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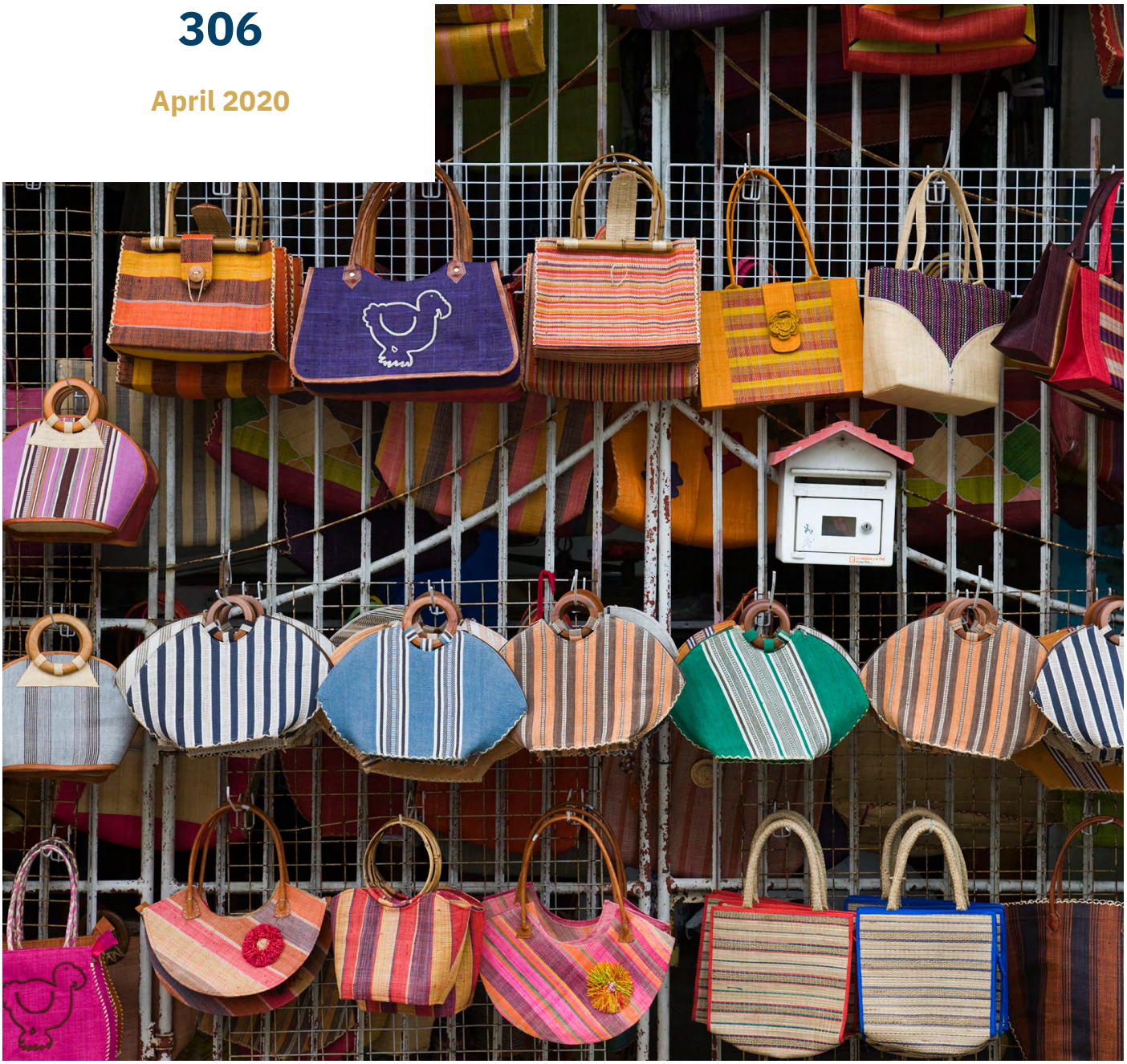

FDI Trends in SADC: Implications for Value Chains, Industrialisation and Inclusive Growth

