SA-TIED
Southern Africa – Towards Inclusive Economic Development

Barriers to entry and the role of African multinational corporations

Entrants in intermediate industrial products (inputs into construction)

Grace Nsomba and Thando Vilakazi

SA-TIED Working Paper #194 | September 2021

UNITED NATIONS UNIVERSITY
UNU-WIDER

national treasury
Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

planning, monitoring & evaluation
Department:
Planning, Monitoring and Evaluation
REPUBLIC OF SOUTH AFRICA

the dtic
Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA

SARS

TIPS

About the project

Southern Africa –Towards Inclusive Economic Development (SA-TIED)

SA-TIED is a unique collaboration between local and international research institutes and the government of South Africa. Its primary goal is to improve the interface between research and policy by producing cutting-edge research for inclusive growth and economic transformation in the southern African region. It is hoped that the SA-TIED programme will lead to greater institutional and individual capacities, improve database management and data analysis, and provide research outputs that assist in the formulation of evidence-based economic policy.

The collaboration is between the United Nations University World Institute for Development Economics Research (UNU-WIDER), the National Treasury of South Africa, the International Food Policy Research Institute (IFPRI), the Department of Monitoring, Planning, and Evaluation, the Department of Trade and Industry, South African Revenue Services, Trade and Industrial Policy Strategies, and other universities and institutes. It is funded by the National Treasury of South Africa, the Department of Trade and Industry of South Africa, the Delegation of the European Union to South Africa, IFPRI, and UNU-WIDER through the Institute's contributions from Finland, Sweden, and the United Kingdom to its research programme.

Corresponding author: gnsomba@uj.ac.za

UNITED NATIONS UNIVERSITY
UNU-WIDER

WIDER Working Paper 2021/143

Barriers to entry and the role of African multinational corporations

Entrants in intermediate industrial products (inputs into construction)

Grace Nsomba and Thando Vilakazi*

September 2021

Abstract: Effective competition in the Southern and East African regions requires independent rivals competing across borders and within domestic markets through innovation and effort, investment, product quality, and prices. To understand the constraints to more dynamic rivalry between firms within the region, this paper considers the obstacles to integration from the perspective of fostering the development of domestic firms with strong capabilities. Two emerging African multinational corporations involved in the manufacturing of intermediate industrial products that are inputs into the construction industry are studied in order to provide a new perspective on these issues. Drawing from interviews and publicly available information, this paper links existing literature on competition, barriers to entry, and inclusive regional growth to the experiences of the emerging identified African multinational corporations with the view to inform policy that encourages regional integration, the development of capabilities, technological investments, and, ultimately, growth and regional competition.

Key words: African multinational corporations, competition, regional integration, barriers to entry, dynamic rivalry

JEL classification: L11, L14, L41, L52

---

* Centre for Competition, Regulation, and Economic Development (CCRED), University of Johannesburg, Johannesburg, South Africa; corresponding author: gnsomba@uj.ac.za

This study has been prepared within the UNU-WIDER project Southern Africa—Towards Inclusive Economic Development (SA-TIED).

Information and requests: publications@wider.unu.edu

ISSN 1798-7237 ISBN 978-92-9267-083-2

https://doi.org/10.35188/UNU-WIDER/2021/083-2

Typescript prepared by Mary Lukkonen.

United Nations University World Institute for Development Economics Research provides economic analysis and policy advice with the aim of promoting sustainable and equitable development. The Institute began operations in 1985 in Helsinki, Finland, as the first research and training centre of the United Nations University. Today it is a unique blend of think tank, research institute, and UN agency—providing a range of services from policy advice to governments as well as freely available original research.

The Institute is funded through income from an endowment fund with additional contributions to its work programme from Finland, Sweden, and the United Kingdom as well as earmarked contributions for specific projects from a variety of donors.

Katajanokanlaituri 6 B, 00160 Helsinki, Finland

1 Introduction and approach

Competition plays an integral role in the regional integration and growth agenda (Roberts 2016). However, for regional growth to be more inclusive, local firms need to be able to participate in value chains and grow their businesses domestically and regionally. This goes beyond participation in regional markets through international and regional trade by being able to make investments and expand geographically to establish operations across the region (Bosiu and Vilakazi 2020) in order to compete with larger, established regional firms. Competition, properly located, therefore means considering the dynamic process of rivalry, which has positive dimensions in the form of the ability to develop productive capabilities as well as negative dimensions such as barriers because of exclusionary conduct by large firms or regulatory barriers (Roberts et al. 2017). The importance of building and expanding capabilities has been highlighted as being at the centre of a country's economic development (Bosiu and Vilakazi 2020). Inclusive growth therefore has a competition dimension and, for this to be properly understood in Africa, it needs to be viewed from the perspective of regional integration and regional competition given relatively small national markets (Roberts et al. 2017).

Effective competition in the region requires independent rivals competing across borders and within domestic markets through innovation and effort, investment, product quality, and prices (Bosiu and Vilakazi 2020). To understand the constraints to more dynamic rivalry between firms within the region, research is required that considers the obstacles to integration from the perspective of fostering the development of domestic firms with strong capabilities. This working paper therefore provides a new perspective on these issues by considering the barriers to new firm entry and expansion of existing businesses in the Southern and East African regions. As a result, this research aims to inform policy that encourages local industrial development and competition between firms at a regional level by understanding the constraints faced by firms in terms of growing their businesses by trying to expand operations beyond local markets.

To understand these constraints at the firm level, this paper studies the experiences of companies that have managed to overcome barriers and expand into the region. These emerging African multinational corporations (AMNCs) are a particular subset of firms that have in different ways overcome the challenges of expanding, investing, and trading outside of their home countries. Therefore, these AMNCs are directly illustrative of the extent and nature of the barriers to entry that can undermine regional competition.

This working paper is the second study under the theme 'South African investment and the role of African multinational enterprises' conducted for the sixth work stream of the Southern Africa—Towards Inclusive Economic Development (SA-TIED) work programme on regional growth for Southern Africa's prosperity. The first study identified emerging AMNCs in food production markets in Southern and East Africa that have developed capabilities over time and have become effective competitors to incumbent firms by analysing the various constraints that the companies have faced in growing their businesses across borders.

This study carries out a similar analysis by identifying firms involved in the manufacturing of intermediate industrial products that are inputs into the construction industry. Cement and steel products are critical inputs in terms of infrastructure development in economies in the region and have therefore been identified as the case study market on which this paper will focus. An important rationale for the selection of these markets is that cartel cases have been prosecuted in South Africa in the markets for production of these inputs, and some of these arrangements have been shown to have had regional dimensions (see Roberts 2016; Vilakazi and Roberts 2019; Paelo et al. 2020). Given that cartels are typically sustained through maintaining barriers to entry, a history of possible cartel conduct in the region would suggest historically high barriers to entry in relevant markets. Given that competitive rivalry is at the heart of regional integration and development, it is imperative to understand the barriers faced by existing and potential rivals in these markets in order to effectively inform policy that encourages the development of capabilities, technological investments, and, ultimately, growth and regional competition.

This paper begins by mapping out the relationship between competition, barriers to entry, and inclusive regional growth and links these issues to the nature of regional competition in input markets for construction. This overview is used to build an understanding of the extent to which entry barriers in cement and steel exist in the region and how they have manifested by linking existing literature to the experiences of emerging AMNCs in the region.

The paper focuses on two emerging AMNCs that have entered these markets, in which there have been strong regional incumbents, at significant scale: Dangote Cement, which is focused on the production of cement, and Universal Mining & Chemical Industries Ltd. (UMCIL, trading as Kafue Steel), a Zambian producer of a variety of long steel products. Dangote has been described as the most significant and disruptive entrant in the cement industry in East and Southern Africa by pursuing an aggressive pricing strategy to build market share with substantial market impacts in Ethiopia, South Africa, Tanzania, and Zambia (Paelo et al. 2020). UMCIL, on the other hand, has emerged as one of the largest steel manufacturers in Zambia now present, exporting and trading in neighbouring countries in the region. The majority of UMCIL's sales are dominated by the rebar market, in which collusive conduct was uncovered in South Africa with possible regional dimensions.

