controlling prices. Each operators have their own pricing strategies, and cost their services based on their cost structure and preferred profit margins. The Government does not give any specific support to any particular categories of contractors. There are, however, a few conduct by Government, particularly the NCIC that may amount to state support or somehow enhance the competitiveness of particular contractors at the expense of others. These include:

**Differentiating fees between small and large contractors:** The registration fees and membership renewal fees for contractors vary among the various categories. Small scale contractors pay very low fees, starting with MK7,500/year, and the fees keeps increasing as the category increases. Firms in Category (MK5m) pays substantially lower fees as compared to a contractor in category (MK100m), which also pas relatively lower fees as compared to contractor in Category (MK1bn). This arrangement gives competitive advantage to the small contractors, which helps increase their productivity, while at the same time safeguarding them from punitive statutory fees.

**Differentiating fees between local and foreign contractors:** the NCIC also differentiates registration and membership fees between local and foreign contractors. Local contractors pay substantially less statutory fees as compared to foreign contractors. This helps safeguard local contractors, most of which are small or medium scale contractors. However, this gives competitive advantage to local contractors over foreign contractors.

**Requiring foreign contractors to partner local contractors:** Construction Industry Regulations in Malawi require foreign contractors to partner local contractor

when they intend to, or undertake construction projects in the country. This is aimed at increasing the capacity of the local the construction industry and increase participation of local contractors in construction projects<sup>46</sup>. However, this requirement gives competitive advantage to local contractors over foreign contractors. This may also result in exorbitant pricing, delays in completion of projects, but also compromised standards for infrastructure.

## TRADE RESTRICTIONS

Malawi is an open economy that trades with the outside world. Malawi is a predominantly importing and consuming country in most respects. The country's imports far outweigh its exports; as such the country always has a trade deficit. The products that are regulated in terms of entry into Malawi include sensitive products that either are illegal, or do not meet Malawi standards, or banned internationally or goods that are strategic to the economy and welfare of the citizens. However, in the construction industry, there are no particular types of goods that are restricted to be imported into the country. There are, therefore, no specific construction industry operations that are adversely affected by trade restrictions.

There may, however, be some restrictions in terms of foreign personnel that are allowed to operate in the country. Foreign personnel intending to operate business or ply their professional trade in Malawi are supposed to get residence permits and business permits. Residence permits may be given either on permanent or temporary basis depending on the intentions of the Applicant. One of the bases for assessing the applications is the (i) type and volume of investment brought in by the Applicant; (ii) professional and technical aspects of the Applicant; and (iii) type of business or work the Applicant applies for. There are some restrictions on types of businesses or work

that foreign personnel. The construction industry, however, does not have restrictions in terms of operating a business. Foreigners are allowed to operate construction firms in each category and at all levels. However, for economic reasons, most foreign construction firms are in the upper categories (large scale construction firms). There is, however, restriction on the type of work foreign personnel can undertake in the country. To safeguard employment for locals, foreign personnel is mostly restricted to highly technical and professional aspects of the construction works, while leaving the low skilled works plus ground labour to locals.

## CONCLUSION

### Summary of findings

**Regulatory framework:** the main Regulator for the construction industry is the NCIC which operates under the Ministry of Transport and Public Works. The major piece of legislation used in the regulation of the sector is the National Construction Industry Act (NCI Act); but there are subsidiary Regulations that are developed under the Act. All construction companies in Malawi are required to register with the NCIC before they can undertake any construction projects, where they pay registration fees but also membership renewal fees. Contractors are classified from Class 1 (small scale contractors) to Class 9 (large scale contractors), based on their capacity to undertake particular projects. Contractors are appraised based on: type of equipment/machinery the contractor possesses; technical expertise, in terms of qualifications and experience of essential staff; and financial capacity. Foreign construction contractors that intend to undertake construction projects in Malawi are required to do as a joint venture with local contractors. The Regulations require that there should be a partnership, but

also stipulate minimum volumes (30% for contractors and 51% for consultants) of work that should be undertaken by the local firms. In the construction industry, there are various statutory boards and industry trade associations that also play a crucial role in the regulation of the sector.

The regulatory framework has the potential to adversely impact on the outcomes on the market. Firstly, the differentiation of registration and membership fees limits import competition in the lower categories segment of the market. . These may in turn increase the overall costs for construction works since the sector is dominated by foreign contractors in terms of contract volumes. The classification of contractors is good for ensuring standards. However what has been observed is that there are compromised standards for infrastructure. Partly this has been attributed to weakness in enforcement/monitoring to ensure standards. The foreign-domestic firm partnership requirement gives competitive advantage to local contractors over the foreign contractors. This kind of arrangement has been reported to impact negatively on the pricing in the industry by the local partnering contractor/consultant. Statutory board and industry associations have a substantial role to play in regulation of the industry, and also sit at the NCIC Board, hence participating in the decision making. This brings an element of conflict of interest by some members representing statutory boards and industry associations most of whom operate or manage construction companies.

**Market structure and its Impact:** there are 889 building contractors, 875 (98%) are local while 14 (2%) foreign; and 1,158 civil contractors, 1146 (99%) are local while 12 (1%) foreign. Contractors are classified based on capacity from Class 1 (small scale contractors) to Class 9 (large scale contractors). On the overall, there are

more contractors in lower categories, and fewer in upper categories. Most of the local contractors are in lower categories, while all but one, foreign contractors are in Class 9 (unlimited category). When using Contract Values (Revenues) as a measure of market share, the market appears to be highly concentrated; with CR1 = 0.58, CR2 = 0.64, and CR10 = 0.89. Using contract value, the market is dominated by large scale foreign contractors controlling 84% of the market. In Top 10, there were only 4 local contractors. This analysis mainly applies to contracts for the large scale development projects. When using Number of Contracts awarded as a measure of market share, the market does not appear to be highly concentrated; with CR1 = 0.02; CR10 = 0.15; CR20 = 0.25; and CR40 = 0.39. Using number of contracts awarded, the market is dominated by medium scale local contractors. Most of the projects analysed here are maintenance projects and small-to-medium scale development contracts.

The market structure of the construction industry has various effects on the outcomes on the market. Firstly, there is market dominance in on large scale development projects by foreign contractors. Most local contractors operate on small-to-medium scale projects. The industry has also exhibited high pricing for construction works, as most infrastructures have been found to be undertaken at exorbitantly high costs. Costs for critical inputs/financial services, lack of effective competition and corrupt practices have been highlighted as some of the reasons for the high costs for construction. Compromised standards for the infrastructure, particularly those constructed by local contractors, is another major outcome on the market. Some of the factors leading poor performance include: use of poor equipment, inadequate technical expertise, but also an element of corruption, both in contracting but also monitoring of projects. Other than the poor

standards, delayed completion, or even at times non-completion (abandonment) of projects is also another big challenge facing the procuring entities. Some of the factors attributed for delayed completion include: inadequate technical expertise, financial constraint, delayed disbursement of funds by contracting agencies, among others.

**Barriers to entry:** there are various factors that act as impediment to potential investors, both local and foreign to venture into the construction industry in Malawi. Some of these factors may also inhibit the development of the construction industry, while at the same time, prevent pro-competitive outcomes on the market. Among the most prominent barriers include: technical requirements; financial requirements; registration procedures and costs; foreign-local firm partnership requirement; brand loyalty; access of critical inputs and services. Analysis of entry and exiting in the sector has demonstrated that on the overall, the number of contractors have been increasing, both for local but also foreign contractors. The figures have shown some periodical, linked to economic down-turns, but the overall trends has been increasing.

**Price determination:** in the large scale development projects, the contracting entities hire consultants to conduct an ex ante project assessment. This assessment identifies and estimates the major cost items for the project. The contracting entity then uses these cost items to develop a standard bid document template. In the template bid document, all applicable cost items are listed, with their estimated amounts. However, the *ex-ante* project assessment report not shared with potential bidders (contractors). Normally the acceptable bids are those with costs within 15% bounds of the predetermined costs for the project, however, procuring entities can also consider bids which are outside

the bounds. Contractors bid individually, or as joint ventures based on their own cost structure and preferred profitability margins. The pricing by the competing contractors is largely determined by their access to required inputs, and at what cost they access the required resources for the project.

**Procurement policies and procedures; and its Impact:** procurement for construction services is mainly regulated by two types of legislations. First is the National Construction Industry Regulations, which were developed under the National Construction Industry Act. The Regulations require that procuring entities contract contractors that are registered with the NCIC only. Additionally, contracting institutions are required to recruit contractors in relevant categories only. This is to ensure adherence to set standards in the construction industry. The Regulations also require that foreign contractor's partner with local contractors when undertaking construction projects in the country. This is aimed at building the capacity of local contractors but also ensuring participation of local contractors in construction project in the country.

Contracting in the construction industry is also regulated by the Public Procurement Regulations, which were passed under the Public Procurement Act. Among other aspects, the Regulations require that procuring entities ensure that the procurement process follows competitive tendering. This to ensure that the procurement process produces competitive outcomes inform of best service at lowest possible cost. The Regulations also require conducting of pre-bid meetings; site visits and public bid opening sessions to ensure standards in the submission of the tenders, but also to ensure transparency and accountability in the procurement processes. In the tendering process, contracting institutions are required to use of

standard template bid document to ensure standardisation, but also assist small scale contractors who may have problems in structuring their bids.

The procurement policies and procedures have various positive attributes in ensuring standards and uniformity, but also ensuring pro-competitive outcomes in the procuring process. The classification/grading of contractors is particularly important to ensure that relevant contractors are recruited in relevant types and sizes of projects. The requirement for foreign/local firm partnership also has the benefits of enhancing the capacity of the local construction industry. Competitive tendering is particularly essential to promote pro-competitive outcomes on the market. Aspects like pre-bid meeting, site visits, public bid opening and use of standard template for bid documents are also important to ensure standards in the bidding process. However, these procedures also have some aspects that raise competition concerns. The requirement for foreign/local firm partnership creates a cartel kind of arrangement between local and foreign contractors. Pre-bid meetings, site visits and public bid opening also facilitates information sharing which create breeding ground for collusive conduct by contractors, but also corrupt practices between the contractors and key staff at the contracting institutions. On the other hand, the use of standard templates for bid documents is likely to result in collusive pricing since all potential bidders become aware of how the competitor's bid is structured.

**State support and Trade Restrictions:**

the Government does not give any specific support to any particular categories of contractors. There are, however, a few types conduct by Government, particularly the NCIC that may amount to state support or somehow enhance the competitiveness of particular contractors at the expense

of others. These include: differentiating fees between small and large contractors; differentiating fees between local and foreign contractors; requiring foreign contractors to partner local contractors; etc. Most of these aspects are of regulatory nature and their impact on competition and outcomes on the market have been captured in Section 2 of the report. There are no major trade restrictions that severely affect the construction industry.

**Recommendations**

Based on the findings presented above, the study puts forward the following proposals to address some of the issues that have been raised.

Reviewing the membership of the NCIC to balance up representation. NCIC as a regulatory body needs to be neutral not only in its conduct but also its representation. The current membership of NCIC is skewed towards contractors. There is need to balance up representation of interests in the Council.

**Review of foreign/domestic contractor partnership requirement:** As indicated, due to this requirement competition between foreign companies and local companies is muted. Proper guidelines should be developed to ensure that competition between foreign and local contractors is maintained. Without being prescriptive, the guidelines could, for example, require that foreign companies should identify a local contractor after winning the bid and should do so through competitive bidding.

**Insulate the bidding process from possible bid rigging:** As observed some of the bidding processes followed have inherent potential to facilitate bid rigging. Such bidding processes should be designed in a manner that does not create opportunities for bidders to share

information that can lead to bid rigging. For example, pre-bidding meetings should be arranged in a manner that does not facilitate sharing of information among bidders. Furthermore, those involved in assessing bids in procurement entities, whether public or private, should be inducted in detection of bid rigging.

**Putting in place measures to prevent corruption:** market outcomes in the construction industry are suspected to be influenced by corrupt practices such as collusion between officers involved in procurement and the bidders. All procurement entities need put in place measures that prevent officers involved in procurement from engaging in conducts that may compromise the competitiveness of the bidding process, as well as the implementation of the construction projects.

**Thorough review of the construction industry regulatory regime:** The regulatory regime for the construction industry needs to be reviewed to make it pro-competitive. The review should examine the costs and benefits of some restrictions on foreign contractors.

**Stakeholder Sensitisation:** there is need for sensitization among stakeholders on competition and consumer protection law and policy. These include: the public sector including market regulators, operators (construction firms and their associations); consumers (users of construction services) and the general public.

## REFERENCES

- Chilipunde, R. and Khombeza, P. (2012). An Assessment of Construction Costs in Malawi. Department of Quantity Surveying and Land Economy: University of Malawi, Polytechnic: (<http://timesmediamw.com/malawi-building-costs-highest-in-sadc-region/>)
- Chirwa, D., Samwinga, V. and Shakantu, W. (2011). Timely Project Delivery: A Case Study of Malawian Educational Projects. Education Infrastructure Management Unit (EIMU), Lilongwe, Malawi. (Retrieved from: [https://www.academia.edu/878068/Timely\\_project\\_delivery\\_a\\_case\\_study\\_of\\_Malawian\\_educational\\_projects](https://www.academia.edu/878068/Timely_project_delivery_a_case_study_of_Malawian_educational_projects))
- GAN Business Anti-Corruption Portal (2016 ). Malawi Corruption Report. (Retrived from: <http://www.business-anti-corruption.com/country-profiles/malawi>)
- Kamanga, M.J & Steyn, W. (2013). Causes of Delay in Road Construction Projects in Malawi. Journal of the South African Institution of Civil Engineering (J. S. Afr. Inst. Civ. Eng. vol.55 n.3 Midrand Jan. 2013).
- Kulemeka, P.J., Kululanga, G. and Morton, D. (2015). Critical Factors Inhibiting Performance of Small- and Medium-Scale Contractors in Sub-Saharan Region: A Case for Malawi. Journal of Construction Engineering: Volume 2015 (2015), Article ID 927614, 17 pages. (Retrieved from: <http://dx.doi.org/10.1155/2015/927614>).
- Malawi Government, (2015). National Construction Industry Policy. Lilongwe, Malawi.
- Malawi Government, (1996). National Construction Industry Act. Lilongwe, Malawi
- Malawi Government, (1997). Competition Policy for Malawi. Lilongwe, Malawi
- Malawi Government, (1998). Competition and Fair Trading Act (Cap 48:09 of the Laws of Malawi). Lilongwe, Malawi
- Malawi Government, (2003). Public Procurement Act. Lilongwe, Malawi
- Malawi Government, (2005). Public Procurement Regulations. Lilongwe, Malawi
- Malawiana (2016). Corruption in Malawi Construction Industry Angers VP Chilima. Published on 16 November 2016. (Retrieved from: <http://malawiana.net/corruption-in-malawi-construction-industry-angers-vp-chilima/>)
- Malawi News Agency. (2016). Malawi: Substandard Construction Work of Rumphi Stadium Irks Minister. Published on 28th January 2016. (Retrieved from: <http://allafrica.com/stories/201601291002.html>).
- National Construction Industry Council, (2013). Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers (2013, revised). Lilongwe, Malawi.
- National Construction Industry Council, (2016). 2016 State of Competition in the Construction Industry Report. Lilongwe, Malawi
- National Statistics Office, 2012. Statistical Year Book. Zomba, Malawi
- NCI Act, (2010). National Construction Industry (Practice of Construction Consultancy Services by Foreign Consulting Firms) Regulations. Lilongwe, Malawi.

NCI Act, (2014). National Construction Industry (Sub-Contracting and Joint Ventures by Foreign and Malawian Construction Firms) Order. Lilongwe, Malawi.

Nyasa Times (2017). Malawi Government to Probe Poor Road Constructions – Mutharika. Published, 26th May 2017. (Retrieved from: <http://allafrica.com/stories/201705260461.html>)

Nyasa Times. (2016). Corruption in Malawi Construction Industry: Change Model of Delivery. Published on 23 November 2016. (Retrieved from: <https://www.nyasatimes.com/corruption-malawi-construction-industry-change-model-delivery/#sthash.dU19WufW.dpuf>)

Nyasa Times (2016). Poor Chinese Work: Malawi Minister Urges Contractor to Adhere to Standards. Published on 3rd February 2016. (Retrieved from: <http://www.nyasatimes.com/poor-chinese-work-malawi-minister-urges-contractor-to-adhere-to-standards/#sthash.VMNsQS0v.dpuf>).