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Abstract

This paper analyses inward foreign direct investment (FDI) trends in SADC countries with the purpose of informing the SADC Industrialisation Strategy and Roadmap (SISR) and its ongoing implementation. It first examines the SISR and the role of private investment/FDI in industrialisation, after which it gives a brief explanation of the structural determinants of FDI within the SADC context. The bulk of the paper then analyses FDI trends in the region based on a number of metrics, including years, sector, activity, job creation, export potential and inter-regional investments. The findings confirm the importance of manufacturing investments in generating inclusive growth, while identifying specific sectors that show a mismatch between export potential and levels of FDI. Additionally, the findings highlight strong inclusive growth potential in agro-processing sectors in SADC, while noting the decline in natural resource investments. Classic manufacturing sectors such as textiles also show possibilities for revived potential. The economic spillovers from services investments have been minimal, yet there are opportunities to create additional value-add in these sectors.

Introduction

SADC is one of eight regional economic communities (RECs) on the African continent, and was established in 1992 with a mandate to integrate the economies of Southern Africa in order to promote the development of the region.[1] Acknowledging that SADC countries have diverse economic contexts (for example, South Africa is a dominant economy compared to the rest of the region, and Mauritius, Seychelles and Madagascar are island economies, among other differences), the SADC REC seeks to leverage competitive differences as strengths and harmonise national policies and regulations to facilitate greater regional cooperation. Ultimately, regional economic integration seeks to alleviate poverty and improve the lives of citizens. Through the SADC Industrialisation Strategy and Roadmap, released in 2015, SADC has placed industrialisation-led growth and investment in value chains as a central strategy to achieve this mandate.[2] In the SISR, the region has identified a range of specific value chains with high potential for investment and upgrades to higher value-added activities. Foreign direct investment, often from multinational corporations, can play a key role in driving investment in value chains.

However, a number of factors are changing traditional global value chain investment destinations. Rapid technological advancements and the automation of labour have reduced the cost advantages of relocating value chain production to developing countries.

1 SADC, "Declaration and Treaty of the Southern African Development Community, August 17, 1992" (Gaborone: Printing and Publishing Company Botswana, 1993), https://www.sadc.int/files/8613/5292/8378/Declaration__Treaty_of_SADC.pdf.

2 SADC, "SADC Industrialisation Strategy and Roadmap (SISR) 2015–2063", April 21, 2015, https://www.ilo.org/wcmsp5/groups/public/---africa/---ro-addis_ababa/---ilo-pretoria/documents/meetingdocument/wcms_391013.pdf.

Additionally, consumer demand for sustainable supply chains and the growing role of services within global production are changing investment destination decisions. Within SADC, select countries are also experiencing more rapid economic and population growth. Considering these shifts, this study seeks to reassess SADC priority value chains through an analysis of FDI trends in the region. The analysis will firstly examine the SISR and the role of private investment/FDI in industrialisation, briefly explaining the structural determinants of FDI within the SADC context. Thereafter it will analyse FDI trends in the region based on metrics such as time period, sector, activity, job creation, export potential and regional investment. This analysis seeks to give insights into promising areas of growth and potential in the region, and subsequently probe existing policies and/or structural factors driving these FDI trends. Ultimately, the study hopes to support the SADC Secretariat in its objective to attract private sector investment in value chains under the SISR.

SADC's industrialisation strategy and value chain approach

The following section will examine SADC's growth strategy, unpacking the interplay between regional value chains, industrialisation and economic growth, and their relevance to improving regional development and prosperity in SADC.

Since its inception, SADC has produced various policies and strategies to drive regional economic growth. The SADC Regional Indicative Strategic Development Plan was developed in 2001 as the principal strategic framework to guide regional integration, with trade, industry, finance and investment included as one its six clusters.[3] The SADC Protocol on Trade (1996) also officially established a SADC Free Trade Area in 2008.[4] These strategies are informed by the ideology that leveraging the comparative advantages of different SADC member states and a combined regional market will accelerate economic growth in the region. Ultimately, the AU strives to integrate all eight RECs into a self-reliant African Continental Free Trade Area.

However, the benefits of liberalised trade cannot be realised without competitive national industries and the production of primary, intermediate and finished goods for value-added trade in the region. This rationale underlines the release of the SISR in 2015 and the current value chain-driven approach to industrialisation and regional growth.[5]

3 SADC, "Regional Indicative Strategic Development Plan", 2001, https://www.sadc.int/files/5713/5292/8372/Regional_Indicative_Strategic_Development_Plan.pdf.