2 Literature review

It is important to be mindful of the particular challenges that economies in East and Southern Africa face when considering issues of competition and regional integration. While these challenges will vary from country to country, there are some prevailing common concerns across the region, including the small size of the domestic markets, low levels of industrialization and diversification, high levels of concentration, and, in many countries, a history of systematic exclusion of the majority of the population from full and meaningful economic participation (Burke et al. 2017). This has meant incumbent firms are likely to hold dominant positions and that many incumbents have tended to be large international companies, such as Lafarge in cement and Arcelor Mittal in steel.

The issue of dominance is more nuanced in smaller economies that have to consider the efficiency benefits of concentration, which allows firms to exploit economies of scale. Concentrated industries may enable firms to generate productive efficiencies and lower the unit costs of production, which some way explains why many industries in small economies tend towards monopoly and oligopoly (Gal 2003). As a result, there is a challenge that is associated with assessing the effects of concentration in economies in the region because of the efficiency gains that may be associated with higher concentration levels (Burke et al. 2017). However, the efficiency gains that might be associated with having fewer firms in smaller markets does not negate the need to pay close attention to dominance by a single firm or firms acting in a coordinated manner, particularly in key strategic sectors that are dominated by firms with a significant regional and global presence. Therefore, understanding the nature of competition and the extent of barriers to entry is integral in enabling inclusive regional growth.

2.1 Competition, barriers to entry, and inclusive regional growth

The notion of inclusive growth is typically achieved through supporting higher levels of employment and rising wages (Khan 2012) and, among other policy options, entails the formation of linkages within and across value chains and industries. At a regional level, potential gains arise from shared production, transfer of skills and technology, and market development between countries (Fessehaie et al. 2015a). In the East and Southern African context, the rapid growth of industries and lead firms in South Africa has largely facilitated the growth of regional markets through large firms establishing effective value chains and distribution channels that feed into the region (das Nair and Chisoro 2015; Burke et al. 2017; Esho and Verhoef 2020). South African firms have thus managed to take up lead positions in various markets across the region and have 'exported' anticompetitive practises in some cases (Paelo and Vilakazi 2017; das Nair and Chisoro 2015).

Large companies that are integrated across country borders are able to 'export' market conduct and practises insofar as they can extend collusive arrangements or restrictive business practises to affect other territories. This has been seen in a number of markets, including fertilizer and cement (Kaira 2017). Studies in these sectors have shown that corporations have historically leveraged control of infrastructure and inputs, as well as favourable regulations (including trade rules) to sustain market power while representing themselves as 'development partners' (Vilakazi and Roberts 2019). The cement cartel that was uncovered in South Africa in 2011 is a good example of this. The cartel affected all of the Southern African Customs Union (SACU) member states, where specific country markets were allocated to different producers. Similarly, collusive arrangements in scrap metal, construction, concrete pipes and culverts, pilings, steel products, and industrial gases all affected at least two countries in Southern Africa (Roberts et al. 2017; Kaira 2015).

The conduct of firms in these sectors, emanating from South Africa, is a strong example of the ability of large firms to integrate into regional markets while leveraging investor-friendly policies yet dampening competition and rivalry. Importantly, as will be discussed below, this makes clear that there are trade-offs that smaller economies face between potential efficiency gains that large firms can achieve and the detrimental effects of high market concentration and the exercise of market power by lead firms acting unilaterally or jointly as has occurred in the cement industry (Amunkete et al. 2016).

Despite the concerns around harmful market arrangements, competition is often overlooked when considering regional integration strategies. The regional integration agenda in Africa has focused more on linking African markets and removing trade barriers to promote intra-African trade (Brenton and Isik 2012). For example, emphasis has been placed on measures to achieve deeper integration including through improved transport networks and enhancing institutions to support trade (Vilakazi 2018; Roberts et al. 2017). However, growth and development through regional integration depend to a large extent on the decisions of companies to increase productive capacities and their willingness to make long-term investments (Roberts 2016; Bosiu and Vilakazi 2020). Where large firms are able to extract profits without making meaningful investments in developing capabilities, competitive rivalry and growth can be harmed (Bosiu and Vilakazi 2020). This can be worsened where large firms face no risk to their dominant positions in the market.

Rivalry through entry and market contestation therefore forces firms to increase their competitiveness. In closely linked regional markets, such as in Southern and East Africa, the strongest potential rival can emanate from across the border. Established multinational firms operating across the region generally enjoy the benefits of being integrated through the value chain and being present in different geographic markets (Kano et al. 2020). This implies that for rivals to be effective competitors, they often need to enter at large scale and with a regional footprint.

Where entry is effective, and entrants are able to affect market outcomes through competitive processes even in smaller local markets, the welfare of consumers (end-users and intermediate users of inputs) is enhanced (Vilakazi and Roberts 2015). Pro-competitive policy intervention can play an important role by enforcing measures that reduce barriers to entry, leading to benefits for consumers through greater competition (Banda et al. 2015). This often requires the use of competition policy (insofar as it is based on addressing strategic barriers to participation) in conjunction with other industrial policy strategies that seek to address structural constraints to growth and entry (Banda et al. 2015).

Realizing the potential gains from integration is therefore dependent on a number of factors, including geography, regional entry, transport costs, and firm conduct (Roberts et al. 2017). If the population of a particular region is dispersed over a large area, then the natural tendency is to create market regionalization through small and isolated local markets within the region, which favours the concentration of industry (Gal 2003). This will naturally prevent realizing the gains from integration. The effects of geography can potentially be exacerbated by weak transport infrastructure and non-competitive logistics sectors (Paelo and Vilakazi 2017). Transport costs can erode the benefits of tariff reduction, resulting in integration policies, such as the African Continental Free Trade Agreement (AfCFTA), failing to significantly affect trade flows. Adjacent policies, such as achieving efficient transport networks to support value chains, are therefore just as important as trade measures in improving contestability of markets by 'independent' rivals across borders (Paelo and Vilakazi 2017).

Other things being equal, reducing barriers to entry will over time result in both static and dynamic gains from competition (Banda et al. 2015). Competing firms will not only compete on price to win over customers but will also develop their capabilities through investment and innovation, which enhances prospects for regional industrial development. The discussion above has indicated that for growth to be more inclusive across regions, enabling entry needs to be central to the regional development agenda.

2.2 Multinational corporations in emerging African markets

Research on multinationals from emerging markets such as Asia and South America has prompted much debate around the definition of an emerging market, as well as what constitutes a multinational (Esho and Verhoef 2020). The applicability of mainstream theories of the internationalization of multinational corporations (MNCs) is contested, with some scholars proposing new theoretical frameworks and others calling for the extension of existing theories (Ramamurti 2012; Buckley and Casson 2019; Esho and Verhoef 2020). Importantly for this paper, existing research on MNCs has generally overlooked the experiences of emerging AMNCs, particularly from outside the leading African economies such as Kenya, Nigeria, and South Africa (Verhoef 2017; Buckley and Casson 2019; Esho and Verhoef 2020).

Esho and Verhoef (2020) and Bosiu and Vilakazi (2020) emphasize the existing gaps and lack of engagement with empirical evidence relating to particularly lesser known, nascent AMNCs from African countries other than South Africa. The experiences of these AMNCs are important as they provided unique context in terms of the role that geography, cultural diversity, networks, and entrepreneurship in an African context play in expansion and internationalization activities across the continent. Esho and Verhoef (2020) find that there are succinct differences between the experiences of AMNCs and MNCs from the developed world.

The internationalization activities of African firms have increased remarkably in scale, scope, and sophistication over the past two decades, where African firms are now emerging as serious challengers in their domestic and regional markets (Boso et al. 2019). However, the internationalization of AMNCs has neither been simple nor straightforward. The growth of these AMNCs is best explained through the application of multifaceted theories (Esho and Verhoef 2020). They often do not have institutional and state support, unlike Chinese MNCs, for example, and they also face a multitude of contextual constraints that manifest in different forms in the course of expansion into different African countries (Boso et al. 2019; Esho and Verhoef 2020). For instance, the Bakhresa group (a diversified food and beverage conglomerate from Tanzania) has been found to have confronted market failures, state intervention, and weak social institutions as constraints to business expansion (Esho and Verhoef 2020).

Nonetheless, studies have shown that AMNCs typically have the ability to leverage their knowledge of successfully doing business in weak institutional environments at home by exploiting this knowledge when they expand to countries with similar institutional imperfections (Boso et al. 2019). Given the volatility and complexity that exists in many African economies, the ability to effectively manage institutional voids presents a powerful source of competitive advantage for African firms as they challenge established Western multinationals and, in recent times, emerging-market multinationals (Boso et al. 2019). This is seen through the expansion activities of Bakhresa as well as Export Trading Group (ETG), which is one of the largest and fastest growing integrated agricultural conglomerates in sub-Saharan Africa that originated in Kenya in 1967 (Bosiu and Vilakazi 2020).