OECD (2007). Policy Roundtables: Competition in Bidding Markets. Directorate for Financial and Enterprise Affairs Competition Committee, OECD.

## Endnotes

- 1 Malawi Government. (2015). National Construction Industry Policy. Lilongwe.
- 2 NCIC: 2016 State of Competition in the Construction Industry Report
- 3 NCIC: Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers (2013, revised)
- 4 The study was conducted by Rodrick Chilipunde and Patrick Khombeza of Department of Quantity Surveying and Land Economy at the University of Malawi, Polytechnic in 2012.
- 5 Malawi Government (1996): National Construction Industry Act. Section 20(1)
- 6 NCIC (2013): Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers: Revised
- 7 See the distinction between Foreign, Local and Malawian firms in Section 1.5 of this report
- 8 NCIC: Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers (2013, revised): Section 7
- 9 Member Practice is a paid-up registered Malawian construction firm or group of registered local or Malawian construction firms, which is not serving any disciplinary measures
- 10 NCI Act (2014): National Construction Industry (Sub-Contracting and Joint Ventures by Foreign and Malawian Construction Firms) Order. Section 10
- 11 NCI Act (2010): National Construction Industry (Practice of Construction Consultancy Services by Foreign Consulting Firms) Regulations of 2010. Section 5
- 12 NCIC: 2016 State of Competition in the Construction Industry Report. Lilongwe
- 13 NCIC: 2016 State of Competition in the Construction Industry Report. Lilongwe
- 14 See Section 3: (Competition Analysis) below
- 15 Competition and Fair Trading Commission (2015): Report on the Investigation into the Alleged Anticompetitive Conduct by the National Construction Industry Council. Lilongwe, Malawi.
- 16 NCIC: 2016 State of Competition in the Construction Industry Report
- 17 The Regulations requiring foreign-local firm partnership were passed in January 2010 (for construction consultants) and January 2014 (for construction firms)
- 18 In Malawi, Regulations are subsidiary legislation, hence they are gazzetted and become passed as an implementation framework for an Act of Parliament, and hence Regulations are backed by the Act.
- 19 Interview with the (National) Roads Authority

- 20 Members of the Council (NCIC Board) include representation from: Master Builders Association, Malawian Building Contractors and Allied Trades Association; Board of Architects and Quantity Surveyors; Board of Engineers; Association of Consulting Engineers; Board of Registration of Land Economy Surveyors, Valuers, Estate Agents and Auctioneers and material suppliers [Section 4(1) of the NCI Act].
- 21 Miscellaneous contractors include: bore-hole drilling, structural steel fabricators and erectors, landscaping, painting, mechanical and interior partitioning, plumbing and water proofing, glazing etc
- 22 NCIC: Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers (2013, revised)
- 23 OECD (2007). Policy Roundtables: Competition in Bidding Markets.
- 24 In 2013, the NCIC embarked on Project Registration in order to monitor performance of firms. Project Registration collects data from construction clients. The main providers of the information are the Department of Buildings which functions as the central Government Buildings project managers, the Education Infrastructure Management Unit, the Roads Authority, the Ministry of Health, Central East African Railways, Millennium Challenge Account, commercial banks, and other private firms.
- 25 Maintenance contractors are those involved in rehabilitation of already constructed structures; while Development contractors are those involved of construction new structures
- 26 The Table captures the Top 10 firms that won 12 or more contracts. The Analysis is based on data sourced from the Roads Authority which had sample of 923 observations (both development and maintenance contracts).
- 27 Nyasa Times. (2016). Corruption in Malawi Construction Industry: Change Model of Delivery. Published on 23 November 2016.
- 28 Nyasa Times (2016). Poor Chinese Work: Malawi Minister Urges Contractor to Adhere to Standards. Published on 3rd February 2016.
- 29 Malawi News Agency. (2016) Malawi: Substandard Construction Work of Rumphu Stadium Irks Minister. Published on 28th January 2016.
- 30 Malawiana (2016). Corruption in Malawi Construction Industry Angers VP Chilima. Published on 16 November 2016.
- 31 Nyasa Times (2017). Malawi Government to Probe Poor Road Constructions – Mutharika. Published, 26th May 2017.
- 32 GAN Business Anti-Corruption Portal (2016 ). Malawi Corruption Report.
- 33 NCIC: Procedures for Registration of Contractors, Consultants and Construction Material Manufacturers and Suppliers (2013, revised)
- 34 As stated above, these Boards include: Board of Engineers, Board of Registration of Land Economy Surveyors, Valuers, Estate Agents and Auctioneers, and Board of Architects and Quantity Surveyors.
- 35 NCIC: Procedures for Registration of Contractors, Consultants and Material Manufacturers and Suppliers. (2013 revised).
- 36 Information sourced from the Roads Authority
- 37 Information sourced from the Roads Authority
- 38 These may include Registration fees (NCIC and Statutory Boards); membership renewal fees (NCIC plus industry associations); project specific fees etc
- 39 Please see details on Foreign-Local firm partnership in the Section 2 on “Regulatory Framework for the Construction Industry”
- 40 Malawi Government (2005): Public Procurement Regulations; Article 68
- 41 Malawi Government: Public Procurement Regulations; Article 74(b)
- 42 Nyasa Times. (2016). Corruption in Malawi Construction Industry: Change Model of Delivery. Published on 23 November 2016.
- 43 Please see details on the Impact of Foreign-Local firm partnership requirement in the Section 2 on “Regulatory Framework for the Construction Industry”
- 44 GAN Business Anti-Corruption Portal (2016 ). Malawi Corruption Report.
- 45 Please see details on use of standard bid documents which include cost items in the Section 4 above on “Price Determination in the Construction Industry”.
- 46 NCI Act, (2014). National Construction Industry (Sub-Contracting and Joint Ventures by Foreign and Malawian Construction Firms) Order



# CHAPTER 8

ANALYSIS OF THE STATE OF  
COMPETITION IN KENYA'S  
CONSTRUCTION MARKET



## INTRODUCTION

The Competition Authority of Kenya (CAK) is established under the Competition Act, No. 12 of 2010 (the Act). The Authority's mandate is to enforce the Act with the objective of enhancing the welfare of the people of Kenya by promoting and protecting effective competition in markets and preventing misleading market conduct throughout Kenya.

The Authority under the auspices of the Africa Competition Forum (ACF) is carrying out a research in the construction sector. The ACF is an informal network of African national and multinational competition authorities as well as regional competition agencies. The principal objective of ACF is to promote the adoption of competition principles in the implementation of national and regional economic policies of African countries. The research is aimed at assessing the level of competition and trade nexus at a regional level. The research which covers eight (8) countries Kenya, South Africa, Swaziland, Namibia, Mauritius, Malawi, Gambia and Gabon aims to inform government policies to enhance efficiency in the construction sector and also enable the countries involved to be able to collaborate in terms of exchange of information and experiences.

Through this study, the Competition Authority of Kenya (CAK) will be in a better position to assess competition issues and any anti-competitive practices that may be present within the construction industry in Kenya.

## Background of the Construction Industry

The Kenya Vision 2030 is the national long-term development policy that aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. The Vision comprises of three key pillars: Economic; Social; and Political<sup>1</sup>. Kenya Vision 2030 overall goal for the construction sector is to increase its contribution to Gross Domestic Product (GDP) by at least 10% per annum and propel Kenya towards becoming Africa's industrial hub.<sup>2</sup> The construction sector has a high potential of employment creation; provides stimulus for growth of the agricultural sector and offers significant opportunities for export expansion. The Kenyan government has planned a complete revamp of road, rail and port transport infrastructure.

The construction sector deals with building of new houses, apartments, factories, offices and schools. It also deals with building of roads, bridges, ports, railroads, sewers and tunnels, among many other things. In addition, it deals with maintenance and repair of all of those structures and produces the basic materials such as concrete that are used to make them. The industry's significance is due not only to the fact that it provides the buildings and infrastructure on which virtually every other sector depends, but to the fact that it is such a sizeable sector.<sup>3</sup>

Currently, Kenya is going through a construction boom. The government has invested heavily on the construction sector

in order to improve on infrastructure such as road networks and at the same time provide new residences for the locals. With increase in population, opportunities exist in the construction of residential, commercial and industrial buildings, including prefabricated low-cost housing. The boom can be attributed to:

- i) Inadequate infrastructure comprising rail, roads and ports presenting opportunities for continued development in the building and construction sector. For instance, in 2014 Kenya signed a Kshs 42 billion deal with a Chinese communication company for construction of the first three berths of Lamu port, part of the ambitious Lamu Port South Sudan Ethiopia Transport (Lapsset) corridor. The Lapsset project is expected to serve land locked countries in the wider Eastern Africa region. These construction projects are meant to make up for decades of under-investment that stagnated economic growth in Kenya and cement its status as East and Central Africa's commercial hub.
- ii) Secondly, the rapid growth in population, from 38.6 million in 2009 to 44.2 million in 2015, has led to a rising demand for housing in most parts of the country, grants a major chance for growth as private developers put efforts to meet the demand.<sup>4</sup> Table 1 below shows the value of buildings from 2011 to 2015.<sup>5</sup>

**Table 1: Reported Value of New Private and Public Buildings, 2011 – 2015**

Year	Private (Nairobi City County – Ksh million)			Public (Nationwide – Kshs million))		
	Residential	Non- Residential	Total	Residential	Non-Residential	Total
2011	34,046.5	5,803.4	39,849.9	2,614.2	-	2,614.2
2012	37,373.4	6,200.8	43,574.2	4,629.5	70.0	4,699.5
2013	45,236.4	7,039.6	52,276.0	1,725.4	-	1,725.4
2014	50,952.2	8,567.5	59,519.7	502.1	-	502.1
2015	58,428.5	9,645.1	68,073.6	61.5	-	61.5

Source: National Housing Corporation & the State Department for Housing

Note: Public Residential buildings are constructed by the State Department for Housing and NHC

Subcontracting in the construction industry has greatly increased in recent years. In most construction projects, especially building projects, it is common for 80 to 90% of the work to be performed by subcontractors. Subcontracting is used much more extensively on housing and building construction projects than on engineering and industrial projects.<sup>6</sup>

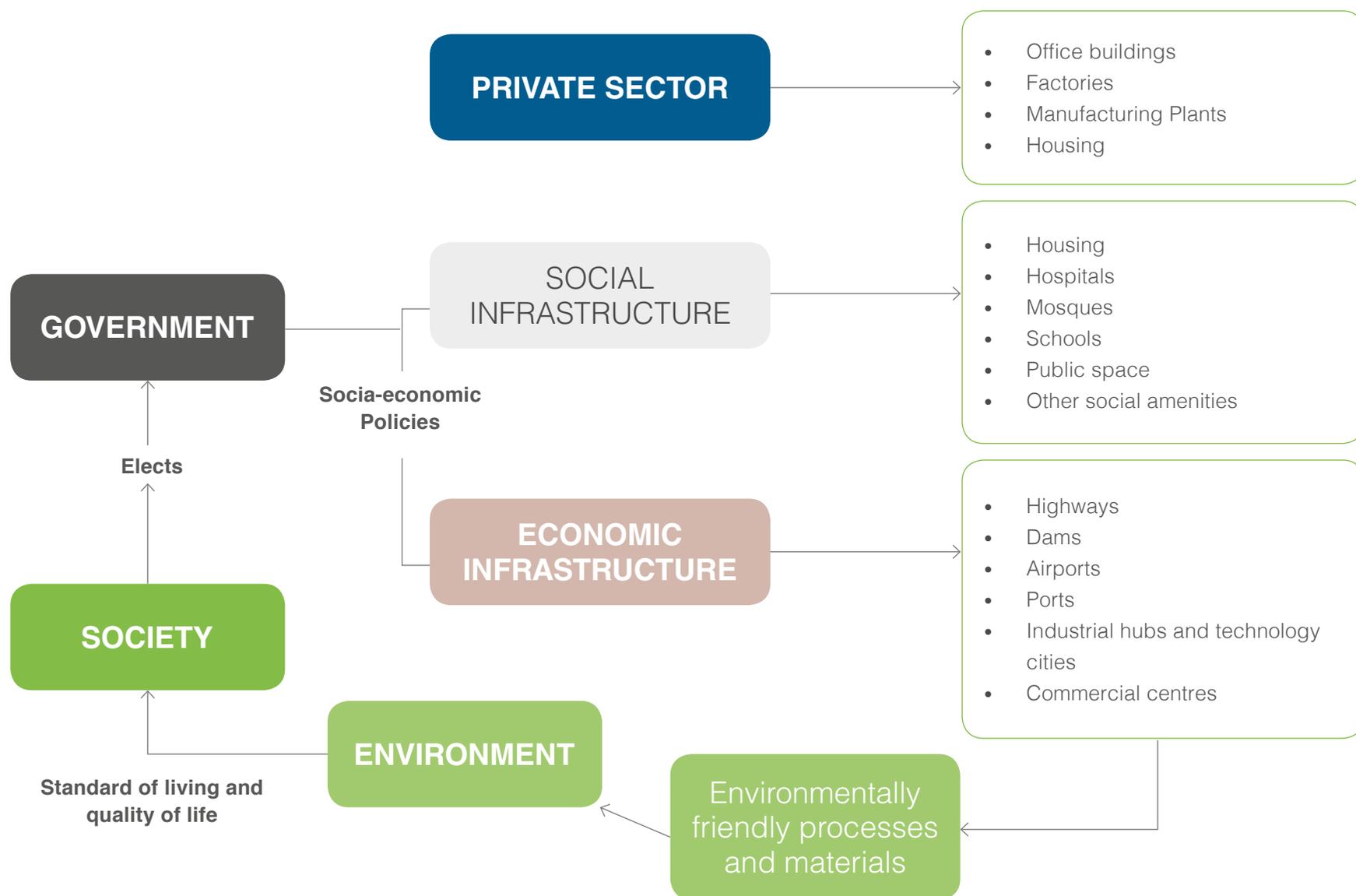
There are various forms of contracts used and choice of contract depends on the prevailing circumstances as well as other

determining factors such as time required to complete the project, nature of works and the client. The most popular form of contracting in the Kenyan industry is whereby the consultants carry out the design and a main contractor builds with the help of subcontractors. Subcontractors appointed by the client are termed nominated subcontractors and those appointed by the contractor domestic.<sup>7</sup> Some reasons as to why contractors engage subcontractors is to provide skilled labour, reduce overhead costs and as

well as reduce financial pressure on the contractors.

Kenyan firms have for a long time complained about their Chinese rivals' competitive advantage both in large public infrastructure contracts and smaller-scale private sector projects. The National Construction Authority requires that for any contract awarded to an international firm, at least 30% of the works must be subcontracted to a local firm.





## Overview of the Construction Industry

Kenya has a well-established construction industry that comprises businesses mainly involved in the construction of commercial and residential buildings, engineering structures and affiliated trade services. The construction industry is a major contributor to Gross Domestic Product (GDP) in the Kenyan economy and plays a leading role in determining economic growth. According to the Kenya National Bureau of Statistics (KNBS), the real estate and construction sectors have been some of the main drivers of economic growth in Kenya for the last five years. The Kenyan construction industry contributed 7 percent of the Gross Domestic Product (GDP) in 2015, which makes it clear that Kenya has a well-developed construction industry.

The Vision 2030 aims to strengthen the framework for infrastructure development and accelerating the speed of project completion, raise efficiency and quality of infrastructure projects and increase their timely implementation. It also aims to develop and maintain an integrated safe and efficient transport network, benchmark infrastructure facilities and services and provision with globally acceptable performance standards targeting to enhance customer satisfaction as well as enhance private sector participation in the provision of infrastructure facilities and services strategically complemented by government interventions.

According to the Economic Survey 2016 report released by the Kenya National Bureau of Statistics, the country witnessed a thriving building and construction sector in 2015 registering a growth of 13.6 per cent in value added. Formal employment in the sector grew by 11.4 per cent to stand at 148.0 thousand in 2015 up from 132.9 thousand in 2014. Total proposed development expenditure on roads

increased by 79.2 per cent. Consequently, the index of Government expenditure on roads increased from 263.4 in 2014 to 386.7 in 2015 to support projects being undertaken during the year.