These entities were found to have diversified their activities across industries and across countries over time, which enabled them to vertically integrate their businesses in a manner that substituted the infrastructure and service limitations in the domestic markets they operate in (Bosiu and Vilakazi 2020; Esho and Verhoef 2020). Bakhresa, for instance, established a logistics subsidiary for road transport to support its grain milling business, followed by a container depot subsidiary, a media entity, and a ferry business, which all supported the core activities of the group (Esho and Verhoef 2020).

As a result of institutional knowledge, networks, and the strategies of emerging AMNCs, such as building strong local brand reputations and capabilities, strong regional giants have begun to emerge (Boso et al. 2019; Esho and Verhoef 2020; Bosiu and Vilakazi 2020). The food processing and manufacturing sector has seen the rise of conglomerates such as Bakhresa of Tanzania and ETG of Kenya, who initially began in the processing and trading of soft commodities and have managed to integrate into logistics and production of other fast-moving consumer goods (Esho and Verhoef 2020; Bosiu and Vilakazi 2020). Less documented is the financial sector, which has also seen the emergence of challenger firms in various African markets. Letshego Holdings, a microfinance institution from Botswana, successfully expanded operations to 11 African countries between 1998 and 2018 from offering unsecured loans to persons with permanent employment to providing finance to persons involved in small and medium-sized enterprises as well as in the informal sector (Esho and Verhoef 2020).

There is considerably less evidence about the expansion and challenges faced by AMNCs in other markets, such as those for intermediate industrial products. This working paper contributes in this regard.

Key industries such as steel and cement exhibit high concentration levels, both within countries and regionally (Kaira 2017). In addition, the lead firms in these industries are part of multinational groupings and compete against one another in several markets (Bosiu and Vilakazi 2020). High levels of concentration and multimarket contact mean a greater likelihood of coordination to divide markets and undermine vigorous competition. This suggests the need for appropriate regional competition enforcement as well as complementary region-wide policies to address markets more susceptible to coordination and with high barriers to participation.

Both cement and steel are key inputs to construction and infrastructure development. These sectors have been subject to anticompetitive practises in South Africa, notably in relation to cartel conduct (Kaira 2017). Despite the high number of cartels that have been unearthed in South Africa, there has not been equivalent success in the neighbouring countries (Kaira 2015). As briefly highlighted above, in order to sustain this conduct, entry barriers must be maintained, including through lobbying for protection against entrants and imports (Amunkete et al. 2016).

3 Regional competition in steel and emerging African rivals

The steel industry is strategically important for lesser developed countries surrounding South Africa, which have a huge deficit in infrastructure development (Kaira 2018). For example, steel is used in the majority of construction projects, whether for domestic or commercial purposes. Therefore, anticompetitive conduct in this sector is detrimental for regional integration and growth through infrastructure development and manufacturing.

In South Arica, the steel sector was prioritized by the Competition Commission of South Africa (CCSA) as a subset of the intermediate industrial products and construction and infrastructure sectors (Kupka and Thomas 2014). ArcelorMittal South Africa (ArcelorMittal) was fined for collusion, information exchange, and excessive pricing for conduct that took place through the South African Iron and Steel Institute and the South African Reinforced Concrete Engineers Association (Kaira 2017). It is in this regional context that the developments in the Zambian steel industry are considered, focused on identifying the key strategies employed by challenger firms in establishing operations and competing with established regional suppliers and importers.

UMCIL is a Zambian-owned steel manufacturer with its main manufacturing plant located in Kafue, Zambia. UMCIL's steel business trades as Kafue Steel, and UMCIL itself is a subsidiary of Trade Kings Ltd, one of Zambia's largest manufacturing conglomerates (Bosiu and Vilakazi 2020). Kafue Steel produces a variety of long steel products that mainly feed into the construction and mining industries. These products include long and flat section iron and steel products such as strips, channels, round and deformed bars, and window profiles.[1] UMCIL's manufacturing activities began in 1990, with the manufacturing of copper oxychloride from copper wastes generated from copper wire. In 1995, UMCIL business partners established Trade Kings Ltd, which started off by manufacturing the trademarked Boom washing paste (Bosiu and Vilakazi 2020). However, because of local copper being sold at London Metal Exchange prices, foreign exchange scarcities, and difficulties in penetrating the market in the succeeding years, UMCIL began to reconsider its manufacturing activities (Sutton and Langmead 2012).[2] This led to the decision to enter the steel industry in 2001, for which manufacturing began in 2005.[3]

This section provides a brief case study on the experience of Kafue Steel in the Zambian steel market and its expansion into the region. Drawing from interviews conducted with UMCIL, other market players, and secondary data sources, the section provides a discussion that covers three

---

[1] https://www.umcil.co.zm/products/

[2] Interview with UMCIL, 16 May 2019.

[3] https://www.umcil.co.zm/about-us/

thematic areas that highlight the entry strategies, growth, and competitive significance of Kafue Steel as a relatively recent entrant in the steel industry from both local and regional perspectives. The key areas are the importance of large-scale competitive entry, the critical role played by funding and industrial policy support, and strategies to achieve competitive impact and regional expansion.

3.1 Large-scale competitive entry

Kafue Steel's entry into the market coincided with Zambia's ambitions for economic diversification and poverty reduction, underpinned by poor returns from Zambia's heavy reliance on copper mining, which started to experience price declines on commodity markets (Fessehaie et al. 2015b). While the Zambian government had conducted a feasibility study on the prospects of establishing a Zambian steel producer, changes in government between 1989 and 1991 meant the project never came to fruition (Sutton and Langmead 2012).

Kafue Steel's entry into the market was large scale, applying a strategy of phased acquisitions of assets and investment in capacity. Through Trade Kings, an 81-acre site was secured in Kafue, which was followed by the collection and accumulation of scrap metal, a key input material for steel production, beginning from 2004 (Sutton and Langmead 2012). Sourcing of equipment from India began in 2005. The construction of the factory site began in 2006, which included a steel-making plant, a 20-ton furnace, and a rolling mill. Phase 1 of the operation was opened in 2008, with an annual production capacity of 100,000 metric tons (MT).

Notably, it had taken nearly 10 years to set up the operation and approximately two decades from the time that the prospect of erecting a Zambian steel production company was being discussed in earnest in Zambian policy processes. This points to the fact that entry at significant scale in heavy industry can be a very lengthy process, given the large size of investments required and the time it takes to secure the policy space to undertake major projects and to procure the appropriate technologies, capital, inputs, and sites to establish a plant. It is also significant that although the initial discussions around a Zambian steel plant had been led by the government, the investments made were ultimately led by the private sector, although UMCIL representatives have always been close to the government discussions in seeking to motivate for scope to undertake such an investment. The implication is that entry in industries that require very large investments and extensive local resources invariably requires significant interaction between the private sector and policy makers that extend beyond narrow bureaucratic considerations such as acquiring business licenses and environmental regulation approvals. In line with the literature on MNCs in emerging markets, it is notable that these state–business engagements can, in some cases, be more fruitful where the entrant is a local firm, with the knowledge and networks to navigate shifts in the domestic policy space—this seems to have been the case with Kafue Steel, noting that the process to set up the facility transcended a transition from one party dominance in the 1980s and through a period of regime change and rapid privatization in Zambia in the 1990s and 2000s.

Phase 2 of the project entailed acquiring the machinery to undertake direct reduction of iron oxide, eliminating the need for scrap metal and improving the production process.[4] This was followed by the installation of another production line to process manganese, nickel, and silica for the production of high grade steel.[5] This yielded a total production capacity of 200,000 MT, around two-thirds of the total Zambian consumption of steel products in 2019, which is approximately 300,000 MT, in a market that had been dominated by imports from South Africa.