The construction sector is estimated to have expanded by 9.2 per cent in 2016 compared to a relatively higher growth rate of 13.9 per cent recorded in 2015. The slower growth was principally due to a considerable reduction in the activity of the construction of the Standard Gauge Railway (SGR) as it neared completion. The significant reduction in the import of key construction materials such as iron and steel (14.5 per cent) and non-ferrous metals (2.2 per cent) were also an indication of scaling down of construction activities related to the SGR. Further, the slowed growth was also evidenced by a slow uptake of loans in the building and construction sector from KSh 106.3 billion in 2015 to KSh 104.8 billion in 2016. The estimated value of building works completed in Nairobi City County rose from KSh 70.9 billion in 2015 to 76.2 billion in 2016. Similarly, the number of new private buildings in Nairobi City County (Kenya's Capital) grew from 9,054 in 2015 to 10,002 in 2016. The construction of new public residential buildings rose from 45 in 2015 to 1,062 in 2016. During the period under review, cement consumption increased by 10.4 per cent from 5.7 million tonnes in 2015 to 6.3 million tonnes in 2016, an indication of a robust growth despite the slowdown.<sup>8</sup>

The country's 2015 Economic Outlook, shows that the construction industry is one of the major sectors drawing investors into the country. Investment prospects exist particularly in transport, slum upgrading and informal settlements, urban renewal, construction of middle and low income housing and the manufacture and supply of building materials and components.

Cement consumption went up by 9.9 per cent in 2015 in tandem with the growth in the building and construction sector. Total construction cost index increased by 4.9 per cent compared to an increase of 10.1 per cent in 2014, mainly attributable to the fall in fuel prices, a key input component of the index. The index of reported private building works completed in major towns rose from 341.4 in 2014 to 367.1 in 2015. In addition, the index of reported public building works completed in main towns registered an increase from 106.1 in 2014 to 116.2 in 2015. Loans and advances to the sector increased by 32.3 per cent from KSh 80.4 billion to KSh 106.4 billion in 2015.

## Objectives of the Study

This is a comparative analysis study that aims to map out the major players across the countries, the main changes over time and the market structures. The market dynamics to be assessed include barriers to entry, regulatory arrangements, as well as identifying strategies that can enhance efficiency in the sector. The specific objectives of the study are as follows:

- i) Assess the market structure of the construction industry;
- ii) Identify how the conduct of key players in the construction industry affect competition;
- iii) Identify barriers to entry existing in the construction industry in Kenya;
- iv) Assess the effects of existing regulations on competition in the construction industry.
- v) Make recommendations for enhancing competition in the construction industry

## Methodology

Information used in this study was obtained from a number of sources, including requests for written submissions from relevant stakeholders as well as interviews

with selected stakeholders in the industry. The stakeholders that were requested to provide information include the construction industry regulator (the National Construction Authority - NCA), Government departments, and construction services procuring entities (both public and private).

It should be noted, however, that very few stakeholders responded to the requests for information that the Authority made. Among others, the Authority received responses from: the NCA, Department of Infrastructure and the Public Procurement and Oversight Authority. In addition to the requests for information, the Authority also used secondary data from various sources including relevant studies and the internet search.

### Limitations of the Study

The construction industry consists of diverse related activities which include construction of physical infrastructure, electrical services, architecture and construction related consultancy services. As there are more than one product market in the construction industry, it is not easy to define product markets appropriately. Due to time and resource limitations, this study focuses on construction of physical infrastructure and mainly civil engineering works. These include heavy constructions such as roads, bridges, tunnels, railways, airports, harbours (e.g. the lapsset project) and other water projects.

The main focus will be on government and government funded projects, with reference to the National Government, County Governments and other State Agencies/Corporations. Therefore, the findings of the study may not be applicable to the whole construction industry. The other limitation is in terms of inadequacy in data used in the analysis. The information used in this initial analysis is based on a few interactions with stakeholders and desk research.

The study is structured as follows: Section 2 presents the regulatory framework and Statutory Boards; Section 3 looks at the general state of competition in the construction industry; Section 4 looks at the price determination and section 5 gives an analysis of the procurement policies and procedures; Section 6 provides concluding remarks.

## REGULATORY FRAMEWORK AND INDUSTRY ASSOCIATIONS

The government regulates various sectors of the economy to ensure that the consumers reap maximum benefits as opposed to letting market forces determine how things are run. Regulation is also a means of accomplishing objectives that go beyond pure competition goals such as implementation of universal policies to ensure access to basic services and subsequently contributing to economic growth that may otherwise not be achieved.<sup>9</sup> Consequently, every country regulates some sectors of its economy at any given time.

In Kenya, the construction industry is regulated by the National Construction Authority (NCA). The NCA is established under Act No. 41 of 2011 Laws of Kenya. NCA's mandate is to regulate, streamline and build capacity in the construction industry. The NCA also registers and regulates the performance of local and foreign contractors and accredits skilled construction workers and site supervisors. It has segregated construction firms into categories based on the contract value they are allowed to undertake as well as the academic requirements for the owners of the companies.

### The National Construction Authority Act No. 41 of 2011

This is an Act of Parliament to provide for the establishment, powers and functions of

the National Construction Authority and for connected purposes.<sup>10</sup> The Act establishes the National Construction Authority which has been given wide ranging powers as far as the industry is concerned. The definition of construction is also very wide and covers anything from buildings, roads, dams and telecommunication apparatus amongst others.<sup>11</sup>

The National Construction Authority Act (NCA) was gazetted in December 2011 and the NCA Board inaugurated in July 2012. It was formed with the main aim of consolidating and creating a well-regulated construction industry that will promote sustainable socio-economic development<sup>12</sup>.

### The National Construction Authority Regulations of 2014 (The Construction Regulations)

The Construction Regulations give the NCA the mandate to regulate, promote quality assurance and undertake research in the industry. Registration under each category of the Works is on a point basis pegged on criteria such as financial capacity, experience, available equipment and technical expertise. Certain Works are now exclusively reserved for local contractors as opposed to open bidding which attracts all interested bidders. Foreign contractors are only eligible to register for a NCA-1 contract (i.e. a building contract above Kenya Shillings five hundred million) whereas local contractors will be eligible to register for all categories of contracts.

In a nutshell, the regulations outline how the following should be done:-

- i) Registration of contractors
- ii) Joint ventures
- iii) Identification and reporting of construction works, contractors or projects by owner
- iv) Certification and accreditation of skilled construction workers and

- construction site supervisors
- v) Enforcement of the following:-
- Fees
  - Investigation of complaint or suspicion.
  - Removal of contractors from Register
  - Liability of principals and employers.

### Sub-Contracting and Joint Ventures

The scope of the Regulations is far reaching in that under a joint venture contract, it is mandatory to recruit employees from the local labour market and where one requires technical or skilled foreign employees, the prior approval of the NCA is sought, provided that such skills are not available locally. It is notable that while the NCA

is empowered to give an exemption from the Regulations, this power seems to be discretionary as the criteria for exemption has not been provided under the Regulations<sup>13</sup>.

The NCA may register such joint ventures that a foreign contractor enters into with a local firm or person. The Construction Regulations further require that the employees of such a joint venture be competitively recruited from the local labour market. Recruitment or employment of foreign technical or skilled workers on such contract shall only be done with the approval of the NCA where such skills are not available locally. It is important to note though that contractors may be exempted from this provision by the NCA.<sup>14</sup>

### Registration of foreign contractors

The Construction Regulations define a “foreign contractor” as:

- a firm incorporated outside Kenya; or
- a firm incorporated in Kenya in which 51% of the shares are held by a non-Kenyan.

The Regulations require that a contractor, whether foreign or local, must be registered under the category of construction works (Works) they propose to undertake. The Works are classified under eight categories; NCA-1 to NCA-7, ranging in monetary value from unlimited value contracts (NCA-1 contract) to contracts valued for Kenya Shillings five million and below (NCA-7).

**Table 2: Categories of contractors in Kenya**

CLASS	CONSTRUCTION WORKS
NCA 1	Unlimited contract value
NCA 2	Contract value up to 500,000,000 (contractors –buildings), up to 250,000,000 contact value (specialist contractors), up to 750,000,000 (roads and other civil works).
NCA 3	Contract value limited to 300,000,000 (contractors –buildings), up to 500,000,000 (roads and other civil works)
NCA 4	Contract value limited to 200,000,000 (contractors –buildings), up to 100,000,000 (specialist contractors) up to 300,000,000 (roads and other civil works)
NCA 5	Contract value limited to 100,000,000 (contractors- buildings), up to 50,000,000 (special contractors) up to 200,000,000 (roads and other civil works)
NCA 6	Contract value limited to 50,000,000 (contractors – buildings) up to 20,000,000 (special –contracts) up to 100,000,000 (roads and other civil works)
NCA 7	Contract value limited to 20,000,000 (contractors – buildings), up to 50,000,000 (roads and other civil works).

From the table above, large construction firms range from classes one (1) to three (3) while the smaller construction firms range from classes four (4) to eight (8). Each class has an upper bound on the size and value of projects it is eligible to undertake, where smaller contractors work on small scale projects while the large contractors operate on large scale development projects. NCA 1 contractors are in the unlimited category that is illegible to undertake projects of any size. The classification criteria is largely premised on three factors:

- Financial Capability;
- Technical Qualifications;
- Skills and Experience;
- Statutory Requirements (PIN certificate, VAT certificate, audited accounts, Tax clearance, etc);
- Equipment/machinery the contractor possesses.

According to NCA rules and regulations, a contractor may be registered for more than one class of construction works but may hold only one category of registration in relation to particular class of construction works at any given time.<sup>15</sup>

### Statutory Bodies and Industry Associations

In Kenya, the construction industry is regulated by various other parastatals in addition to the NCA. These institutions are mandated to manage, develop, rehabilitate and maintain public roads, develop and maintain public buildings as well as residential houses. These institutions include National Housing Corporation (NHC), Kenya Urban Roads Authority (KURA), Kenya Rural Roads Authority (KERRA), and Kenya National Highways Authority (KENHA).

In addition to government parastatals, there are governing boards and industry associations that are mandated to regulate the market and monitor the conduct of players in the industry. These include Board of Registration for Architects and Quantity Surveyors, Engineers Board of Kenya (EBK), Architectural Association of Kenya (AAK) and the Institute of Quantity Surveyors of Kenya (IQSK). These boards are established in order to execute the scheme and curriculum for professional education and other activities of matters of continuous training for the registered persons and examinations for those wishing to be registered. All applicants interested to venture into the construction industry are also vetted by these Boards, before seeking registration with the NCA.

### Overview of the other Relevant Government Acts

	Limit the number or range of contractors, e.g. establishes a license process as an operation requirement	Limit the ability of contractors to compete, e.g. significantly raises production costs of new entrants relative to incumbents	Reduce the incentive of contractors to compete vigorously; reduce mobility of consumers between suppliers
Physical Planning Act Chapter 286	<ul style="list-style-type: none"> <li>• Provide for the preparation and implementation of physical development plans and for connected purposes</li> </ul>		Provides for the appointment of the Director of Physical Planning, requires regional and local authorities to adopt Physical Development Plans in accordance with this Act and provides for control of development and subdivision of land.

Environment Management and Coordination Act (Amendment) of 2015	<ul style="list-style-type: none"> <li>Establishes the National Environment Management Authority (NEMA)</li> <li>Requires an environmental impact assessment (EIA) preliminary report to be undertaken on a project prior to its construction.</li> <li>Only consultants registered by NEMA are allowed to provide environmental impact assessment submissions, whether as an EIA project report or a full EIA study. The lead environmental expert must be registered with NEMA.</li> </ul>	<ul style="list-style-type: none"> <li>Payment of 0.1% of the estimated project cost or a minimum of ten thousand Kenyan Shillings must be made with the submission of the EIA reports</li> </ul>	<p>The Act provides for environmental protection through;</p> <ul style="list-style-type: none"> <li>Environmental impact assessment</li> <li>Environmental audit and monitoring</li> <li>Environmental restoration orders, conservation orders, and easements</li> </ul>
Engineering Technology Act No 23 of 2016	<ul style="list-style-type: none"> <li>Establishes the Kenya Engineering Technology Registration Board.</li> </ul> <p>Establishes requirements for one to work as a</p> <ul style="list-style-type: none"> <li>professional engineering technologist,</li> <li>consulting engineering technologist,</li> <li>certified engineering technician</li> </ul> <p>A person must apply for a practicing license</p>	<p>For one to be a consultant Engineer, he must be</p> <ul style="list-style-type: none"> <li>Registered with EBK as a Professional Engineer;</li> <li>Must have at least 9 years continuous professional experience of which 5 years will be post registration as a professional engineer</li> </ul>	<ul style="list-style-type: none"> <li>The Applicant shall pay 2,000/= as processing fee and Kshs. 20,000/= as registration fee for local firms.</li> <li>Foreign firms to pay 150 USD as processing fee and 600 USD as registration fee.</li> </ul>
Kenya Roads Act 2017	<ul style="list-style-type: none"> <li>provided for the creation of three new agencies to be responsible for the development and maintenance of the road network namely:</li> <li>Kenya National Highways Authority (KeNHA)</li> <li>Kenya Rural Roads Authority (KeRRA)</li> <li>Kenya Urban Roads Authority (KURA).</li> </ul>	Not applicable	Not applicable

## Devolution and County Governments

The devolved government, proposed during the making of the new constitution, is primarily geared towards achieving two main objectives.

- i) Involve the people in governance
- ii) Allow better supervision and implementation of policies at the grass root level

Established under chapter 11 of the constitution of Kenya, county governments are in charge of land survey and mapping as well as county public works and drainage in urban centre's. Of major concern is that the National Government and county

governments constantly pass laws and issue regulations touching on health, safety, environmental concerns and other issues, which more often than not, raise construction costs while at the same time curtailing the level of competition in the sector.

## Impact of the Regulatory Framework on Competition and Market Outcomes

### Registration and membership fees

The National Construction Authority Act No. 41 of 2011 obligates all contractors to register with the NCA, as well as their professional bodies and renew their

membership annually. This process involves the contractors paying registration fees and membership fees. Analysis of the respective registration fees shows a huge discrepancy between the fees paid by local contractors as compared to those paid by foreign contractors. For instance, for the NCA 1 category, local contractors pay fees of approximately KES 100,000 while foreign contractors pay approximately KES 300,000, for firms of similar category.

This gives a competitive advantage to local contractors over foreign firms. The higher registration fees paid by the foreign firms will translate to higher operation costs. Consequently, most foreign firms tend to

quote higher in order to factor in the high fees paid. That notwithstanding, the Kenyan construction sector is dominated by foreign firms as per appendix I attached. Foreign firms are only eligible to register under the NCA 1 category which encapsulates major construction projects.

### **Foreign-Domestic Firm Partnership Requirement**

A foreign firm is required to make an application to the National Construction Authority before undertaking work under category NCA-1. The application must be accompanied by an undertaking in writing that the foreign contractor shall:

- a) subcontract or enter into a joint venture with a local person or firm for not less than 30% of the value of the contract work for which temporary registration is sought; and
- b) transfer technical skills not available locally to a local person or firm in such manner as the NCA may determine from time to time;

Foreign contractors have been increasingly dominating the Kenyan construction scene over the last couple of years. Most of the contracts issued by the Kenyan government and the big private sector players in the country have been undertaken by foreign companies who are favoured by clients because of their relatively significant expertise and financial muscle. For this reason, local contractors felt that they were being edged out unfairly and consistently pushed for affirmative action which led to the enactment of the National Construction Authority Regulations, 2014 (the Regulations).

The requirement to partner with local firms gives a loophole for local contractors to quote exorbitantly high prices in partnering with foreign contractors. The challenge with this regulations is that

- a) They are not binding on the part of the foreign firms. The foreign firms may win tenders individually and it is up to them to then seek a local partnering firm afterwards
- b) The local firms may not get their fair share of the agreement. Most local firms are assigned just segments of the project and hence may not really benefit from the skills transfer initiative.
- c) Majority of the local firms lack the technical capacity and know how to handle such projects. Subsequently, the quality of work done is normally very shoddy as the labourers hired are mostly ill equipped and inexperienced.

### **Conflict of Interest on the Composition of the NCA Board**

In addition to representatives from the Ministry of Public works and devolution, the NCA Board consists of members from various industry associations such as the Architectural Association of Kenya, The Institute of Engineers in Kenya, The Institute of Quantity Surveyors of Kenya, The Law Society of Kenya and two other members appointed by the Cabinet Secretary to represent groups with special interests in the construction industry. The Board composition may result in conflict of interest as some of the members may pass regulations to ensure they protect their interests within the industry.

In summary, determining the proper relationship between competition enforcement Agencies and sectoral regulators is a complex issue that depends on not only the legal and regulatory systems of a country, but also the appropriate balance between conflicting regulatory and market-oriented objectives. It also depends on the confidence that the Kenyan government has in the effectiveness of the market so as to determine outcomes that are best for consumers and the economy as a whole<sup>16</sup>

## **GENERAL STATE OF COMPETITION IN THE CONSTRUCTION INDUSTRY**

### **Industry Structure**

The various players in the construction sector include:-

#### Contractors

Contractors for construction projects are readily available in Kenya. One may find contractors of all categories ranging from labour based contractors for simple jobs to those with the most advanced equipment in the market today and a capital base of millions of US dollars. There are also foreign-based contracting companies who have invested in Kenya such as John Gleeson and Mowlem from UK. The National Construction Authority Act No. 41 of 2011 defines a contractor as follows:-

The government sometimes carry out construction works for its own projects by using the Ministry of Public Works and Housing which is also the custodian of all government owned properties.<sup>17</sup>

## 16. Meaning of “Contractor”

- 1) For the purposes of this Act, a person carries on business as a contractor where such person, for reward or other valuable consideration, undertakes the construction, installation or erection, for any other person, of any structure situated below, on or above the ground, or other work connected therewith, or the execution, for any other person, of any alteration or otherwise to any structure or other work connected therewith, and undertakes to supply
  - a) the materials necessary for the work, or is authorized to exercise control over the type, quality or use of the materials supplied by any other person;
  - b) the labour necessary for the work, or is authorized on behalf of the person for whom the work is undertaken or any other person, to employ or select workmen for employment for the purposes of the execution of the work, whether under a contract of service or otherwise: Provided that a person shall not be deemed to be a contractor if the work undertaken -
    - i) does not incur a cost exceeding such sum or sums as the Board may from time to time determine; or
    - ii) Consists of a residential house for private use, not requiring a structural design.
- 2) The Board shall register eligible contractors to undertake any of the classes of contracted works set out in the Third Schedule depending on their knowledge and experience.

### ***National Construction Authority Act, No. 41 of 2011 [Rev. 2012]***

#### Architects

The architect designs the form of the building providing space to meet the client's needs and also incorporating aesthetics based on cultural and regional trends and environmental aspects. Regulation of entry is very strict, with regulation requiring one year of practice and successful completion of a professional exam to become a full member of the profession. Furthermore, becoming an architect in Kenya requires having at least one year of domestic experience or demonstrating sufficient knowledge of the country's building contract procedures. In addition, a relatively high number of services (four) are provided by the profession under an exclusive or shared right. Cooperation is only allowed between comparable licensed professionals.<sup>18</sup>

According to the OECD competition assessment toolkit, license or permit requirements are often stricter than is necessary for consumer protection and can unnecessarily reduce consumer choice and create artificial scarcity that raises prices.

While licensing schemes often have well-founded consumer protection objectives, such barriers frequently have the effect of protecting incumbent producers from competition. Care needs to be taken that license and permit requirements do not become more onerous than is necessary to achieve the sought regulatory objectives.<sup>19</sup>

#### Engineers

Engineers have the unique role of solving social problems through the use of machines, devices, systems, materials and processes. Entry into the profession involves basic requirements such as a mandatory exam to practice the profession, in addition to compulsory university education (five years on average), and licensing. Engineers also enjoy exclusivity rights, in some cases together with architects, for some activities such as the preparation of feasibility studies, planning, designing, drawing, construction, commissioning, operation, maintenance, supply of specialized engineering equipment, and management of engineering works or projects. Conduct is not strictly

regulated, with the only constraint being that cooperation is allowed only between comparable licensed professionals.<sup>20</sup>

#### Quantity Surveyors/Building Economists

It is common practice in Kenya to incorporate bills of quantities in the tender documents. The advantage of this is that all the tenderers have the same project parameters and therefore make it quite easy to analyze the bids and also ensures responsiveness of the tenders. As a result building economists provide an invaluable role in the construction process. Ideally the building economist is not part of the design team but provides staff input for the architect or project manager. Building economists are readily available in Kenya although they have traditionally been termed quantity surveyors.

#### Environment Experts

In the earlier days projects were constructed without much regard to the sustainability of the construction industry or care for

the environment. Construction projects require huge amounts of the Earth's natural resources and it is, therefore, necessary to protect the environment from the vagaries of the industry. Environmental experts assess projects and draw environmental impact assessment with a view to minimizing the negative effects while enhancing the positive ones.

### Clients

The clients include government parastatals, county governments, and individuals, private companies such as a banks, industrial organizations or institutions such as schools or hospitals. Pension funds and insurance companies are also involved in the construction industry as clients. The client normally initiates the project and provides the design team with a project brief based on his needs and budgetary constraints and therefrom the design team undertakes to propose solutions to the client's needs.

### Project Managers

The concept of independent project managers is fairly new in Kenya and is the process of taking root. Previously one of the design consultants used to act also as a project administrator and would provide the necessary liaison between the client and the design team. The disadvantage of such a set-up is that a person may lack objectivity as a project administrator and favour his team leading to unnecessary conflicts between the various consultants and the contractor

in a project and affect the implementation of the project. Indeed this has been the case in Kenya up to a point where the market has lost confidence in the industry.

### Social Scientists

Social scientists analyze projects and come up with recommendations appertaining to gender and other social issues thus incorporating a social dimension to projects. This helps in maximizing the benefits accruing from a project. For example building of a factory in a certain location may appear to be a good idea considering the number of jobs that will be available to the local populace but on the other hand if not carefully implemented this may lead to growth of slum areas in a bid to provide shelter and social amenities for the labourers in the factory. Therefore, demographic effects of the project need to be assessed and results incorporated in the design.

### Material Suppliers

There are enough construction material suppliers in the country at the moment to satisfy the demand. Materials such as paints, glass, cement, steel, plastic and ceramic wares are all manufactured locally. However there is a dire need for increased prefabrication to minimize wastage and improve on the quality of the finished product and delivery time. This is an area where the suppliers can capitalize on as the players are very few. Maybe when the number of prefabricators increase the

cost of prefabricated products will reduce making such goods more attractive to contractors as opposed to site fabrication and thus making construction cheaper to the clients.

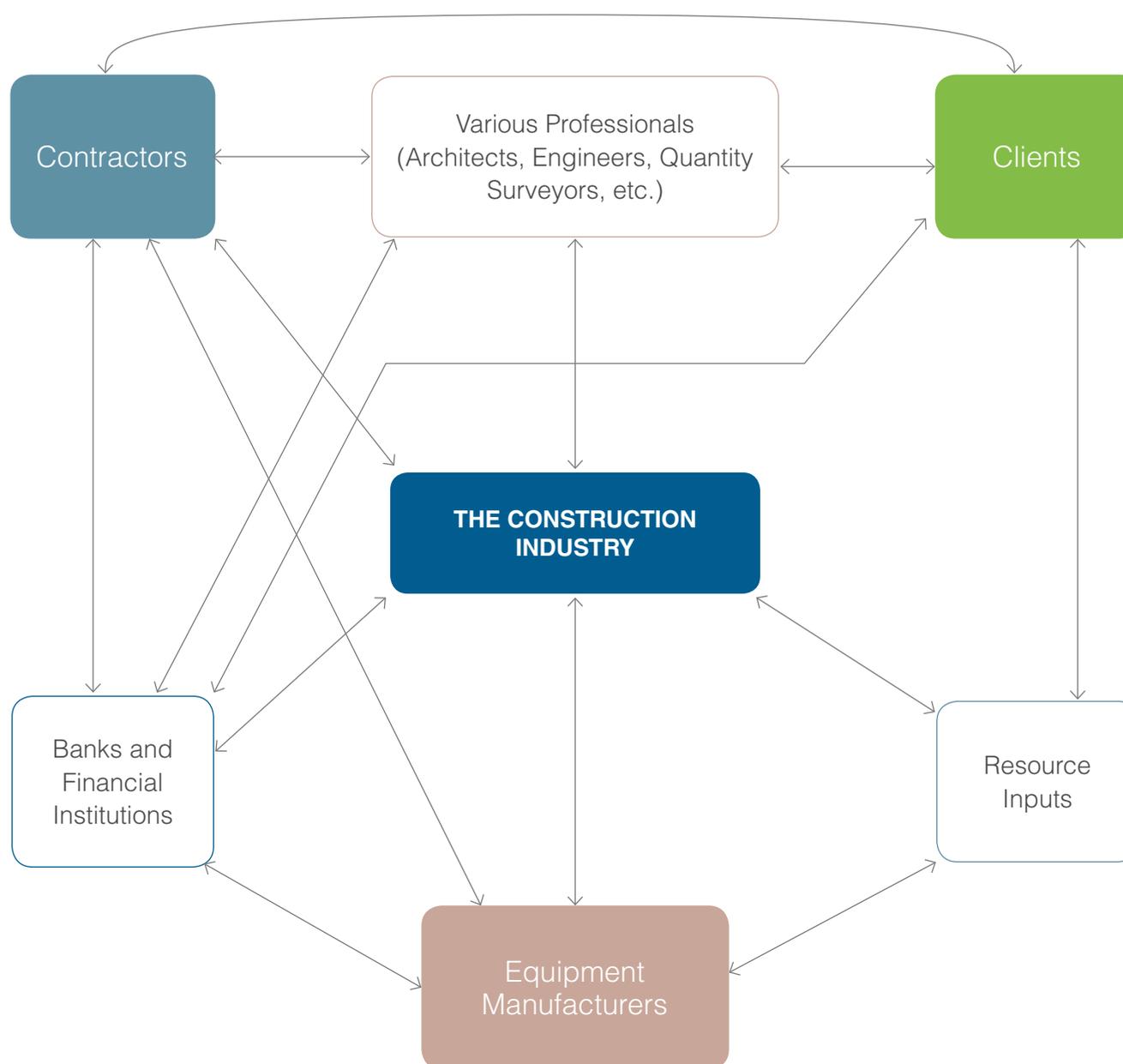
### Financial Institutions

There are various finance institutions from which investors may get financial assistance such as banks, mortgage companies, non-governmental organizations, public and private pension funds, financial and insurance companies. All these are organizations that need to invest for long terms. Of particular interest to the building industry are mortgage companies which are created purposely for the building industry. World Bank, African Development Bank and bilateral aid agencies also finance projects through loans and grants to the government and non-governmental Organizations.

### Property Managers

Once the facility is complete and has been occupied property managers take over to ensure that the value of the facility is maintained by putting in place proper maintenance and operation procedures for maximization of the utility and profits accruing from the facility.

**Figure 1: Main Players in the Construction Industry and their Inter - Relationships**



**Number of Construction Firms in Kenya**

The National Construction Authority (NCA) whose mission is to regulate, streamline and build capacity in the construction industry in Kenya is the regulator of local and foreign contractors operating in Kenya.<sup>21</sup> According

to NCA 18,000 contractors registered with NCA in 2015 with local contractors forming about 50%. As at 2015, 111 NCA 1 contractors applied for registration with NCA. More than 50% of NCA 1 contractors were from local Kenyan companies. 80 percent of Kenyan contractors fall below

NCA 4 and as such lack requisite financial capacity, equipment and manpower to undertake massive projects.<sup>22</sup>

The table below shows some of the major construction projects currently being undertaken in the country:-

	PROJECT	DESCRIPTION	MAIN CONTRACTOR (S)	COST
1	LAPSSET	The LAPSSET Corridor Program is a regional flagship project intended to provide transport and logistics infrastructure aimed at creating seamless connectivity between the Eastern African Countries of Kenya, Ethiopia and South Sudan	<ul style="list-style-type: none"> <li>China Roads and Bridge Corporation the international arm of China Communications Construction Company</li> </ul>	Estimate of US\$24.5 billion, equivalent to Kshs. 2.4 Trillion
2	Standard Gauge Railway	The project comprises the construction of the USD 200 million Nairobi Commuter Rail Network and the USD 3.2 billion Mombasa Nairobi-Malaba Corridor	<ul style="list-style-type: none"> <li>China Road and Bridge Corporation</li> </ul>	Estimated cost of shs. 484 billion
3	Dongo Kundu	The Dongo Kundu bypass, which is part of a three-phase plan to decongest Mombasa. To develop the traffic route to Mombasa South Coast towards Tanzania, alleviate congestion in this area and facilitate the logistics from the new container terminal through development of the Kipevu Link Road and Mombasa Southern Bypass (Dongo Kundu Bypass).	<ul style="list-style-type: none"> <li>China Civil Engineering Construction Cooperation (CCECC)</li> </ul>	Estimate of kshs. 25 billion
4	Nairobi Public Transport System	The rail and road system-hyped as the long-sought solution to Nairobi's public transport mayhem, aims to ease urban mobility and make commuting a less stressful experience for the over 2.6 million people currently entering or leaving the city daily	<ul style="list-style-type: none"> <li>Gauff Ingenieure- JBG and PB-Consult GmbH (GER) (Gauff Consultants)</li> </ul>	Estimate of kshs. 100 million

Many construction projects could not be efficiently completed without some degree of sub-contracting. Even large contractors have to rely on smaller, more specialized firms for some aspects of their projects. However, at times, a winning bidder will sub-contract part of a project to a firm that would ordinarily be its rival. In fact, firms in the construction sector often consider talking to and partnering with each other to be a normal way of doing business.

Whereas in one project companies might truly behave like independent competitors, in another project they might form a joint venture or have a contractor/subcontractor Agreement. That kind of complex relationship causes headaches for competition authorities because it may

not be clear whether or not meetings and communications between the companies served a legitimate business purpose. Some of the largest construction firms in Kenya are:-

- China Road and Bridge Corporation
- China Wu Yi
- Southern Engineering Company Limited
- H Young Company EA Ltd
- Civicon Ltd
- Zakhem Construction Limited
- Cementers Limited
- SS Mehta & Sons Limited
- Vaghjiyani Enterprises Limited<sup>23</sup>

### Barriers to Entry in the Construction Industry.

The entry of new players restrains the exercise of abuse of dominance and excessive market power of incumbent players. One indication of a competitive market therefore is that it must be possible for a new firm to enter and for existing firms to expand or exit. The exercise of market power is unlikely when entry is likely, timely and sufficient

For small construction firms, the start-up costs for entering their local market tend to be low. That may be due to the fact that relatively few pieces of equipment have to be bought. Small firms commonly lease equipment on an as-needed, project-by-project basis. There are other financial

hurdles, though. Customers with substantial projects often require construction firms to post a bond, which acts as a financial guarantee for the customer in the event that the firm is unable or unwilling to fulfil its obligations. The standard amount of the bond varies substantially from country to country, being as little as zero to as much as the entire value of the contract. These bond requirements may present formidable obstacles to new firms, especially if they are small.

There exists a lot of business rivalry in the construction sector. This is mainly seen through rivalry between foreign owned firms and local contractors who perceive the foreigners as a threat of substitutes within the industry. Competition focuses heavily on price because companies typically cannot fund major innovations.<sup>24</sup> Kenyan construction industry is not insusceptible to challenges and impediments just like in other developing countries in Africa and the entire world, there are several setbacks in the construction industry. Examples of such setbacks include lack of transparency in bid procedures, inelastic demand, highly cyclical business, large number of buyers and sub-contracting, to name but a few.

### Strategic Barriers

#### *Government Regulations*

The NCA has segregated construction firms into categories basing on the contract value they are allowed to undertake as well as the academic requirements for the owners of the companies. Owing to this fact those companies that do not meet the minimum requirement are unable to access projects that are beyond their scope in terms of financial and academic parameters.

Barriers to entry in this industry are not only restricted to construction firms but also to professionals bodies. The professional

regulatory framework has procedures and criteria that have seen qualified professional registered with the bodies but at rates that have seen a number of court cases involving the registration of individuals to these bodies for example registration to Engineers Regulatory Board and Board of Registration of Architects and Quantity Surveyors (BORAQS).