[4] https://www.africanreview.com/manufacturing/metals/zambia-adds-steel-to-manufacturing-base

[5] https://www.africanreview.com/manufacturing/metals/zambia-adds-steel-to-manufacturing-base

The production process adopted in the first phase was predominantly based on rolling mill technology imported from Danieli Technologies and SMT Machines, two Indian technology and machine developers. The rolling mill technology is a metal-forming process in which scrap metal is heated to a specific temperature and passed through one or more pairs of rolls to reduce its thickness to make it more uniform. Therefore, the phased approach to setting up production meant that this was done through backwards integration using the rolling mill and scrap metal as raw materials initially.[6]

Because of several setbacks, however, Kafue Steel was not able to generate considerable sales between 2008 and 2009, leading to stockpiling of most output (Sutton and Langmead 2012). Among other production difficulties, this was attributed to the lack of product certification at the time.[7] Industry standards and certifications can have the effect of raising entry barriers if they are difficult, lengthy, or unreasonable to achieve, particularly for market entrants and smaller rivals. Standards and certifications are important for consumer welfare and safety, and they can serve as an important signal to markets about the quality and reliability of products and suppliers. This is especially important in markets for intermediate inputs into construction, where steel, for example, is critical for ensuring the structural integrity of buildings and civic works.

On the other hand, standards and certifications can impede entry, to the extent that they shape perceptions about entrants and products. Specifically, although Kafue Steel was able to obtain Zambian certifications for its products, there was a lack of uptake of its products initially because of perceptions about the quality of its products, which were viewed as being inferior to products from South Africa.[8] Ultimately, this led Kafue Steel in 2011–12 to pursue and obtain certifications from the South African Bureau of Standards for its products at an additional cost,[9] which speaks to the importance in policy of ensuring good perceptions, capabilities, and credibility of local standards institutions to enhance the prospects of entrants in manufacturing industries. That is, the work of standards and certifications institutions is especially significant for competition in certain industries and should constitute an industrial development priority, particularly where local firms being supported by governments are required to establish themselves and compete against international counterparts.

Competition from Chinese entrant Good Time Steel Company (GTS), which entered the Zambian market in the mid-2000s having initially operated in Malawi, meant that Kafue Steel faced competition from both importers and traders, as well as a local producer (albeit with smaller scale of production). Imports from South Africa were typically sourced by local distributors and merchants—some that were affiliated with South African distributors as well (Fessehaie et al. 2015b).[10] Kafue Steel has imported certain types of steel products from South Africa (such as structural steel that is not produced in Zambia). As a result of significant trading across borders in the 2000s, around the time of the entry of Kafue Steel, iron and steel imports grew from US$48.3 million in 2005 to US$143.9 million in 2008, with South Africa being the main source (Fessehaie et al. 2015b). It was therefore strategically important for Kafue Steel to rapidly create a local brand and reputation, underpinned by the dual certification of its products. Subsequently, Kafue Steel also obtained an international standards certification in 2012, an International Organization for Standardization (ISO) 9001208 accreditation, which ultimately contributed to increased demand

---

[6] https://www.umcil.co.zm/about-us/

[7] Interview with UMCIL, 16 May 2019.

[8] Interview with UMCIL, 16 May 2019.

[9] Interview with UMCIL, 16 May 2019.

[10] Interview with UMCIL, 16 May 2019.

for its products.[11] These, in effect, were additional strategic investments that the company had to make in order to enhance its brand and competitiveness in the local and regional market—additional sunk costs that would likely confront any major entrant into large-scale manufacturing activity in the region not incurred by existing multinational rivals.

Although characterized by a lengthy period from conceptualization to significant production, Kafue Steel's entry into the Zambian market demonstrates the significant scope for entry of effective rivals in regional markets historically dominated by leading South African and international rivals. The company grew its presence from selling 200 MT between 2008 and 2009[12] to producing and selling 20,000 MT of steel in 2010, 50,000 MT in 2011 (Sutton and Langmead 2012), and approximately 120,000 MT by 2019.[13] The company's entry, and that of GTS and other traders, occurred at a time when ArcelorMittal South Africa (AMSA) had already begun to face competition law scrutiny in South Africa in relation to the pricing of its flat steel products, amongst others, as discussed below (Fessehaie et al. 2015b; Mondliwa and das Nair 2017).

Kafue Steel's growth is no doubt also linked to UMCIL's ability to retain skilled personnel with training in related activities—a key player in the company's operational growth and initial engagements with local government was its executive technical director, a Zambian scholar and entrepreneur who had obtained domestic and international exposure and training in industrial chemistry, metal work, mining, and plant design.[14] The combination of these in-house capabilities, capital (as discussed below), and leveraging plant technologies from international sources appears to have been critical in establishing the operations and positioning of Kafue Steel in the local market. Requirements for effective entry as a trader or merchant of steel products are significantly less extensive, which also explains the proliferation of smaller traders in the steel supply chain in Zambia, often providing only very limited value addition to imported products. As such, the cost of entry for a local producer is significantly higher in order to acquire the required capabilities, typically necessitating significant funding and policy support.

3.2 Funding and industrial policy support

Developing diversified, sophisticated industrial capabilities is critical for structural transformation and economic growth and involves a shift over time from lower productivity activities to higher value-added outputs and exports (Fessehaie et al. 2015b; Hausmann et al. 2007; Bell et al. 2018). For Zambia, diversifying the economy has been challenging given that it is landlocked and is a resource-based economy, historically led by copper mining activities. Through a series of national development plans, Zambia has targeted economic diversification to reduce the country's reliance on copper exports and exploit its resource base by promoting the manufacturing sector (Kaunda et al. 2020).

In order to promote diversification in manufacturing, the Zambian government set out to establish multi-facility economic zones in 2005 (Zheng 2016). The iron and steel subsector was identified as crucial in providing cost-effective inputs to cater for growing demand in other sectors as well as growing demand in the region (Fessehaie et al. 2015a); specifically, the town of Kafue was identified as the iron and steel economic zone. To date, the Kafue economic zone has not been implemented, although there is ongoing engagement to support the development of the zone

[11] Interview with UMCIL, 16 May 2019.

[12] Interview with UMCIL, 16 May 2019.

[13] Interview with UMCIL, 16 May 2019.

[14] Interview with UMCIL, 16 May 2019.

through a partnership between government, UMCIL, and Zambia Consolidated Copper Mines (ZCCM) Investment holdings (a mining investments and operations company).[15]

Involvement of the private sector in this initiative is significant, and Kafue Steel sees itself as playing a lead strategic role in driving this process.[16] Compared to Zambia, South Africa's relative success in attracting investments from MNCs in manufacturing activities has been anchored in attaching supply chains to specific economic zone regions, a process that is in its nascent stages in Zambia (Phiri and Manchishi 2020).

The growth of Kafue Steel has generally not been realized through funding and direct industrial policy support. While there has been clear intent from the government around the need for economic diversification and the important role that subject matter experts and the iron and steel subsector plays, this has not necessarily translated into tangible sector-specific policy outcomes. UMCIL has, however, benefited from economy-wide policies such as the government's emphasis on sourcing inputs locally and provision of tax incentives in this regard by the Zambian Revenue Authority.[17] Notably, the company has benefited from public endorsement of its products in 2016 by President Lungu, encouraging government and other entities to source locally produced steel products, which also aided in enhancing local demand and building the company's reputation.[18] The Zambian Development Agency (ZDA) was involved with providing some support to UMCIL, although this appears to have been part of its general support provided to manufacturing firms in Zambia, including assisting with lobbying for a conducive business environment.[19]

These forms of local support from policy makers can contribute significantly to the growth of local manufacturing enterprises. However, in reality, funding for large-scale local entrants remains limited in Zambia and the region generally, and public resources are stretched to address other key domestic priorities such as investing in infrastructure and public health and education.

Almost all of the funding for the development of the Kafue Steel operation was sourced internally within the Trade Kings group, following unsuccessful attempts to secure funding through private banks.[20] This is significant for at least two reasons. First, internal resources of local holding companies or investors are a critical advantage for AMNCs. The ability of a holding company to reinvest in its different subsidiaries at the level required for the establishment of very large, sophisticated, and competitively significant domestic manufacturing operations is typically uncommon in smaller economies with poorly developed and under-resourced capital markets. Arguably without access to these internal resources, it is unlikely that Kafue Steel would have entered the market, given that capital was not available from traditional private finance and government sources. As such, access to funding remains a critical barrier to entry for regional entrants, and Kafue Steel's ability to circumvent this constraint is more likely to be an exception that proves the rule.

Second, the ability of the broader company group to fund the entry of Kafue Steel speaks to a key entry strategy of AMNCs that have studied in this and parallel studies. In the case of Kafue Steel, Dangote Cement, and ETG, internal resources as well as gradual migration of capabilities and

[15] Interview with UMCIL, 16 May 2019.

[16] Interview with UMCIL, 16 May 2019.

[17] Interview with UMCIL, 16 May 2019.

[18] Interview with UMCIL, 16 May 2019.

[19] Interview with ZDA, 17 May 2019.

[20] Interview with UMCIL, 16 May 2019.

resources from one area of a business to another have been critical. Trade Kings has been well established in the Zambian market, across various consumer goods, chemicals, and mining, through UMCIL which was originally established to produce copper chloride in Zambia. The accumulated experience, knowledge, and capabilities involving highly skilled internal personnel are likely to have contributed significantly to the ability of the company to support the establishment of Kafue Steel financially and in terms of human capital and distribution capabilities, for example. A key insight emerging from the research is that each of the companies mentioned above are primarily diversified business groups that have been able to gradually evolve their portfolio of activities and leverage resources from within the group to develop other parts of the business. In small, open economies with limited domestic resources this is a critical entry strategy that has been employed, particularly in competing with better-resourced South African and international MNCs that can leverage capital from international sources and groups.

3.3 Competitive impact and regional expansion

Fessehaie et al. (2015b) find that in the iron and steel market, particularly where a firm intends to supply the mining sector, it is imperative to understand the procurement requirements and patterns of mining companies in order to understand what capabilities are needed to competitively establish a local manufacturing presence. In the Zambian market, it was found that local iron and steel suppliers generally failed to understand their weaknesses because they understood the market to be purely price-driven and thus underestimated the importance of developing trust-based relationships and investing in innovation and quality (Fessehaie et al. 2015b). The experience of Kafue Steel with establishing quality standards, certification, efficient production, and brand reputation for its products is an important illustration of the significance of dynamic strategies for building productive capabilities and competitiveness over time, innovation, and other parameters beyond price that shape the dynamics of competition.

Shortages of scrap metal in Zambia (which was UMCIL's main input) in 2013–14, made phase 2 of the production site even more important as this necessitated the use of different technologies and backward linkages using iron ore as the main input. Operation of the iron ore mine began between 2016 and 2017 using direct reduced iron (DRI) technology. This technology allows for the production of iron and steel products in an energy efficient way by directly reducing iron ore into 'sponge' form in a manner that requires less energy as opposed to using a furnace.[21] At full capacity, Kafue Steel can use approximately 70 per cent of DRI technology to meet its demand, with 30 per cent of demand met through the use of metal scrap.[22] The investments made in acquiring primary resources and the use of technology as part of its strategy has been significant from a competition perspective, as it has enabled the company to be more competitive in terms of quality and cost efficiency, which is critical for competing with well-established, well-resourced rivals operating at greater scale. Industry buyers in Zambia rank innovation and quality amongst the most important factors that shape their buying strategies for key inputs (Fessehaie et al. 2015b).[23]

Building on its strategy to achieve quality and cost efficiencies in production, Kafue Steel has grown its exports into other countries in the region (primarily Malawi) in competition with South African and deep-sea imports, and the company is gradually developing a regional presence. Growth in its exports began to be evident in 2010 and 2011. Out of the 20,000 MT produced in

[21] Interview with UMCIL, 16 May 2019.

[22] Interview with UMCIL, 16 May 2019.

[23] Interview with UMCIL, 16 May 2019.

2010, 40 per cent was exported (Sutton and Langmead 2012). Similarly, from the 50,000 MT produced in 2011, 60 per cent was exported (Sutton and Langmead 2012).

Expansion of regional exports has been critical to support the attainment of scale economies in production. That is, access to a regional market is critical for AMNCs, which highlights the importance of related policies in terms of removing trade and non-tariff barriers to support large-scale entrants in manufacturing. The AfCFTA will make a significant contribution in this regard. Domestic markets, which are typically already dominated by established traders and importers, are important but limited routes to market to ensure sufficient offtake for domestic manufacturers to achieve economies of scale and cost competitiveness. In this context, a critical strategy employed by Kafue Steel to expand its regional footprint has been to also establish a physical presence in other countries, namely South Africa and Burundi. The company has grown in this regard and supplies products to various countries including South Africa, Mozambique, Malawi, Tanzania, and Burundi.

The implication in terms of regional policies for industrialization and integration is that although domestic markets are relatively small in terms of demand, and despite limited public resources to support the entry of firms such as Kafue Steel in countries in Southern Africa, regional entrants can be supported directly and indirectly through policies that enable access to regional markets, including trade regulations. That is, the process of developing diversified manufacturing capabilities and driving regional industrialization in heavily resource-constrained countries extends beyond offering tax incentives and direct support. Instead, it also relies on ensuring coherent and well-coordinated economic policies that can lessen other structural barriers to entry and expansion over and above improving access to finance.

4 Price competition and entry in regional cement markets

Cement production around the world has a long history of cartel conduct (Roberts 2016). In East and Southern Africa, as in developing countries more generally, the majority of the local producers are affiliated with or are subsidiaries of large multinationals and are companies that have a history of collusive arrangements between them in several country markets globally (Roberts 2017; Connor 2014; Kaira 2017; Vilakazi and Roberts 2019). To understand why the cement industry is so intimately linked with collusive behaviour, it is necessary to first look at the production process. Cement production is a typically large-scale industrial process, with substantial fixed costs (Amunkete et al. 2016). Key inputs also need to be sourced—including limestone, or clinker made from limestone, and energy (Paelo et al. 2020). Time and substantial capital investments are both crucial components for supply operations to begin. In addition, cement is bulky and expensive to transport. As such, there is typically a small number of long-established producers in any geographic market (Amunkete et al. 2016). The only alternative for consumers may be to import cement from international suppliers at high costs that could include any import tariffs that may be in place (Amunkete et al. 2016).

The oligopolistic characteristics and geography of regional cement markets mean that regional competition and trade are especially important (Paelo et al. 2020). However, the sector has been the subject of investigations by competition authorities in several countries in East and Southern Africa and scrutiny of large mergers that can increase regional and local concentration (such as that of Holcim and Lafarge in 2015 to create LafargeHolcim).

Following the CCSA uncovering the cartel arrangements, which affected the SACU market until 2009, Zambia's Competition and Consumer Protection Commission (CCPC) initiated an investigation of excessive pricing and price discrimination against Lafarge Zambia, with the case being finalized in 2017 (CCPC 2017).

A new producer, Dangote Cement, entered the market (at significant scale) in Zambia, South Africa, Tanzania, and Ethiopia around 2015. The impact of this entry, as well as that of other companies in South Africa, Kenya, and Ethiopia, has been significant, with important price and non-price effects (Paelo et al. 2020). Importantly, the removal of import restrictions on cement enabled the flow of cheaper cement across borders, such as from Zambia to Malawi, with significant reductions in local prices in neighbouring countries (Paelo et al. 2020).

Few studies have considered the impact of anticompetitive conduct in cement (and other industries) in Africa, aside from South Africa. Paelo et al. (2020) analyse the extent of harm arising from a lack of competition and collusive arrangements in cement over time, the impacts of entry, and the role of trade and industrial policies and competition agencies in addressing these issues as part of broader regional integration and industrial development agenda. Through their assessment of prices in the region, Paelo et al. (2020) find indications of supra-competitive price margins in Kenya, Tanzania, and Zambia, which were subsequently undercut by the entry of new firms led by Dangote Cement. Trade data also showed low intra-regional trade in cement.

4.1 The entry of Dangote Cement

In 2014 and 2015, Dangote Cement entered cement markets in Ethiopia, South Africa, Tanzania, and Zambia. Its entry is significant in that regional markets had previously been dominated by internationalized firms Lafarge (prior to the merger with Holcim), Holcim, and PPC from South Africa. LafargeHolcim (post-merger) and PPC had the largest total regional cement manufacturing capacity, followed by Dangote Cement (Paelo et al. 2020).

Since its entry, Dangote Cement has changed competitive dynamics in the regional cement market, which, for a period, led to downward pressure on prices (Paelo et al. 2020). Most recently, however, Dangote Cement has emerged as a cartel leniency applicant in Zambia for engaging in collusive practises with Lafarge Zambia to raise prices and allocate territories (CCPC 2021). Lafarge and Mpande Limestone Limited were fined for their involvement in the collusion, following an investigation by the CCPC of Zambia, which commenced in January 2020. Most significant for this paper is the fact that Lafarge had previously been involved in excessive pricing of cement products in Zambia (investigation concluded in 2017) (CCPC 2017) and collusive conduct in South Africa (and SACU), which was exposed in 2009 (Amunkete et al. 2016).