### Natural and Intrinsic Barriers

#### *Technology*

In construction sector technology is crucial since it affects performance, hence those construction companies that do not possess the required technology are unable to compete with the ones that are well equipped. Construction companies that fall short in regards to technology are not in a position to undertake certain technologies this especially applies to small construction companies who cannot afford to purchase certain equipment to facilitate in completing the project.

### Entry and Exit Dynamics

#### *Capital*

Quite a number of construction companies are below the NCA 4 category thus are unable to undertake massive projects. Such companies are unable to fully take advantage of economies of scale when compared to big companies who possess financial power. Among other challenges experienced in this industry, capital has been outlined as one of the major challenges faced by entrepreneurs in the construction sector, coupled with complacency among the contractors as they tend to settle for what they have attained. However, the sector is expected to grow faster towards the end of the year as commercial banks continue to lower lending rates (CBK, 2015).

In addition, some of the machines acquired by contractors cannot be used after the assignments are completed resulting in various sunk costs. Furthermore, various administrative constraints (such as: building permissions, special qualifications) or costs of complying with quality regulations may constitute barriers to entry.<sup>25</sup>

#### *County Levies*

The imposition of higher levies, charges and taxes by many of Kenya's 47 new counties is causing increased concern to traders, consumers and investors because of the impact on business costs and the threat of higher inflation. The wide disparity between tax levels in different counties poses an additional complication. Counties cite the need for revenue, but new local-level taxes will reinforce the impression that Kenya is a high-cost economy and will potentially have a negative impact on investment.<sup>26</sup>

#### *Registration Procedures and Costs*

Firms that intend to carry out construction work in Kenya are required to be registered by the NCA. This applies to both local and foreign firms, although registration requirements and fees paid vary. The firms also need to be vetted by statutory bodies for the respective professions.

#### *Partnership*

Kenyan Nationals can gain entry into the sector freely. However, foreign companies are limited to only one project at any one time. 30% of the contract business should be handled in Kenya. Foreign staff must also acquire immigration permits.

## PRICE DETERMINATION IN THE CONSTRUCTION INDUSTRY

Unlike most of the sectors of the economy, the construction industry does not have structured units of measurement which can be quantified to determine the price. It is not possible to calculate straight forward standard costs as the determinant factors vary from project to project.

The table below shows the annual percentage changes in construction input price indices for the period 2014 to 2016. Overall, the total cost index grew by 4.1 per cent in 2016 compared to a 4.9 per cent increase in 2015. This may be attributed to a slowed rate of increase in compensation of employees in 2016. Stability of prices of inputs in construction occasioned by the relative stability of the Kenya Shilling against other currencies also contributed to a lower increase in the construction cost

index. However, other material inputs such as timber, hydrated lime and structural steel recorded increases in prices in 2016. The rate of change of the total cost index of residential buildings and other construction was 3.4 per cent and 5.0 per cent, respectively, in 2016. Wages in the Building and Construction sector increased by 7.9 per cent in 2016 compared to 10.0 per cent increase in 2015.<sup>27</sup>

	Materials			Labour			Total		
	2014	2015	2016*	2014	2015	2016*	2014	2015	2016*
Residential Buildings	8.7	2.0	1.5	7.9	10.0	7.9	11.2	4.3	3.4
Non-Residential Buildings	7.6	1.9	1.4	7.9	10.0	7.9	9.4	4.7	3.6
All Buildings	8.2	1.9	1.5	7.9	10.0	7.9	10.4	4.5	3.5
Other Construction (roads, bridges and dams)	6.7	0.7	1.2	7.9	10.0	7.9	9.6	5.6	5.0
Overall Cost Index	7.7	1.5	1.4	7.9	10.0	7.9	10.1	4.9	4.1

Source: KNBS and Ministry of EAC, Labour and Social Protection<sup>28</sup>

\*Provisional

## PROCUREMENT POLICIES AND PROCEDURES

### The Public Procurement and Asset Disposal Act No. 33 Of 2015

An Act of Parliament to give effect to Article 227 of The Constitution; to provide procedures for efficient public procurement and for assets disposal by public entities; and for connected purposes enacted by Parliament of Kenya. Information to bidders and contractors is made available the standard procurement and asset disposal documents pursuant to: Section 58 (1) & (2) and Section 70 (2), (3) & (6) of Public Procurement and Assets Disposal Act, 2015(the Act herein after referred to as PPADA, 2015).

Section 67 of PPADA, 2015 restricts disclosure of information relating to a

procurement whose disclosure would:

- Impede law enforcement or not be in the public interest;
- Prejudice legitimate commercial interests, intellectual property rights or inhibit fair competition.

NB: The restrictions do not apply where:

- the disclosure is to an authorized employee or agent of the entity involved in the procurement proceedings
- the disclosure is for the purpose of law enforcement
- the disclosure is pursuant to a court order
- the disclosure is to PPRA or Public Procurement Administrative Review Board

Regulations arising from the Public Procurement and Asset Disposal Act are currently in the process of being developed

### Debriefing of award results

Notification letters are sent to both the successful and unsuccessful bidders. NB: Section 87 (3) of PPADA, 2015 requires notification letters to unsuccessful bidders disclose the successful tenderer and also inform the unsuccessful tenderers on why their bids were unsuccessful.

Entities required to: publish and publicise all contract awards on their notice boards and website if available; and to report all contract awards to PPRA; The E-Tendering/ procurement is used/carried out through the Integrated Financial Management Information System (IFMIS) under National Treasury.

The procurement law has made provision for the application of preference and reservation scheme under part XII of the

Act (sections 155, 156, 157 & 158 of the Act) with the main objective of ensuring sustainable promotion of local industry and for purpose of protecting and ensuring the advancement of persons or groups previously disadvantaged by unfair competition or discrimination, reservations, preferences.

To ensure a level playing field, the National Treasury and PPRA are mandated to monitor and evaluate the implementation of the preference and reservations. The Kenya Anti-Corruption Commission jointly with the Public Procurement Oversight Authority developed Corruption Prevention Guidelines in Public Procurement in 2009. The guideline outlines corruptions risks in public procurement system.

Part XV of the Act provides for the administrative review of procurement and disposal proceedings. A candidate or a tenderer, who claims to have suffered or to risk suffering, loss or damage due to the breach of a duty imposed on a procuring entity by the Act or the Regulations, may seek administrative review by the Public Procurement Administrative Review Board. In addition, Section 175 (1) of the Act states that a person aggrieved by a decision made by the Review Board may seek judicial review by the High Court

### **Impact of Procurement Policies on Competition and Market Outcomes**

The procurement policies and procedures highlighted above have various positive attributes. These ensure that the procurement process is fairly competitive and follows due process. It also ensures participation of local contractors in construction projects, while at the same time boosting the local capacity in the construction industry

### **Foreign-local contractor partnership**

The requirement for foreign contractors to ensure that 40% of the contract business is handled in Kenya or by local contractors has its benefits. However, this arrangement also has adverse effects on competition and outcomes on the market as well as the quality of work produced. The National Construction Authority also reviews incorporation certificates issued by foreign counterparts in other countries in its evaluation of foreign contractors.

### **Use of standard procedures for bidding**

Under Section 9(1) (k) of the Act the Authority is mandated to develop and manage the State portal on procurement and asset disposal and ensure that it is available and easily accessible. Similarly, Section 9(1) (m) of the Act requires the Authority to create a central repository or database that includes:-

- a. Complaints made on procuring entities;
- b. a record of those prohibited from participating in tenders or those debarred;
- c. market prices of goods, services and works;
- d. benchmarked prices;
- e. State organs and public entities that are non-compliant with procurement laws;
- f. statistics related to public procurement and asset disposal;
- g. Price comparisons for goods, services and works; and (any information related to procurement that may be necessary for the public.

The Public Procurement and Asset Disposal Authority in the process of developing the state portal as part of the monitoring and evaluation framework

## Endnotes

- 1 <http://www.vision2030.go.ke/about-vision-2030/>
- 2 <http://www.knbs.or.ke>
- 3 Competition in The Construction Industry, DAF/COMP(2008)36
- 4 <http://www.knbs.or.ke>
- 5 The Economic Survey 2016, KNBS
- 6 Construction Contracting by Clough, Richard & Sears 1994
- 7 Construction process in Kenya by Eng. Peter Kimari  
<http://www.hdm.lth.se/fileadmin/hdm/alumni/papers/icm2000/ICM2000-10.pdf>
- 8 The Economic Survey 2017, KNBS
- 9 The Role of Competition Agencies In Regulated Sectors  
<https://www.justice.gov/atr/file/519376/download>
- 10 [http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/NationalConstructionAuthorityAct\\_No41of2011.pdf](http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/NationalConstructionAuthorityAct_No41of2011.pdf)
- 11 <http://www.erubiengineering.com/?p=43>
- 12 <http://building.co.ke/introduction-to-the-national-construction-authority/>
- 13 <http://www.africalegalnetwork.com/blog/2015/04/legal-alert-kenya-the-national-construction-authority-nca-stiffens-regulations-on-foreign-contractors-in-kenya/>
- 14 <http://www.oraro.co.ke/alert/building-a-strong-national-foundation-local-content-in-kenyas-construction-industry/>
- 15 <http://www.nca.go.ke>
- 16 Role of Competition in Regulated Sectors by Stuart M. Chemtob
- 17 <http://www.lth.se/fileadmin/hdm/alumni/papers/icm2000/ICM2000-10.pdf>
- 18 UNLOCKING GROWTH POTENTIAL IN KENYA; Competition Authority of Kenya (CAK), and the IFC, a member of the World Bank Group (WBG).
- 19 <http://www.oecd.org/daf/competition/46193173.pdf>
- 20 UNLOCKING GROWTH POTENTIAL IN KENYA; Competition Authority of Kenya (CAK), and the IFC, a member of the World Bank Group (WBG), 2015
- 21 <http://www.nca.go.ke>
- 22 <http://www.constructionkenya.com/3000/nca-registered-contractor>
- 23 National Construction Authority
- 24 Factors Affecting Performance Of Local Road Construction Companies In Kenya; Sirkoi 2015
- 25 OECD COMPETITION IN THE CONSTRUCTION INDUSTRY , DAF/COMP(2008)36
- 26 <http://country.eiu.com/article.aspx?articleid=1871570571&Country=Kenya&topic=Economy>
- 27 KNBS Economic Survey 2017
- 28 KNBS Economic Survey 2017



# CHAPTER 9

COMPETITION CHALLENGES ARISING



## INTRODUCTION

Chapter 9 highlights both the common and unique competition challenges identified in the African market studies set out in the preceding chapters. Where relevant these challenges are grouped according to themes. Moreover this chapter draws from the experience of the foreign markets discussed in chapter 2 in confronting the competition challenges in the various construction industries.

In this regard we consider the market features enabled the competition challenges to form and develop and we set out the extent to which these features may be present in the identified African markets. The resulting discussion aims to provide African competition agencies with a point of reference against which to identify possible competition concerns arising in their respective jurisdictions.

## CHALLENGES IDENTIFIED IN THE COUNTRY STUDIES

The preceding market studies identified the following features which, to varying degrees, may pose competition challenges for the

construction markets in which they prevail.

Vertical relationships

- The impact of input markets
- Vertical integration

Horizontal relationships

- Joint ventures
- Sub-contracting
- Cross directorships
- Conflict of interest
- Information sharing

Market structure

- Barriers to entry
- Market concentration

Regulation

- Anti-competitive regulations
- Standard setting
- Public procurement

Other competition challenges, namely pricing and concurrent jurisdiction

### Vertical relationships

Defining the concept

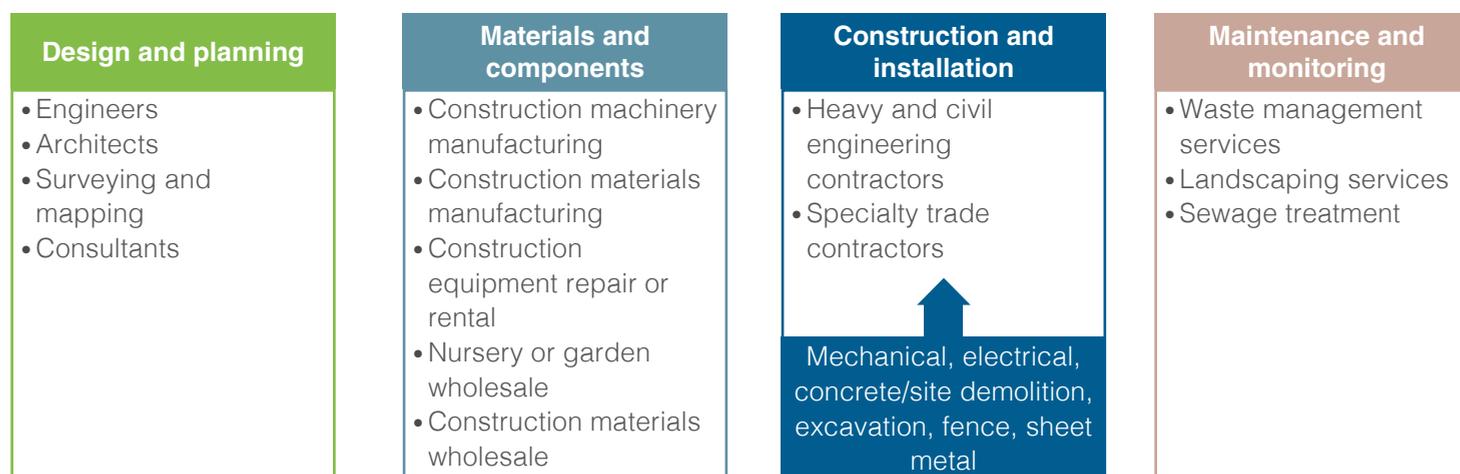
Vertical relationships, in competition terms, denote interactions between firms

at different levels of the value chain and, specifically, between customers and suppliers. Vertical integration can be defined as the consolidation of companies at different stages of production or distribution within the same industry. Vertical integration can be backward or forward in nature.

In construction, sub-contracting may be indicative of a purely vertical relationship between firms. However experience shows that sub-contracting may have horizontal consequences, which has more serious implications for competition in the industry. As such, this chapter considers the implications to be drawn from sub-contracting in the discussion on horizontal relationships in construction and not under vertical relationships.

In general terms the construction value chain consists of four stages, namely (1) design and planning; (2) materials and components (also referred to as input markets); (3) construction and installation; and (4) maintenance and monitoring.

**Diagram 1: The construction value chain**



Within the construction context, therefore, vertical integration refers to consolidation or cooperation between firms along the four stages illustrated above.

#### African market experience with vertical relationships

##### *Namibia*

The Namibian study presumed that some of the larger contractors operating in Namibia were backwardly integrated into input markets such as bricks, cement, aggregates and ready mix concrete. The study concluded that the extent of the vertical integration not only increased barriers to entry, but also increased the possibility of coordinated conduct as it created platforms for information sharing. The study further pointed out that the major construction companies, especially the South African companies, were vertically integrated into infrastructure and construction materials, such as bricks and aggregate products. This increased the possibility of information sharing, as the construction companies were not only competitors but also enjoyed each other's custom.

##### *South Africa*

South Africa's construction market also displays features of vertical integration. The South African country study revealed that extensive upstream and downstream linkages exist in the construction sector in South Africa. According to the study this vertical integration allows contractors to function more efficiently in delivering construction services. As such, some of the largest construction companies are constantly looking to acquire an important input supplier. For instance Raubex, largely a road contractor, recently acquired an important input supplier for bitumen, Tosas.

##### *Swaziland*

The Swaziland country study found that two construction companies, Du Van Developers and Afrotim Swaziland have "associated companies" or "partners" which have the potential to exclude other firms from meaningfully participating in the industry. Firms that are usually sub-contracted by Du-van Developers include: Build-Tech; Brickon, Unison Concrete and Mega Electrical. Build-Tech supplies building materials such as roofing materials, floor materials, finishing materials and other specialist materials. Brickon supplies all masonry products such as blocks, precast concrete elements, and paving items amongst others. Unison Concrete supplies ready mix concrete to various sites where Du Van works and is also available to other independent contractors and Mega Electrical is in the business of electrical installations and services.

Afrotim Swaziland works in partnership with Swaziland Truss and Timber Products Company. Swaziland Truss and Timber Products Company exclusively supply Afrotim with timber for roofing. Based on the information gathered, Du-Van Developers and Afrotim are vertically integrated with their "associated companies" and/or "partners". These relationships remain a cause for concern because for any tender won by Du-Van Developers and Afrotim, the other players have zero chance of being sub-contracted except for the partnering companies.

##### *Mauritius*

The Mauritius study found that some major players in the industry are vertically integrated. Typically cement suppliers are vertically integrated with companies which are active in the downstream markets for the supply of ready-mix concrete, aggregates, and blocks. Some of these companies are

also active in the supply of construction contracting services. According to the study this may give them a competitive advantage with respect to their competitors who are not vertically integrated. Such advantage could result in benefits for consumers in terms of price and innovative products and services. In some cases, however, these vertically integrated companies may be involved in restrictive business practices such as refusal to deal/supply to gain an unfair advantage over their competitors or to exercise market power by exploiting customers.

The Mauritius study identified one of the reasons for vertical integration in this industry as being security of supply. Upstream producers integrate with downstream distributors to secure a market for their output. Firms are then better able to control access to inputs and control the cost, quality and delivery times of the inputs. When two companies are vertically integrated such as Lafarge (Mauritius) Cement Ltd and Pre-mixed Concrete Ltd, among others, this implies that they will have easier access to inputs and be able to control the output and therefore gain a competitive advantage over their respective competitors.

Upstream suppliers who are vertically integrated might squeeze the margins of their competitors, since the former can control their costs more effectively through their downstream subsidiaries and be better able to compete in the downstream market. In certain cases, vertically integrated companies might use their position to foreclose access to inputs to their competitors. For instance, by refusing to deal with competitors or by giving competitors more unfavourable trading terms than they would have given to their subsidiaries.

Equally however, in the Mauritian experience, firms may use their vertical integration advantage to benefit consumers. Some of the stakeholders in Mauritius submitted that vertically integrated companies may not necessarily act in a harmful manner or have the objective of foreclosing small contractors and restricting competition. These companies are likely to have the ability to invest in innovation and improve the quality of its products to the benefit of the consumers.

The Mauritius competition agency has in the past applied competition remedies to concerns of potential market abuse arising from the vertical integration of firms within the construction industry. In a previous investigation conducted by the competition authority in Mauritius, on the Holcim/Lafarge merger and the subsequent divestment of Holcim Ltd to Gamma-Civic Ltd, the executive director expressed some concerns about the vertical links of Gamma-Civic Ltd in the construction market, through its presence in sub-markets. The executive director was particularly concerned that Gamma-Civic Ltd, through its acquisition of Holcim Ltd, would consolidate its vertical links in the construction industry by becoming an integrated player (from cement supplier to the finished construction project contractor).

Gamma-Civic Ltd proposed undertakings or commitments to the competition authority to address these concerns. In the said undertakings, Gamma-Civic Ltd, through its subsidiary, Kolos Cement Ltd, cement supplier, undertook to deal with all its clients and potential clients at arm's length and would not apply any discriminatory policy in relation to the supply of cement, nor to the terms and conditions of supply of cement, in favour of entities related to Gamma-Civic Ltd, without the prior approval of the competition authority. Gamma-Civic Ltd also maintained that it would not discriminate

against its rivals with regards to the price of cement, the supply of cement and the related terms and conditions.

The extent of vertical integration in the construction industry in Mauritius is illustrated in Chapter 5.

## CONCLUSION

The African country studies identified the potential competition concerns and benefits arising from general vertical relationships and from vertical integration within the construction industry. Such relationships may increase the barriers to entry for new construction firms since incumbents could foreclose downstream rivals or engage in margin squeezing tactics. Vertical integration may also facilitate information sharing, thus increasing the risk of collusion. On the other hand, vertical integration may benefit customers since vertically integrated firms are likely to have the ability to invest in innovation and improve the quality of products to the benefit of the consumers. Moreover vertical integration allows contractors to function more efficiently in delivering construction services since they are able to deliver a holistic, centrally managed, solution to customers.

However whether firms use their vertical integration to benefit or harm the market is a matter of observation, investigation and fact which, as pointed out by the Mauritian competition agency, requires constant monitoring.

An assessment of the factors enabling the Dutch construction cartel reveals that vertical integration played a role in facilitating the establishment and persistence of the cartel. The Dutch construction market was a bidding market, where the relevant market could be defined by the number of firms that were invited to take part in the bidding. For large, complex

projects only a limited number of large, often vertically integrated construction firms could meet the demands set in the procurement procedure (e.g. a certain track record in the specific market). In many cases, smaller firms could not meet these criteria by themselves. In that case, they could only compete by forming a consortium with other firms (which also limited the number of competitors on the market for a given project) or they could act as sub-contractors.

### BOX 4: VERTICAL RELATIONSHIPS IN CONSTRUCTION

#### Competition challenges posed by vertical relationships and vertical integration in construction

- May pose a barrier to entry for new construction firms
- May lead to margin squeeze on rivals
- May lead to foreclosure of downstream rivals
- May facilitate collusion as smaller rivals are left vulnerable and seeking protection
- May lead to anti-competitive information sharing

#### Competition benefits of vertical relationships and vertical integration in construction

- Model may deliver efficiencies for customers
- Larger, vertically integrated firms can pool resources to innovate and improve quality

### Horizontal relationships

#### Defining the concept

Horizontal relationships denote the interactions between competitors or

potential competitors in the construction industry. Relations between competitors are notorious in competition law because of their potential to lead to cartelisation, a most egregious violation of competition law. Cartels can harm the market and consumers in various ways. Companies who operate in a cartel can become complacent and lose their incentives to innovate for the benefit of their customers. Consumers, on the other hand, lose out on the benefits of competition, that is, obtaining the best quality product at the best price. Conventional economic wisdom finds that competitive markets are best suited to deliver this result to consumers.

Horizontal relationships appear on a spectrum of harm depending on the nature of relationship competitors are engaged in. Hard core cartels, the likes of which are discussed in chapter 2, are clandestine arrangements which represent the most harmful types of horizontal relationships, leading to increased prices and decreased quality over sustained periods. Information sharing, in this context, refers to the act of competitors sharing trade related information with one another. This occurs most commonly within the auspices of trade associations and may lead to anti-competitive outcomes where such information sharing leads to collusion.

In competition, cross directorships refers to the placement of company directors on boards that inherently give them access to competitor information. This can be in the form of directors sitting directly on the boards of competing firms alternatively sitting on the boards of bodies that competitors have in common. A common example in construction can be found in the regulatory bodies that govern the affairs of the construction industry. These bodies often benefit from the expertise offered by active market participants however they can also serve as a platform for information

exchange and ultimately collusion. This is because, much like an industry association, regulatory boards provide an opportunity for competitors to meet regularly and discuss industry concerns. Moreover, regulatory bodies often have the authority to compel industry participants to furnish them with market data, which gives the competitors sitting on the board access to more market information than they would have in the ordinary course of trade, thus creating fertile ground for collusion.

Finally industry bodies such as regulatory authorities, trade associations and professional bodies also raise the potential for conflicts of interest to occur on their respective boards of directors. This occurs when an active industry participant faces choices that may benefit the constituency the body serves but may simultaneously harm the industry participant's more narrow interests. The preceding market studies reveal all of the above concerns with horizontal relationships in the construction industry in varying degrees.

However horizontal relationships can take other forms which may lead to efficiencies that ultimately benefit the market. A commonly occurring example of such a relationship in construction is the joint venture. A joint venture is a commercial enterprise undertaken jointly by two or more parties which otherwise retain their distinct identities. In construction, joint ventures are typically formed for the duration of a specific construction project, after which the joint venture is dissolved. Reasons for the formation of joint ventures vary greatly and may include the pooling of construction expertise and the empowerment of small and medium sized entities.

Sub-contracting primarily occurs between two parties in a vertical relationship. Within construction, however, sub-contracting also occurs between parties in a horizontal

relationship, that is, between competitors or potential competitors. This is particularly the case for very large, highly specialised construction projects where contractors require external expertise to conclude a project successfully. In such a case, firms who would ordinarily compete for the same project may end up in a vertical, sub-contracting, relationship thus raising the risk of competitors exchanging competitively sensitive information and increasing the potential for collusion.

#### African market experience with horizontal relationships

##### *South Africa*

The South African construction market has a history of cartelisation. These findings were revealed in an investigation by the South African competition agency which uncovered widespread collusion and resulted in administrative penalties of a combined R1.5bn for the construction firms involved.

Initial suspicion of possible anti-competitive behaviour by construction companies emerged after the National Treasury and various local municipalities expressed concerns regarding the sharp increases in costs of constructing stadia for the 2010 world cup tournament. Furthermore, international experience of bidding rigging in the construction industry prompted the Commission to initiate an investigation.

Accordingly, the Commission initiated an investigation into the construction industry on the 1st of February 2009 relating to tenders for the construction of 2010 FIFA World Cup stadia. Shortly thereafter, the second investigation was initiated on the 1st of September 2009 and this covered all large and small tenders for construction projects. Resulting from these initiations, the Commission received approximately

150 marker applications (or leniency applications waiting in a queue) and 65 applications for corporate leniency which implicated the majority of medium and large construction firms. These included big construction companies such as Murray and Roberts, Group Five, Stefanutti Stocks, WBHO and Aveng.

Given this response from the construction industry, the Commission developed and launched a fast track settlement programme on the 1st of February 2011. The principles of the fast track settlement programme were adopted from similar programmes utilised by the Office of Fair Trade (“OFT”) and the Netherlands competition authority (“NMA”). The aim of this programme was to incentivise firms to cease anticompetitive conduct and enter into a comprehensive settlement with the Commission which was financially beneficial to them. Through the fast track settlement programme, construction firms admitted to rigging 298 contracts to the value of R111.9 billion. Of these contracts 141 fell within the statutory period allowed for prosecution. The Commission concluded settlements with the majority of the firms involved in bid rigging and collusive tendering of projects that took place between 2006 and 2009 in 2013. The total administrative penalties from that settlement process amounted to R1.46 billion. Construction firms that did not settle their matters with the Commission during the fast-track process have since continued to either settle or contest their matters in the Competition Tribunal.

The revelation of a long-standing and widespread cartel in South Africa is arguably not surprising given the extensive upstream and downstream linkages that exist in the South African construction sector and the lumpy nature of demand. The South African market displayed many of the characteristics of the Dutch market prior to the uncovering of the Dutch construction

cartel. These included external factors such as cyclical demand, a bidding market and market concentration as defined in construction markets, as well as internal factors between the cartel members such as frequent opportunities to communicate on industry bodies and reciprocity amongst market participants. Moreover the 2010 Soccer World Cup event presented a once-in-a-lifetime opportunity for construction firms to engage in large scale projects within the deadlines set by the soccer federation, FIFA, leaving the State with little bargaining power against the construction firms.

#### *Kenya*

The Kenyan market study points out the potential for conflict of interest arising from the composition of industry bodies. The National Construction Authority comprises representatives from the Ministry of Public Works and devolution, members from various industry associations such as the Architectural Association of Kenya, The Institute of Engineers in Kenya, The Institute of Quantity Surveyors of Kenya, The Law Society of Kenya and two other members appointed by the Cabinet Secretary to represent groups with special interests in the construction industry. According to the market study the Board composition may result in conflict of interest as some of the members may pass regulations to ensure they protect their interests within the industry.

The blurred lines caused by sub-contracting and the formation of joint ventures in construction were raised as a potential concern in the Kenya market study. The study observed that, in Kenya, many construction projects could not be efficiently completed without some degree of sub-contracting. Sub-contracting in the construction industry has greatly increased in recent years. In most construction projects, especially

building projects, it is common for 80 to 90% of the work to be performed by sub-contractors. Sub-contracting is used much more extensively on housing and building construction projects than on engineering and industrial projects and the complexities that arise from the different capacities in which competitors address one another can raise concerns for competition authorities.

#### *Namibia*

The Namibian market study concludes that the industry is prone to collusion due to fact that the relevant product is simple and not very differentiated. Relatively speaking, most construction firms in Namibia are low-tech businesses. They tend to use fairly basic materials to build the same things their competitors build. Many customers do not care which firm they hire so long as the firm carries out the work according to plan and charges a comparatively low price.

According to the study, procurement takes place by means of transparent bid procedures. The general public often has access to bid openings for construction projects, at least in auctions for public procurement. Procurement laws and administrative regulations tend to require a certain amount of transparency so as to discourage corruption. Procurement officials may be required to disclose information such as the identity of bidders and the terms and conditions offered in each bid.

Housing, commercial building and public works all depend on flows from other major sectors. Boom and bust cycles in those sectors therefore affect construction firms too. The demand for construction works – once it is there – tends to be fairly price inelastic. A town that needs a new sewer system, for example, is probably not going to be sensitive to modest price increases.

There is a large and varied number of buyers. It includes individuals, large and small businesses as well as municipal and national governments. The size and heterogeneity of these customers make it more difficult for them to compare information than would be the case if there were only a few buyers.

The Namibian study also found that sub-contracting is common, which raises the risks common to ambiguous relationships and frequent communication between competitors.

### *Swaziland*

The Swaziland market study found that the construction industry in Swaziland is susceptible to collusive arrangements for the following reasons: high concentration levels especially for the higher value, more complex categories of projects; high barriers to entry; and joint ventures particularly between large companies. Other factors that are likely to cause collusive arrangement include: the lack of price sensitivity, sub-contracting of rivals and transparent bidding procedures.

In Swaziland, preference is given to domestic firms when awarding construction tenders. Foreign firms who wish to enter are compelled to form joint ventures with domestic counterparts. Even though no study has been undertaken to establish whether or not the preference given to domestic companies for projects facilitates collusive arrangements or not, it raises barriers to potential competitors. The increase in joint ventures in this industry remains a cause for concern.

The high level of transparency through the continued release of bidding results and details on major construction projects in the country makes it easier for firms to predict the possible moves of their rivals in future bidding rounds. This increases the

likelihood of collusive agreements in the industry especially for the higher categories which are highly concentrated.

The possibility of conflicting interests is also considered in the Swaziland market study. The fact that some directors of construction firms are board members of the Construction Industry Council (CIC) creates room for the manipulation of decisions for personal gain. On the other hand, board members from different associations serve as resource persons in the board when there are critical issues to be resolved.

Concerning procurement the study established that despite having clear provisions which even prohibit public officers and politicians from participating in tenders, there have been cases in which politicians or other individuals with direct interests in certain transactions have participated. The CIC Act provides for severe consequences in cases where firms are found to have engaged in collusive conduct or corrupt practices.

### *Mauritius*

#### **Conflict of interest**

In Mauritius, the construction industry is mainly regulated by the government through the Construction Industry Development Board (CIDB) which operates under the auspices of the ministry of public infrastructure and land transport. The CIDB is administered by its Construction Industry Development Council. The Construction Industry Development Council comprises members which are representatives from the different sectors of the construction industry, who by virtue of their registration are subjected to the regulatory control of the CIDB. It is fairly representative of both the public and private sector and is comprised of representatives from various ministries, construction professional associations, small

and medium enterprises of the construction sector and a person having a wide experience in the construction industry.

A common issue that very often arises is the conflict of interest when making decisions. Council members, by virtue of their position, may unjustly favour their own enterprises to the detriment of competitors and customers. While some conflict of interests might not necessarily amount to a restrictive business practice as defined by the Competition Act 2007, this might be hindering competition in the construction sector by putting stakeholders not represented at the Construction Industry Development Council at a competitive disadvantage. Concerns have also been raised about possible corruption.

It is however highlighted that there are internal procedures set up for the Construction Industry Development Council to mitigate the potential conflict of interest concern. Members of the Construction Industry Development Council are provided with the agenda of the council meeting prior to the meeting so that they may determine whether any potential conflict of interest would arise. Where any conflict of interest is declared, this is recorded by the Council secretary in the minutes of the Council meeting and the member who has declared the interest does not take part in the proceedings or decision in relation to that matter.

#### **Joint ventures**

In Mauritius the CIDB does not permit joint ventures between firms of equal grading. The CIDB explained that the rationale for imposing such restriction is that lower grades contractors may not have the required project management and administration skills required to undertake projects of higher grades.

Smaller contractors have raised concerns in relation to the prohibition of joint ventures between contractors of same grades, in particular between contractors of lower grades. They submitted that this can potentially act as a barrier to expansion to smaller contractors. For instance, if there is a project for which a single contractor of a particular grade is unable to bid for, a joint venture among contractors of the same grade can allow them to bid and deliver for that particular project. For example, two grade F (up to Rs 25 million) contractors forming a joint venture to bid for a grade E project (Up to Rs 50 million). Although together both contractors (grade F) will have the capacity to perform the grade E project, under the current grading system, they will not be allowed to bid for this project.