The analysis in this section focuses on the entry of Dangote Cement in Zambia as a market in which there has historically been single-firm dominance by a global MNC, Lafarge. While the recent developments in terms of competition in the market are interesting, the focus here is on the strategies and experiences of the firm in establishing a presence in Zambia and Southern Africa to the extent that this can contribute insights about the key policies and factors that enable (and hinder) the entry and expansion of AMNCs. These issues are considered in three thematic areas, being the scale of entry and the company's competitive impact; the use of new technologies and alternative business models; and the role of government support measures.

Large-scale entry for competitive impact

Dangote Cement Zambia first produced cement in Zambia in early 2015. Signals of its entry into the market had commenced in 2010, meaning that establishing the plant took a period of approximately five years.

In terms of plant capacity in Zambia, Dangote Cement has established a plant of significant scale, estimated at 1.5 million metric tons per annum (mtpa).[24] Its domestic capacity matches the domestic capacity of Lafarge Zambia; therefore, its market shares with approximately one-third of the market. However, Dangote Cement's entry in Zambia needs to be considered in the context of a strategy to achieve a significant competitive impact at a regional level. For instance, across the border in Tanzania, Dangote Cement entered with a production facility with an annual capacity of 3 million mtpa, which is two times its capacity in Zambia and equivalent to around 30 per cent of the Tanzanian market in terms of production capacity. Having a regional presence allows the company to employ a regionalized strategy for competition, including identifying which of its operations are best positioned to service high-priced regional markets like the Democratic Republic of Congo (DRC) as well as interlinked landlocked markets such as Malawi where Lafarge has had a dominant presence. Having significant capacity, other things being equal, allows the company to be a more effective rival in terms of price competition, with an ability to drive prices lower in each market in order to win market share rapidly.

The fact that the company was able to support investments of this scale in multiple countries in the region within a relatively short period of time signals the scale of investments and financial resources required to make a significant competitive impact. In markets such as cement where there is a longstanding history of coordination between firms, it is generally difficult for smaller entrants to disrupt existing arrangements, and it is more likely that they may seek to join the existing arrangements to ensure that they have a secured portion of the market.

The competitive impact of Dangote Cement's entry on the back of significant production capacity and operational efficiencies (discussed below) is evident in price competition that has resulted in Zambia and regional markets. There is evidence that entry has led to significant reductions in consumer prices, once costs and other factors that affected market outcomes are accounted for (Paelo et al. 2020; Vilakazi 2016). However, it is also important that this impact is not only in terms of price competition in the local market. There have been dynamic competitive responses from rivals in the region most likely because of the competitive pressure exerted by entrants—in Zambia, rivals have increased their production capacity and also adapted their strategies for reaching customers (Paelo et al. 2020), and in Southern Africa, leading incumbents such as PPC have in recent years increased investments in local and regional capacity and improved operational efficiencies. Ultimately, these responses to greater competition mean that benefits can be significant for domestic and regional users of cement, which is especially important given a lengthy history of excessive prices or supernormal margins for incumbent cement producers (Vilakazi 2016).

Entry leveraging new technologies and business models

New entrants, in seeking to be competitive against incumbents, are more likely to draw on new technologies or business models to distinguish their businesses in terms of cost competitiveness or product differentiation. Existing rivals in the regional cement market are well established, generally with much older plant technology. On the other hand, Dangote Cement has entered countries in East and Southern Africa using relatively new technologies.

The company's plant in Zambia incorporates the latest technology in plant production, with significant efficiencies derived in terms of energy costs and maintaining a high quality of cement (Paelo et al. 2020). It is also self-sufficient in terms of energy production, and the plant is able to

[24] https://www.dangotecement.com/zambia/

reuse energy and waste in different stages of the production process, which enhances both environmental management and cost efficiencies.[25]

A key competitive differentiator for Dangote Cement in Zambia is its use of its own fleet to transport cement in the domestic market. Similar to investments made by ETG when it expanded to regional food markets, investment in transport capabilities can increase the level of entry costs of AMNCs. However, investments in transportation contribute to reducing costs relative to rivals.[26] Although this strategy in Zambia may be counteracted by the fact that the Dangote plant is located in the Ndola region in the north of Zambia, whereas the main cement market in terms of domestic demand is further south in Lusaka, its location does provide benefits in terms of access to the Burundi, DRC, and Malawi markets.

Government support and policy bottlenecks

Dangote Cement benefited from substantial government support in entering the Zambian market. The ZDA was instrumental in enabling Dangote Cement to enter the Zambian market in that it facilitated the acquisition of land rights for the plant location from local area chiefs, secured mining rights and permits, and managed the relationship with the local community (Paelo et al. 2020).

A key challenge for AMNCs in the region appears to be that the approaches and policies of governments towards entrants are often different. This relates also to the nature of industry development and investment support provided. For example, in South Africa, Mamba Cement (recent entrant in cement) and ETG (AMNC in agribusiness) have seen extensive government support including significant tax incentives and/or public investment, permits, or grants (Paelo et al. 2020). Although Dangote had a relatively positive experience with receiving government support for its entry in Zambia, there were significant challenges in Tanzania. The company had various commitments from the government in terms of access to natural gas and coal resources to ensure that it would have reliable energy supply. However, changes in the political landscape and policy environment seem to have contributed to challenges in reaching an agreement with the government over key inputs—for example, there were protracted negotiations with the Tanzanian energy regulator over access to natural gas resources at favourable rates (The Guardian 2016). This eventually led to Dangote Cement commencing operations using temporary diesel turbines at high costs that contributed to significant losses (Dangote Cement 2017). The plant in Tanzania was temporarily shut down for a period to minimize these losses, although an arrangement was ultimately reached with the government relating to the coal power plant.

The key issue regarding the inconsistent approaches in and changing nature of government policies is a reality of state–business relations in developing and developed countries. That is, it is inherent in the nature of domestic economies that there is contestation over the use of scarce domestic resources, and there is a need to balance different interests and trade-offs in terms of the benefits and costs of providing specific support to AMNCs and other rivals. The key question in the contest of this paper is whether the decisions made ultimately raise barriers to entry or lead to opportunities for significant investment in large-scale production capacity and whether the benefits to consumers (including downstream users such as construction firms) from greater competition are factored into policy considerations.

[25] Interview with Dangote Cement, 17 May 2018.

[26] Interview with Dangote Cement, 17 May 2018.

5 Discussion

The assessment of the case studies of Kafue Steel and Dangote Cement provide early evidence of the strategies and evolution of AMNCs in intermediate industrial products. The nature of products in which these companies specialize entails investments in large-scale, bulky production facilities. However, the assessment also shows that in order to become effective rivals, these entrants have needed to make investments in new technologies and/or efficient logistics.

In the case of Kafue Steel, being able to integrate backwards into the use of iron ore resources is a strategic priority given a significant shortage and high prices of scrap steel in Zambia. That is, in order to be competitive against imports from South Africa, the company has had to make additional investments at greater costs with a view to gaining long-term advantages. Similarly, Dangote Cement's investments in a very large fleet of vehicles is significant—its rivals in Zambia, for example, are not similarly invested in transportation. This strategy reveals the additional constraints faced by challenger firms—incumbent operators have well-established networks of retailers and distributors, necessitating multilevel entry by competitors that wish to compete and establish local and regional market presence.

The case studies both reveal that the ability to compete depends on the scale of entry, with significant capacity required to compete for market share. Investment in large plant capacity enables the entrants to gradually lower the unit costs of production and to compete on prices in markets for homogenous goods with very little product differentiation. As part of their investment strategies, each of the firms studied has also employed more recent, cost-saving technologies in its operations, albeit at additional cost. This is critical in these markets because energy savings and plant efficiencies reduce the relative costs of production, whereas incumbent operators tend to employ older plants and technologies.

The ability to make these investments depended on the pre-existing financial resources of the entrants. In many local markets in the region, financial markets are largely constrained, and state resources are similarly limited. As such, having access to equity investments or retained financial capital from other group companies or holding companies is very important. Arguably, the large-scale investments observed in these case studies would not be possible without access to these resources. Reinvestment by holding companies or groups appears to be an important common characteristic of AMNCs in these markets, as this enables the companies to make investments not only in plant capacity but other levels of the value chain as well. ETG, for example, made significant commitments in distribution including through an extensive regional agro-dealer network in a number of countries.

The significant investments made are only justified if the companies are able to expand their access to regional markets to ensure sufficient offtake. Kafue Steel and Dangote Cement have each employed strategies to establish a presence in and/or export to neighbouring countries relatively soon after the establishment of their main production facilities. A critical consideration in this regard is whether there are trade barriers that can restrict their ability, which suggests that national and regional policies are also important for attracting the significant investments required.

Similarly, governments are able to support the entry of rivals through credible policy commitments. The AMNCs studied in this research have each sought to engage domestic governments even before initial investments are made. This stage is critical as it ensures that the companies can expect to earn adequate returns on investments made, while governments benefit from the additional local production and job creation that typifies large-scale production of this nature. In reality, the policy environment may change significantly during the period over time, and it is likely that agreements made with governments beforehand may be changed, as was the case with Dangote Cement in Tanzania.

In this regard, the case studies reveal an adaptability on the part of the AMNCs in navigating these shifts and negotiating with governments. This is not necessarily different from the strategies employed by other incumbent firms in lobbying for domestic policy support and protections from competition (including trade barriers) (Roberts 2016). However, it is important that state–business engagements lead to productivity-enhancing, pro-developmental outcomes rather than protections that facilitate rent-seeking, restrict rivalry, and undermine sources of competitive discipline from local or international rivals. The nature of state–business relations between AMNCs and governments in the region is an important area for further research, to be understood in terms of how to balance the competing interests of local elites and international businesses. That is, these interactions are part and parcel of the nature of domestic political settlements in many developing (and developed) countries, rather than anomalous distortions to be wished away.

The impacts of entry have been significant and make the case for domestic policies that enable rather than undermine entrants. In cement, there is a growing body of evidence that the combination of effective implementation of competition policies, as well as government support for entrants such as that offered to Dangote Cement in Zambia, are complementary for changing market outcomes. This is especially important in a market such as cement where there is a history of market abuse and high prices for consumers and users of cement products.

6 Conclusion

Both the Southern African Development Community (SADC) industrialization roadmap and the AfCFTA have as a core focus developing regional industrial capacity in African markets. The research shows that this is about more than trade policies. Instead, it necessitates an interface between various policy areas, including policies to enable the growth of regional entrants and to remove competition barriers.

The opening up of markets in Africa has enabled the growth of domestic firms that have grown to compete with large MNCs. While this has been especially prevalent in food markets, it is less prominent in markets for inputs to construction and the production of intermediate industrial products. Part of the reason for this is the nature of bulky, high-risk investments required to establish production capabilities of sufficient scale to compete for market share in the region. For example, while there have been entrants to the cement market in Zambia, it was not until Dangote Cement was able to enter at significant scale in the Zambian and regional market that there was substantial competitive impact.

The AMNCs studied have evolved their businesses over time, accumulating different local capabilities that have enabled them to compete more effectively with established rivals. They have also employed newer technologies and made additional investments in local distribution and marketing capabilities, building on resources accumulated through other group businesses.

The extent of government financial support has been limited given highly constrained economies in terms of resources. However, it is evident from the research that there are firms with internal financial resources to make investments and expand their businesses within the region given appropriate local market conditions. It is also clear that governments can aid or hinder these investments through policy making—that is, inconsistencies in policy over time or an inability to engage with competing local interests can undermine the attractiveness of domestic and regional markets for potential investors. That being said, it is notable that the firms studied display an adaptability to local political economy conditions that enabled them to navigate shifting policy environments. This is a critical area for further research and may hold the key to understanding the different incentives of regional multinational firms, their strategies for overcoming barriers to entry, and how policymakers can better engage with these companies to stimulate local and regional investments even in highly complex political economy environments.

In each of the cases considered, there is evidence of significant competitive impact, including stimulating incumbent firms to improve their capabilities. In cement, the price effects of entry have been substantial with significant decreases in prices in Zambia, and in steel, Kafue Steel has emphasized competition on the quality of steel products supplied to the market. These static and dynamic benefits from competition only result if entrants that have made large-scale investments can reap the benefits of scale obtained through accessing a larger regional market. The level of demand in many of the countries in the region for these products tends to be relatively small and insufficient to support large-scale production. This insight points to the importance of trade policies and opening up regional markets for greater cross-border trade and investment—a focus on these issues in the ongoing negotiations relating to the AfCFTA is critical for fostering regional industrial development. Related barriers faced by companies in terms of access to finance should also be prioritized, noting that it is only in exceptional circumstances that regional companies have the required internal finance resources to support large investments. At the same time, (regional) competition policies can play an important role in removing other barriers that result from market abuse and restrictive business practises employed by incumbent firms that can undermine potentially effective rivals.

References

Amunkete, T., E. Chokwe, G. Gabriel, M. Humavindu, J. Khumalo, T. Mbongwe, G. Nguruse, and B. O Nyagol (2016). 'Regional Cartels and Competition in the Cement Industry Across Six Countries: Botswana, Kenya, Namibia, South Africa, Tanzania, and Zambia'. In S. Roberts (ed), *Competition in Africa: Insights from Key Industries*. HSRC Press: Cape Town.

Banda, F., G. Robb, S. Roberts, and T. Vilakazi (2015). 'Key Debates in Competition, Capabilities Development, and Related Policies: Drawing the Link Between Barriers to Entry and Inclusive Growth'. CCRED Working Paper 2015/4. Centre for Competition, Regulation and Economic Development. Johannesburg: University of Johannesburg. https://doi.org/10.2139/ssrn.2716038

Bell, J., S. Goga, P. Mondliwa, and S. Roberts (2018). *Structural Transformation in South Africa: Moving Towards a Smart Open Economy for All*. CCRED Working Paper No 9/2018. Centre for Competition, Regulation and Economic Development. Johannesburg: University of Johannesburg. Available at: https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/5be17018575d1f0f5f3333f0/1541501005773/CCRED+Working+Paper+9_2018_Structural+Transformation_BellGogaMondliwaRoberts.pdf (accessed 12 August 2021).

Bosiu, T., and T. Vilakazi (2020). 'Competition and Inclusive Regional Economic Growth in Food Production: Barriers to Entry and the Role of African Multinational Corporations'. WIDER Working Paper 2020/88. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2020/845-0

Boso, N., I. Adeleye, K. Ibeh, and A. Chizema (2019). 'The Internationlisation of African Firms: Opportunities, Challenges and Risks'. *Thunderbird International Business Review,* 61(1): 5–12. https://doi.org/10.1002/tie.21977

Brenton, P., and G. Isik (eds) (2012). *De-Fragmenting Africa: Deepening Regional Trade Integration in Goods and Services*. Washington, DC: World Bank.

Buckley, P.J., and M. Casson (2019). 'The Internalization Theory of the Multinational Enterprise: Past, Present and Future'. *British Journal of Management,* 31(2): 1–14. https://doi.org/10.1111/1467-8551.12344

Burke, M., T. Paremoer, T. Vilakazi, and T. Zengeni (2017). 'Cross-Cutting Competition Issues in Regional Industrial Development'. CCRED Working Paper 20/2017. Centre for Competition, Regulation and Economic Development. Johannesburg: University of Johannesburg. Available at: https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/59d5f22f8a02c7e2d816a295/1507193402807/AIDIRP+Cross-Cutting+Competition+Issues+in+Regional+Industrial+Development+Working+Paper+20-2017.pdf (accessed 12 August 2021).

CPPC (Competition and Consumer Protection Commission) (2017). 'Lafarge Cement Zambia Plc Fined ZMK99,235,500 for Abuse of its Dominance'. CCPC Press Statement. Dublin: CCPC.

CCPC (2021). 'CCPC Fines Cement Companies for Anti-Competitive Trade Practices and Orders Adjustment of Prices'. CCPC News Article. Available at: https://www.ccpc.org.zm/details/45 (accessed 12 August 2021).

Connor, J.M. (2014). 'Price-Fixing Overcharges: Revised 3rd Edition'. Working Paper. https://doi.org/10.2139/ssrn.2400780

Dangote Cement (2017). 'Annual Report 2017'. Lagos, Nigeria: Dangote Cement. Available at: https://dangotecement.com/wp-content/uploads/2021/04/DCP-2017-AR_updated_April20181.pdf (accessed 25 August 2021).