The CIDB however highlighted that one grade of contractors may move up the ladder and bid for a higher grade of projects by joint venture with a contractor in the same higher grade. With such contracts, lower grades contractors will be able to acquire necessary skills and experience to enable them to move to higher grades. Alternatively, small contractors can also merge, work together for a period of time, expand and then request for an upgrading. Moreover, in view of promoting more competition, especially among the lower grades contractors, the CIDB has reviewed the scale of the grading since 1st March 2017 by increasing the grading limit of some grades.

### **Trade associations**

Trade associations benefit their members in a number of ways. For example, they perform an important information gathering

function that would be difficult for its members to perform individually. It may also help in the establishment of standards, promotion of innovation and representation of its members before legislative bodies.

While a large majority of trade association activity can be pro-competitive or competitively neutral, they may sometimes fail to take account of anti-competitive issues which can result in them engaging in illegal conduct. These associations may sometimes be used by competitors as a platform to meet and discuss pricing and business strategies. Common examples of such conduct is price fixing, bid-rigging and market sharing.

### Conclusion

The African market studies share several similarities with international case studies conducted in chapter 2.

Late payments by large contractors was cited as one reason that drove UK construction firms to find alternative means to secure business, raising their incentives to collude. Swaziland, in its market study, concludes that most challenges faced by construction SMMEs in Swaziland emanate from lack of access to finance, poor record keeping and inadequate technical and late payment by government. The study recommends that the government should ensure that payments are honoured in time to minimise challenges that are faced by firms due to delays.

Cyclical demand, market concentration, sub-contracting, the formation of joint ventures and frequent opportunities for communication were all cited as factors

that enabled the formation and continued existence of the Dutch construction cartel. The African market studies display similar characteristics to a large degree and they all recognise the potential for collusion to occur in these conditions. Indeed South Africa records a history of widespread collusion in its construction market.

Variations on the Japanese system of designated suppliers were also present in the African market studies conducted. While the Kenyan market study does not expressly refer to an approved list of designated suppliers, as provided for in Japan, the Kenyan National Construction Authority has segregated construction firms into categories based on the contract value they are allowed to undertake as well as the academic requirements for the owners of the companies. As shown in the foreign examples set out in chapter 2, this approach may increase the risk of State sponsored corruption although it is designed to improve quality and reduce costs.

In South Africa the amended CIDB regulations (2013) further provide a ranking framework for construction projects based on both track record and available capital. This criterion allows different firms to tender for different projects in grades 1 to 9. Therefore, the CIDB rating system regulates the extent to which firms can participate in public sector construction tenders. These regulations bear some resemblance to the Japanese designated supplier system. Although they are aimed at managing the project budget and quality, these regulations may increase the risk of State sponsored corruption as firms clamour to appear on the list of designated service providers, similar to the Japanese example.

## BOX 5: HORIZONTAL RELATIONSHIPS IN CONSTRUCTION

### Competition challenges posed by horizontal relationships in construction

- Joint ventures may produce efficiencies however they increase the risk of anti-competitive information sharing
- Similarly, sub-contracting may blur the lines between appropriate and inappropriate information sharing
- Designated supplier lists enhance market concentration, limiting the pool of competitors and revealing the identity of bidders, thus raising the potential for collusion
- The composition of regulatory boards and industry bodies raise the dual concern of information sharing and conflict of interest

### Competition benefits of horizontal relationships in construction

- Joint ventures allow firms to pool intellectual and financial resources for the benefit of the construction project and the development of SMMEs in construction
- Designated supplier lists allow the customer – which, in the African market studies conducted, is often the State – to secure appropriate expertise and manage its budget
- The availability of active industry expertise on regulatory boards and other industry bodies assists those entities to stay abreast of industry development and facilitates quality decision making

## Market structure

### Defining the concept

Both the African market studies and the international case law set out in chapter 2 revealed that market structures play a significant role in the prevalence of cartels. To a large extent, the country examples discussed herein display similar characteristics in their respective construction markets.

One such characteristic is a high degree of market concentration. As explained earlier, in construction, although there may be many market participants registered with the competent authorities to provide construction services, markets are defined more narrowly because (1) construction projects require specialised expertise which may not reside in all registered market participants; and (2) even where many firms possess the required expertise, regulatory authorities often rank market participants according to their financial capacity to successfully carry out a project and, in that way, limit the number of firms eligible to bid for a project.

The second common characteristic of construction markets which is relevant for this discussion is the significant barriers faced by potential entrants into the market. Substantial capital requirements, technological advancements, stringent regulatory requirements and entrenched structural hurdles have all been cited as formidable barriers for potential entrants to overcome. Research shows that collusion tends to form and succeed in highly concentrated markets (due to the small number of participants to be managed) with substantial barriers to entry (due to the lack of disruptors who may pose a threat to the cartel).

### Market structures in the African markets selected

#### *Kenya*

For small construction firms in Kenya the start-up costs for entering the local market tend to be low. That may be due to the fact that relatively little equipment has to be bought. Small firms commonly lease equipment on an as-needed, project-by-project basis. There are other financial hurdles, though. Customers with substantial

projects often require construction firms to post a bond, which acts as a financial guarantee for the customer in the event that the firm is unable or unwilling to fulfil its obligations. The standard amount of the bond varies substantially from country to country, being as little as zero to as much as the entire value of the contract. These bond requirements may present formidable obstacles to new firms, especially if they are small. The financial hurdles tend to threaten small and local firms more than they do the larger foreign owned firms. Moreover, the financial barriers extend beyond start-up costs to cover equipment costs and the corporate taxes which vary from county to county in Kenya.

Regarding the barriers posed by regulation, the NCA has segregated construction firms into categories based on the contract value they are allowed to undertake as well as the academic requirements for the owners of the companies. Companies that do not meet the minimum requirement are unable to access projects that are beyond their scope in terms of financial and academic parameters. Regulatory barriers also apply to the registration of professionals in the industry.

In construction, technology is crucial since it affects performance. Hence, those construction companies that do not possess the required technology are unable to compete with the ones that are well equipped. This especially applies to small construction companies in Kenya who cannot afford to purchase certain

equipment in order to successfully carry out a construction project.

that the higher the grade of registration, the fewer market players participate in that category.

#### Swaziland

In Swaziland market concentration is depicted as a function of the grading system. The figure below demonstrates

**Diagram 2: Number of building contractors, civil contractors and electrical contractors by category**



\* On the x-axis: B is for Building; C is for Civil; E is for Electrical; and F is for Foreign. Entry requirements comprise regulatory requirements as well as other requirements such as the availability of start-up capital and the availability of qualified personnel. The construction industry is capital intensive therefore the availability of start-up capital serves as a substantial barrier to entry. Moreover to enter a specific field of the industry requires special skills or expertise which tends to create a barrier to qualify for some projects. The grading system applicable in Swaziland poses a barrier to expansion. The regulatory requirement for

some categories of firms to pursue only projects applicable to categories within which they are registered remains an expansion barrier, especially for civil and building contractors. Firms are not allowed to tender or bid for projects that exceed the value of the firm.

Furthermore, the CIC requirement for foreign firms to partner with local firms in order to do construction works in Swaziland can be considered as a barrier. This requirement has resulted to perpetual joint ventures with cartel-like features.

The Swazi market structure is also affected by long standing corporate relationships. Most construction companies have developed ties with their clients such that it would be difficult for new firms lacking experience to enter any market in the construction industry and be successful. Firms that have successfully completed projects usually stand a better chance of being awarded large projects.

#### Namibia

The Namibian construction market also displays high structural and regulatory

barriers to entry. The barriers to enter the Namibian construction industry, especially the contractor segment, for both construction of buildings and infrastructure projects are quite high. In addition to the regulatory barriers and the extent of vertical integration, the industry is faced with a dire shortage of specialised skills, such as engineers.

Namibia has a serious shortage of engineers, technologists and technicians. There are estimates that the shortage stands at about 50 construction project manager in 2015 and the number will increase to 100 in 2020. In the year 2013 and 2014, the National Planning Commission carried out econometric forecasts to provide a holistic picture of skills shortages in the construction industry. The finding of the econometric forecast was supplemented by interviews, meetings, workshops and a literature study with a view to providing a holistic picture of skills shortages in the industry sector. Table 4 on page 39 indicates shortages per occupation or occupational category over two periods of 2015 and 2020. Financial requirements, customer loyalty and vertical integration were also cited as barriers to the Namibian construction market.

The regulations applicable to the Namibian construction industry require market participants to meet financial thresholds before they qualify to undertake construction projects. They also require the firm to demonstrate that its human resources are capable of managing construction projects, thus constituting further regulatory barriers.

#### *South Africa*

Similar to the Swaziland example, the South African construction market displays a higher level of concentration in the higher, more specialised grades of construction expertise. Grade 1 holds the majority market

share of 89% across all classes of work, with specialist class of work (SW) being the highest by 93.8% market share and electrical being the lowest by 75.8% market share. Grade 9 holds the least market share across all classes of work as they all hold less than 1% market share. This goes to show that the higher the grade, the fewer contractors are registered. This may be due to higher barriers to entry.

Barriers to entry vary based on the scale of entry. Small contractors such as those classified under CIDB grading 1 face relatively lower barriers to entry in this market. The vast majority of CIDB graded firms in South Africa are characterised as grade 1.

This may be indicative that entry in this category is relatively easier as compared to the higher grading levels. However, barriers to entry increase when contractors tender for high value projects; graded levels 2 to 9 under the CIDB rating system. Market participants submit that for high valued projects; some of the barriers to entry include capital requirements, access to equipment, complying with black economic empowerment credentials and attracting skilled workers. In addition, the incumbent larger construction companies are dominant and this further acts as barriers to entry for any new entrant.

The main barriers to entry in the construction industry can thus be summarised as following:

- a) registration compliance and regulatory requirements;
- b) high initial capital requirements;
- c) operating costs that are substantial given that this industry has low profit margins;
- d) requirement to possess industry specific knowledge;
- e) need to attract skilled labour whilst the supply thereof is limited.

In addition, the implementation of the CIDB rating system can also act as an additional barrier to entry for public tenders as it limits the number of firms that can participate in this industry. More so, the CIDB ratings' dual requirements of financial capacity and work capacity further acts as significant barrier to entry for those other firms that are capable to participate in this industry but for the track record.

On the basis of the above, it appears that barriers to entry are high for high valued projects that are typically classified between grades 2 to 9.

#### Conclusion

It is trite that high levels of concentration coupled with high barriers to entry make a market conducive to anti-competitive conduct, including collusion. This was also demonstrated in the Netherlands, UK and Japanese examples of collusion within their respective construction industries. In the Netherlands, although there were many firms registered to participate in the construction industry, the classification of firms according to size and speciality meant that only a few firms were eligible to bid for construction works at any given time, thus limiting the market to fewer firms. This small number meant that the cartel was able to facilitate discussions between potential bidders more easily. As previously mentioned, the Japanese system of designated suppliers had a similar impact and also helped to facilitate collusion. The African market studies revealed similar characteristics in their construction industries and all the studies concluded that these features may leave the industries prone to collusion and other forms of anti-competitive conduct.

### Box 6: Competition challenges posed by high barriers and high concentration

- The number of firms registered as contractors may be a misleading indicator of concentration since projects are often specialised, limiting the number of potential competitors;
- High levels of concentration facilitate collusion as the cartel would have fewer members to organise and monitor
- High barriers to entry minimise the threat of new entry thus creating a comfort zone for cartels to form and thrive

### Regulating construction

#### Defining the concept

The regulation of the construction industry covers a wide range of areas. Sector specific policies outline what the government hopes to achieve in the construction industry and the broad principles it will adhere to while legislation sets out the methods and procedures the government will use to achieve its policies. Professional rules, on the other hand, set the standards by which professions in the construction industry must conduct themselves for purposes of ensuring fairness in the market and safety for the public, in line with the policies and legislation developed for the industry. The rules set for public procurement are highly relevant for assessing competition issues in the construction industry and are generally embedded in countries' respective statutory provisions for the industry.

#### African market experience with regulating construction

##### *Swaziland*

The list of laws governing Swaziland's construction industry are set out in Chapter 6. A number of these laws are fairly new therefore, as the Swaziland market study points out, the full effects of the laws have not yet been realised. However the potentially positive and negative effects of Swaziland's regulatory regime are set out as follows:

Positive effects of the regulatory framework on competition:

- Improved registration of new and existing contractors;
- Yearly renewal of certificates for firm in the sector;
- The process of awarding contracts is reviewed by an independent team;
- Swazi firms are given a priority in the construction industry before foreign owned;
- Quality standards on: construction, contract documentation, codes of practice, procurement processes, legal and contractual processes;
- Information is disseminated to stakeholders on best practice, industry performance and improvement and other matters affecting the construction industry; Safety standards in the construction industry as well as ensuring best practice by industry participants; and
- Monitoring and evaluation the capacity and progress of industry participants.

Negative effects of the regulatory framework on competition:

- The categorisation of firms compels firms to compete only for a specified category. As a result the highest categories are oligopolistic in nature with too much transparency and the

possibility of either explicit or tacit collusion; and

- The requirement for foreign firms to form joint ventures with local firms if they intend undertake construction in certain projects in the country is a cause for concern. As stated above before a foreign company is awarded a tender the CIC has to ensure that there is no domestic firm/company that is capable to do that work first. Whilst this is done to promote the Swazi firms, this has a negative impact to competition. The requirement that foreign firms should form joint ventures with Swazi firm may result in cartelisation.

Swaziland's procurement rules provide for the evaluation and selection of contractors on the basis of price, technical qualifications, or on a combination of price, technical qualifications, time, and other factors. The more popular procurement methods are traditional sealed bidding and sole source selection. The Swaziland market study states that traditional sealed bidding is most commonly used by the public sector and typically involves price fixing and open bidding. Sole source selection is used by the private sector and involves negotiating the target price by market participants. Large construction projects in Swaziland are owned by the government.

Swaziland's Public Procurement Act of 2011 has specific transparency requirements. It provides that all procurement shall be conducted in a manner which promotes the economy, efficiency and transparency for all goods and services in the public sector. These include construction services and inputs used in construction.

Benefits derived from the Swaziland procurement system may be linked to tangible results such as saving time and money on finding and processing

bids, reducing corruption and increased competition among players. However the Japanese and Dutch examples set out in chapter 2 illustrate the disadvantages associated with increased transparency within the bidding process. Competitors gain knowledge of each others intentions and, given a small number of bidders, the likelihood for collusion increases as well.

### *Mauritius*

The market study on construction in Mauritius notes that the overarching concern with public procurement is that, because formal rules governing public procurement generally make communication among rivals easier, they can promote collusion among bidders and therefore reduce rivalry, with detrimental effects on the efficiency of the procurement process.

In view of facilitating detection of anti-competitive concerns and issues in public procurement, the competition authority of Mauritius has entered into a Memorandum of Understanding (MoU) with the Public Procurement Office. This MoU has helped in promoting co-operation and coordination between the CCM and the PPO when dealing with bid-rigging cases in public procurement. It also facilitated the treatment of cases of bid rigging within the public sector.

Moreover, the Procurement Act prohibits bidders to engage in collusion before or after a bid submission, designed to allocate procurement contracts among bidders, establish bid prices at artificial non-competitive levels or otherwise deprive a public body of the benefit of free and open competition. The Procurement Act further allows the PPO to suspend or debar potential bidders or suppliers on, inter alia, ground of collusion – price fixing.

An analysis of the tender exercises carried out by public bodies in Mauritius over the period 2013-2016 shows that the majority of such bidding exercises occurred via restricted bidding. While restricted bidding can be less burdensome, assists in cost and time savings, reduce the danger of low quality bids and produce better value for money, it is likely to hamper competition in the procurement process due to the limited number of private participants. Thus, one issue that may arise is the criteria of selection of bidders to send requests for bids. It is important that the public sector strikes the right balance between keeping the necessary tension among participants and avoid any confidentiality issue.

With a view to increasing bid responsiveness, contractors have suggested that the process of invitation to bid for restrictive bidding could be done in two stages. In the first stage, the concerned public body can send an email to prospective bidders and request them for their interest for the bids. Bidders can then be shortlisted only based on those expressing their interest to bid.