Das Nair, R., and S. Chisoro-Dube (2015). 'The Expansion of Regional Supermarket Chains: Changing Models of Retailing and the Implications for Local Supplier Capabilities in South Africa, Botswana, Zambia, and Zimbabwe'. WIDER Working Paper 2015/114. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2015/003-4

Esho, E., and G. Verhoef (2020). 'Beyond National Markets: The Case of Emerging African Multinationals'. *Economic History of Developing Regions,* 35(2): 71–97. https://doi.org/10.1080/20780389.2020.1757425

Fessehaie, J., R. das Nair, P. Ncube, and S. Roberts (2015a). 'Growth Promotion Through Industrial Strategies'. IGC Working Paper. London: International Growth Centre. Available at: https://www.theigc.org/wp-content/uploads/2015/06/Roberts-et-al-2015-Working-paper.pdf (accessed 12 August 2021).

Fessehaie, J., S. Roberts, and L. Takala-Greenish (2015b). 'Key Findings from Case Studies of Mining Capital Equipment, Infrastructure Inputs and Soy Agro-Processing in Southern Africa and Implications for Regional Industrial Development Agenda'. CCRED Working Paper. Centre for Competition, Regulation and Economic Development. Johannesburg: University of Johannesburg. Available at: http://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/561d46f5e4b089431662eb2c/1444759285074/Regional+Industrialization+Synthesis+report+02092015+final+for+submission.pdf (accessed 12 August 2021).

Gal, M. (2003). *Competition Policy for Small Market Economies*. Boston: Harvard University Press.

The Guardian (2016). 'Government Lifts Lid on Dangote Gas Impasse'. IPP Media, 21 December 2016. Available at: https://www.ippmedia.com/en/news/government-lifts-lid-dangote-gas-impasse (accessed 14 June 2021).

Hausmann, R., J. Hwang, and D. Rodrik (2007). 'What You Export Matters'. *Journal of Economic Growth*, 12(1): 1–25. https://doi.org/10.1007/s10887-006-9009-4

Kaira, T. (2015). 'A Cartel in South Africa is a Cartel in a Neighbouring Country: Why Has the Successful Cartel Leniency Policy in South Africa Not Resulted into Automatic Cartel Confessions in Economically Interdependent Neighbouring Countries?' 1st Annual Competition and Economic Regulation (ACER) Conference, Victoria Falls.

Kaira, T. (2017). 'Challenges of Competition Authorities in Small Countries with Large Neighbours for Successful Regional Enforcement'. 3rd Annual Competition and Economic Regulation (ACER) 2017 Conference, Dar es Salaam, Tanzania.

Kaira, T. (2018). 'Regional Cartel Enforcement – A Cartel in South Africa is Still a Cartel in the Region?' 4th Annual Competition and Economic Regulation (ACER) 2018 Conference, 19 and 20 July. Sandton, South Africa: IDC.

Kano, L., E. Tsang, and H.W. Yeung (2020). 'Global Value Chains: A Review of the Multi-Disciplinary Literature'. *Journal of International Business Studies*, 51: 577–622. https://doi.org/10.1057/s41267-020-00304-2

Kaunda, S., P. Zengeni, and B. Zulu (2020). *Economic Diversification in Zambia: Are We Getting There? Assessing the Prospects for Economic Diversification in Zambia*. Lusaka, Zambia: Policy Monitoring and Research Centre.

Khan, M. (2012). 'The Political Economy of Inclusive Growth'. In L. de Mello and M.A. Dutz (eds), *Promoting Inclusive Growth: Challenges and Policies*. Paris: OECD Publishing. https://doi.org/10.1787/9789264168305-en

Kupka, J., and A. Thomas (2014). 'Anti-Competitive Behaviour in the Agri-Food and Steel Value Chains in the South African Manufacturing Sector'. *Journal of Economic and Financial Sciences,* 7(2): 315–40. https://doi.org/10.4102/jef.v7i2.143

Mondliwa, P., and R. das Nair (2017). 'Excessive Pricing Revisited: What is a Competitive Price?' In J. Klaaren, S. Roberts, and I. Valodia (eds), *Competition Law and Economic Regulation*. Johannesburg: Wits University Press.

Paelo, A., S. Roberts, W. Simbanegavi, and T. Vilakazi (2020). 'Understanding the Role of Competition in Rethinking Regional Integration in Africa for Inclusive and Sustainable Development'. CRRED Working Paper. Centre for Competition, Regulation and Economic Development. Johannesburg: University of Johannesburg. Available at: https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/5f58bd766b1bea57547da66c/1599651199015/Regional+integration+and+competition_Paper_Final.pdf (accessed 12 August 2021).

Paelo, A., and T. Vilakazi (2017). 'Towards the Integration of Markets: Competition in Road Transportation of Perishable Goods Between Malawi, South Africa, Zambia, and Zimbabwe'. WIDER Working Paper 2017/49. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2017/273-1

Phiri, M., and S. Manchishi (2020). 'Special Economic Zones in Southern Africa: White Elephants or Latent Drivers of Growth and Employment? The Case of Zambia and South Africa'. WIDER Working Paper 2020/160. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2020/917-4

Ramamurti, R. (2012). 'What Is Really Different About Emerging Market Multinationals?' *Global Strategy Journal,* 4(1): 41–7. https://doi.org/10.1002/gsj.1025

Roberts, S. (2016). *Competition in Africa: Insights from Key Industries*. HSRC Press: Cape Town.

Roberts, S. (2017). 'Competition Law Prescriptions and Competitive Outcomes: Insights from Southern and East Africa'. CCRED Working Paper 14/2017. Available at: https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/595260a6d1758e455ac9644d/1498570922830/Competition+law+prescriptions+and+competitive+outcomes_insights+from+Southern+and+East+Africa+14_2017.pdf (accessed 12 August 2021).

Roberts, S., T. Vilakazi, and W. Simbanegavi (2017). 'Competition, Regional Integration and Inclusive Growth in Africa: A Research Agenda'. In J. Klaaren, S. Roberts, and I. Valodia (eds), *Competition Law and Economic Regulation: Addressing Market Power in Southern Africa*. Johannesburg: WITS University Press. https://doi.org/10.18772/22017070909.17

Roberts, S., and T. Vilakazi (2015). 'Understanding Firm Behaviour and the Implementation of Competition Policy as Part of an Inclusive Growth Agenda for South Africa'. CCRED Working Paper 15/2015. Centre for Competition, Regulation and Economic Development. Johannesburg: University of Johannesburg. Available at: https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/58258fd5ebbd1ab109dc53ab/1478856663701/CCRED+Working+Paper+15_2015_Firm+Behaviour_RobertsVilakazi.pdf (accessed 13 August 2021).

Sutton, J., and G. Langmead (2012). *An Enterprise Map of Zambia*. London: International Growth Centre (IGC). Available at: https://www.theigc.org/wp-content/uploads/2014/04/An-Enterprise-Map-of-Zambia-English.pdf (accessed 12 August 2021).

Verhoef, G. (2017). 'The History of Business in Africa: Introduction'. In *The History of Business in Africa: Complex Discontinuity to Emerging Markets. Studies in Economic History*, 1–5. Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-62566-9_1

Vilakazi, T. (2016). 'Regional Cartels and a Review of Developments in the Cement Industry'. Paper prepared for ACER Week Conference 2016, Livingstone, Zambia.

Vilakazi, T. (2018). 'The Causes of High Intra-Regional Road Freight Rates for Food and Commodities in Southern Africa'. *Development Southern Africa*, 35(3): 388–403. https://doi.org/10.1080/0376835X.2018.1456905

Vilakazi, T., and S. Roberts (2019). 'Cartels as "Fraud"? Insights from Collusion in Southern and East Africa in Fertilizer and Cement'. *Review of African Political Economy*, 46(161): 369–86. https://doi.org/10.1080/03056244.2018.1536974

Zheng, D.Z. (2016). 'Multi-Facility Economic Zones in Zambia: Progress, Challenges and Possible Interventions'. Working Paper. Washington, DC: World Bank Group. Available at: http://documents.worldbank.org/curated/en/720981495115586647/Multi-facility-economic-zones-in-Zambia-progress-challenges-and-possible-interventions (accessed 2 September 2021).