Similar to the Swaziland example and the UK industry discussed in chapter 2, small and medium contractors in Mauritius have pointed out that timeframe for disbursement of funds causes them to have cash flow problems. They do not receive any advance payment for projects worth below Rs 5 million. There are also certain public bodies which also delay the disbursement of claims and can take up to 6 months before they are paid. These may limit their ability to compete and grow and consequently have the effect of distorting competition. In the UK, late payments were cited as a direct contributor to collusion in the industry. It is, therefore, necessary for the public entities to adhere to the financing schedules that have been agreed under the contract to allow contractors to effectively undertake projects.

One of the proposals in relation to addressing the issue of cash flow problems faced by small contractors is to facilitate them in obtaining advances to meet the project costs. This could be done through advances granted by government-owned financial institutions against the contracts that have been awarded to them.

Like in many countries, the CIBD in Mauritius has put in place a grading system for contractors. The contractors are categorised between Grade A and Grade H according to their work and financial capabilities. The rationale of the grading system is to have an effective classification method for the proper regulation of the industry. The benefits of having a grading system cannot be ignored since it is the grading system itself which allows an efficient procurement process wherein the right contractors for the project can be easily identified. This can therefore expedite the procurement process.

The registration of professionals of the construction industry, engineers, quantity surveyors and engineers is subject to stringent conditions of age, academic qualification and post qualification experience.

The degree of diligence and responsibility required is very high for construction works given the nature of work and the amount of money involved, the hazard that a faulty work represents to the lives of people and the damage that sub-standard work can cause. It is for these reasons that the licensing criteria by professional bodies are essential in order to ensure that quality works are delivered. It is therefore submitted that the licensing requirement, though considered as a barrier to entry in the respective profession, should be seen as essential to ensuring that the quality of work delivered meets the required standards.

## South Africa

Participation in public sector construction tenders in South Africa is regulated by the Construction Industry Development Board (“CIDB”). The CIDB Act, 2000 provides for an establishment of the CIDB in order to implement an integrated strategy for the reconstruction, growth and development of the construction industry. Therefore, firms that wish to participate in public sectors’ tenders have to be registered with the CIDB under relevant categories.

There are various contractor registration categories under the CIDB system. Broad categories includes Civil Engineering (“CE”), Electrical Engineering Works - Building (“EB”), Electrical Engineering Works - Infrastructure (“EP”), General Building (“GB”), Mechanical Engineering (“ME”) and Specialist Works (“SW”).

The amended CIDB regulations (2013) further provide a ranking framework for construction projects based on both track record and available capital. This criterion allows different firms to tender for different projects in grades 1 to 9. Therefore, the CIDB rating system regulates the extent to which firms can participate in public sector construction tenders.

In South Africa the CIDB has a toolkit that describes proven good practice for procurement, programs, projects, risk and service management. The Toolkit brings together policy and best practice in a single point of reference. It helps to ask the critical questions about capability and project delivery; it provides practical advice and guidance on how to improve. The procurement module of the CIDB’s Toolkit is aimed at government as a whole and to private sector clients wishing to do business with government. Benefits and efficiencies are obtained from:

- improved contract management capability where the module serves the basis for capacitation;
- better purchasing practices and improved outcomes;
- uniform and standardised approach to procurement and supply-chain management across all levels of government, resulting in reduced cost of doing business for both agencies and service providers;
- greater predictability and certainty in the procurement processes;
- the management of procurement becoming routine and administration procedures becoming mechanized;
- cost efficiencies in terms of staff training, the submission of tenders, the compilation of procurement documents and the management of the procurement processes;
- improved industry performance, with a recognition of socio-economic, economic and regional development;
- ethical, acceptable and enhanced responsible business practices;
- establishment of a base for further advancement into electronic procurement;
- and improved business relationships between the private and public sector through a procurement process that is consistent, transparent and easily understood;
- an improved understanding of the requirements of the regulatory regime for procurement; and
- improved understanding of facets of the procurement and related activities.

The South African market study concluded that the CIDB rating system can be regarded as a form of standardisation. Furthermore construction firms competing for public tenders need to adhere to these ratings and thus the CIDB, as the standards setting body, possess market power in the construction industry especially for public

tenders. Various competition authorities including South Africa hold the principle that competition concerns regarding the implementation of standards can only be possible when the standard setting body possess market power. It is thus on this basis that the market study concluded that the implementation of these CIDB ratings had the unintended consequence of creating an environment conducive for cartel formation, particularly for projects in the CIDB grading 7 to 9. This assertion is supported by the fact that the uncovered construction cartel was instigated by the top tier of the grade 9 level construction in the CIDB General Buildings (“GB”) and Civil Engineering (“CE”) categories.

Albeit there are more than 50 firms’ registered in the GB and CE categories, the reality is that currently only the top tier construction firms that have the ability to undertake large projects. Thus based on the CIDB ratings and the top tier construction firms’ knowledge that they were the only ones eligible of undertaking larger projects made it easier for them to reach various collusive agreements particularly for projects categorised under CIDB grading 7 to 9. Notwithstanding that the implementation of these CIDB ratings also resulted in welfare enhancing benefits, the anti- competitive effects of excluding other firms and creating an environment conducive for cartel formation are still a valid competition concern that needs to be addressed. Given this conclusion, the study provided some recommendations to alleviate these concerns.

- Firstly the simultaneous roll out of major projects by government is a crucial factor that contributed to the formation of the last construction cartel. The knowledge that there were multiple projects commissioned made the cartelists firms willing to sacrifice other lucrative deals knowing that they

would be compensated through other projects. Therefore the market study recommends that major construction projects should not be rolled out around the same period but rather be rolled out in different stages to mitigate creating an environment conducive for cartel formation. In addition larger projects can also be rolled out in smaller packages in order to allow smaller graded firms to participate in those projects and this will invariably increase competition and reduce the likelihood of cartel formation.

- Secondly albeit the CIDB ratings allows for lower graded firms to form joint ventures and thus qualify for a higher grading, the stipulated number in forming a joint venture is rather restrictive. In this regard, the CIDB ratings can increase the eligible number to form a joint venture in the different grades in order to allow relatively smaller firms to participate in those projects and this will invariably increase competition.
- Thirdly the CIDB can introduce tougher sanctions to those contactors found to have contravened the provisions of the competition Act. These tougher sanctions can provide a further deterrence mechanism for any firms wanting to take part in collusive conducts.

In addition the current CIDB ratings provisions do not limit the number of contracts a firm can bid for or undertake at the same time. In this regard, the market study proposed that after consultation with all affected stakeholders, the CIDB should within each grading stipulate the number of projects a firm can bid for within a particular point in time. These proposed limitations would allow greater participation by smaller firms in this market albeit through the joint

venture provisions and this would invariably reduce the likelihood of collusion and thus increase competition.

Lastly, there should be a closer working relationship between the CIDB, the competition authority and National Treasury in ensuring that public sector tenders are not subject to collusive tendering. In this regard, the study proposes that the three entities meet on a regular basis to discuss developments in this construction industry. The frequency of the meetings can be increased if there is any ongoing investigation by any of these organisation or when larger projects similar to those undertaken prior to the 2010 FIFA World Cup are about to be commissioned.

#### Conclusion

The Netherlands, Japanese and UK examples detailed in chapter 2 illustrate that regulatory environments can potentially yet inadvertently promote anti-competitive outcomes while targeting efficiencies for the market. In some instances the regulators themselves may flout rules and regulations for nefarious and anti-competitive ends .

There is some support for the idea that the Netherlands regulatory environment enabled collusion up until their Competition Act of 1998 was introduced into law. According to a 1999 OECD report the old Competition Act in the Netherlands was based on the so-called "abuse system". *"The Netherlands tolerated so many anti-competitive agreements that the country became known in the 1980's as a "cartel paradise"*. Moreover a 1992 article claimed that 40% of the important cartel cases in EC competition enforcement were Dutch. Regarding the Dutch construction cartel specifically, it has been reported that *"these cartel offences were encouraged in part by authorities that were extremely accommodating to construction companies."*<sup>1</sup>

On a more active level, the parliamentary inquiry that followed the exposure of the Dutch construction cartel revealed that some government officials were complicit in the collusion, even when they understood their involvement to be illegal. According to Van Den Heuvel *"the authorities helped to perpetuate the system"* either by receiving bribes or by intentionally ignoring increased prices and other red flags.

As mentioned, the exposure of the Dutch construction cartel also led to legislative reforms. The Public Procurement Act was promulgated in 2012 and it stipulated a number of rules to be followed during the procurement process, these being: non-discrimination, equal treatment of businesses, transparency and proportionality. This Act was amended in 2016 to stipulate how governments should be responsible corporate citizens and take sustainability into account when designing tender processes. A new tender process was also introduced for buying new innovative products. The law also requires businesses to sign the European Single Procurement Document, which declares the businesses' financial status, capability and suitability for a public procurement. Finally, from 2017 onwards, governments were required to digitally publicise their tenders.

Similarly, the African market studies pointed out the very important benefits that flow from regulatory oversight and stringent standard setting in construction as well as the disadvantages these regulations may bring when considered from a competition perspective. The most noteworthy of these, as highlighted by the African market studies are set out below.

- Standard setting, while intended to reduce price and quality uncertainties, may lead to price and quality uniformity amongst market participants, resulting in effects similar

to those observed under collusive market conditions. The same concern applies to the determination of professional rules;

- Procurement procedures have the potential to promote collusion. Although procurement procedures

are often designed to promote transparency and fairness, this transparency can be used by market participants to facilitate collusion;

- The contractors grading system which applies in most of the African market studies observed has the impact of

concentrating the market, making it easier for market participants to collude. As previously stated, in Japan the designated supplier system also encouraged a State sponsored form of collusion with contractors clamouring to appear on the list.

## BOX 7: REGULATING CONSTRUCTION

### Competition challenges posed by regulation in construction

- Standard setting may lead to price and quality uniformity amongst industry participants
- Procurement procedures may result in predictability and transparency among industry participants, thus increasing the risk of collusion
- Systems that limit the number of participants by category, depicted as a grading system or designated supplier system, tend to concentrate the market thus facilitating collusion

### Benefits of regulation in construction

- Regulations assist in providing customers with greater certainty of quality, particularly in asymmetrical industries like construction
- Regulations assist to bring transparency and fairness to the process of selecting contractors for work in construction

### Other competition related challenges in construction

The African market studies considered in this publication mention other challenges in their respective construction markets which affect their markets to varying degrees. They can be classified as (1) pricing in the construction market; and (2) concurrent jurisdiction.

#### Pricing in the construction market

The African markets studied herein display similar characteristics of price determination and pricing practices in the construction markets. In general, pricing practices are influenced by factors such as input costs, the value of the project, sub-contracting and professional fees. Respondents indicated that for private spot transactions historical pricing data is freely available in each of the markets and the price increases

for construction materials tend to track inflation over time. Respondents to the market studies also indicated that they freely compare pricing between suppliers leading to the conclusion that pricing practices and price determination in the private construction sector is both fair and competitive.

The pricing of construction services in the public sector has raised sufficient concerns in the selected African markets to warrant legislative mechanisms aimed at controlling public expenditure on construction services. These measures range from the regulation of professional fees to the regulation of public procurement of construction services. Such procurement takes place mainly by public auction. As such, while pricing of construction materials is not controlled by the State, the pricing of construction projects for the State can be managed through a process of public bidding.

Pricing on its own is not an adequate indicator of collusive outcomes. However, taken with other factors, pricing may offer insights into the likelihood of collusion taking place in an industry. The Japanese example set out in chapter 2 shows, with hindsight, the impact of collusion on pricing in the construction sector. As stated in chapter 2, Japan's public procurement system sets a confidential price limit beyond which construction bids are thrown out. A study carried out by the Japan Federation of Bar Associations revealed that, in an overwhelming majority of the cases examined by the bar federation, prices offered by the construction firm that won the bid was equivalent to between 95% to 99% of the confidential upper limit set by the authorities. This indicated that the winner secured the maximum possible profit from the deal, a situation that would not have existed had the bids been competitive. After the conclusion of the Zenecon case,

some municipalities overhauled their systems for public works bidding, for example, by allowing construction firms that did not operate locally to take part in the competition. According to the Japan Federation of Bar Associations, in those cities, the average winning bid fell to the equivalent of between 70% and 85% of the upper limit.

#### Concurrent jurisdiction

One concern amongst agencies tasked with regulating competition in the construction sector is that the sector is often already highly regulated by agencies tasked with overseeing public procurement or regulating the price and quality of services offered by professions in construction. This state of affairs may present a threat to effective

competition regulation in the industry in that the competition agency's jurisdiction may be ousted. A common method for ensuring the harmonious regulation of competition in the sector is the conclusion of a memorandum of understanding (MOU) between the two agencies. At the same time, concurrent jurisdiction presents an opportunity for enhanced competition compliance through advocacy amongst agencies.



## Endnotes

- 1 The parliamentary enquiry on fraud in the Dutch construction industry collusion as concept between corruption and state-corporate crime by Grat Van Den Heuvel in the Faculty of Law, University of Maastricht, The Netherlands. Published in *Crime, Law & Social Change* (2005) 44: 133–151

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Before joining the Namibian Competition Commission, Ms Dundee was a full-time lecturer at the Namibia University of Science and Technology in the Department of Economics and a former Chief economist in the Ministry of Fisheries and Marine Resources, Namibia.

She holds a Bachelor of Economics (honours) from the University of the Western Cape, a Masters of International Business (MIB) from the Namibia University of Science and Technology, Namibia, a postgraduate diploma in education (PGDE) from the University of Namibia and has completed an Executive Management Development Programme (EMDP) from the University of Stellenbosch Business School, South Africa. She has written and published

various articles on the application of the Namibian Competition Act, unemployment and poverty and its link to economic growth and development. Bridget regularly published articles in the local daily newspaper on these topics in 2016.

## *Kenya*

**Beryl Amanda Mwandale** holds Bsc. Actuarial Science from the University of Nairobi, Kenya and an Msc. Financial Econometrics qualification from the University of Dundee, Scotland. She is currently employed as a Principal Officer in Planning, Risk and Quality Assurance Directorate at the Competition Authority of Kenya.

**Feisal Adan Ibrahim** holds a bachelor's degree in economics & Sociology from the University of Egerton University and currently pursuing master's in economics policy management from the University of Nairobi. At the Competition Authority of Kenya, he is currently working in the Enforcement & Compliance Department as a Senior Investigations Officer.

## *eSwatini*

**Samuel Dlamini** holds a master's degree in commerce financial Markets/Economics from University of Rhodes University (South Africa) and was employed at the eSwatini Competition Commission as a Chief economist.

**Nontobeko Dlamini** Ms Nontobeko Thandekile Dlamini is a Junior Economist in the Policy and Research department at Eswatini Competition Commission. She joined the Commission in 2016 as a trainee in the same department before being afforded the position of a Junior Economist in 2017. She has been involved in sector studies that have been conducted by the Policy and Research Department, such studies include the retail banking market inquiry, broiler chicken inquiry and the construction study amongst others. Prior to joining the Commission, Ms Dlamini was a business advisor intern at Eswatini Water and Agricultural Development Enterprise (ESWADE) in 2014. She holds an Honors Bachelor of Commerce Degree in Economics received in 2016 and a bachelor's degree in Economics received in 2013 both from the North West University, South Africa. She is currently pursuing her master's in economics in the same university.

**Nkosingiphile Ngwenya** is a Senior Economist in the Competition Policy and Research department of the Competition Commission of eSwatini. He has spent more than four years with the department after joining the Commission as a trainee in February 2014. It is his successful traineeship period that led to him acquiring the position of a Research Analyst in the same department in 2015 before being promoted to the position of Senior Economist in 2017. The primary duties for Nkosingiphile include mainly doing primary and secondary research in relation to firm conduct in markets, sectors and /or industries of priority to the Commission with respect to the perceived state of rivalry/competition.

In this regard Nkosingiphile has contributed in market studies which relate to the banking industry and the poultry industry amongst other studies that the Commission undertakes from time to time. Mr Ngwenya holds a Bachelor of Arts in Economics and Statistics (from the University of Swaziland 2013); Post Graduate Diploma in Risk Management (from the University of South Africa 2017) and is currently pursuing his master's in economics in Waseda University Japan.













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