4 SADC, "Trade in Goods", https://www.sadc.int/themes/economic-development/trade/.

5 SADC, "SADC Industrialisation Strategy and Roadmap".

According to *A Handbook for Value Chain Research*,[6] a value chain can be defined as:

> the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.

The SISR recognises that many SADC countries are locked in at primary value chain stages, producing raw materials for export and foregoing the greater value-add and economic benefit from industrial activity in later value chain stages (such as processing). The SISR therefore promotes industrial activity through investment and upgrades in regional value chains.

The three pillars of the SISR are:[7]

- industrialisation as the champion of economic and technological transformation;
- competitiveness (at the firm/industry, country and regional level) as an active process to move from comparative advantage to competitive advantage; and
- regional integration and geography as the context for industrial development and economic prosperity.

Within these pillars, the SISR also prioritises three specific growth paths:[8]

- agriculture-led growth, including agricultural value chains;
- natural resource-led growth, including mineral beneficiation and processing, also linking into value chains, both regional and global; and
- enhanced participation in domestic, regional and global value chains.

Recent policy literature has emphasised the emerging potential of services and service value chains, as they comprise a growing proportion of gross domestic product (GDP) in developing countries.[9] Within the SISR, services are considered Priority B activities, specifically within the context of their ability (along with infrastructure) to support industrial activities.

While the emphasis on value chains within the SISR is clear, the chosen priority value chains are less focused. Given the differences among SADC member states in terms of size,

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6 Raphael Kaplinsky and Mike Morris, *A Handbook for Value Chain Research* (Brighton: University of Sussex, Institute of Development Studies, 2000), 4.

7 SADC, "SADC Industrialisation Strategy and Roadmap".

8 SADC, "SADC Industrialisation Strategy and Roadmap".

9 Nora Dihel and Arti Grover Goswami, "The Unexplored Potential of Trade in Services in Africa: From Hair Stylists and Teachers to Accountants and Doctors" (Working Paper, World Bank, Washington DC, 2016); UN Conference on Trade and Development, "Mission to Unlock Africa's Services Sector", February 1, 2019, https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1988; Sebastian Sáez, Miles Mckenna and Barak Hoffman, "Valuing Trade in Services in Africa", in *The Africa Competitiveness Report*, Chapter 2.2, (Geneva, 2015).

location, population, infrastructural development, natural resource endowments, skill levels, and overall economic development, value chain prioritisation should differ greatly among them. In the Action Plan for the SISR, sectoral priorities are outlined for each country based on its own national analyses and policy focus; however, the scope is still very wide. The full list of priority sectors is set out in Table 1. This study seeks to contribute to a further refinement of this list from an evidence-based analysis of FDI in different sectors in the region.

TABLE 1 PRODUCTS AND SECTORS IN SADC WITH POTENTIAL FOR VALUE CHAIN ENHANCEMENT

Cluster	Sub-sector	Countries
Agro-processing	Soya	South Africa, Zimbabwe, Zambia, DRC*, Malawi, Madagascar
	Sugar	Malawi, Mozambique, South Africa, eSwatini**, DRC, Tanzania, Zambia, Zimbabwe, Mauritius, Botswana
	Meat	Botswana, South Africa, Zambia, Zimbabwe, Namibia, eSwatini, Madagascar, Tanzania, DRC
	Cassava	Angola, DRC, Mozambique, Tanzania, South Africa, Malawi, Madagascar, Zambia, Zimbabwe
	Dairy	Madagascar, South Africa, Namibia, Tanzania, DRC, Malawi, Botswana, Zambia, Zimbabwe, eSwatini
	Fish	Angola, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Zambia, Madagascar, Malawi, Tanzania, DRC, Zimbabwe
	Horticulture	eSwatini, Lesotho, Zambia, South Africa, Malawi, Madagascar, Zimbabwe, DRC, Namibia, Tanzania
	Wildlife	Botswana, Namibia, South Africa, Zambia, Zimbabwe, DRC
	Forestry	DRC, South Africa, Angola, Madagascar, eSwatini, Mozambique, Zimbabwe, Zambia, Namibia, Tanzania, Malawi, Mauritius
	Other	Angola, DRC, Lesotho (maize), Mauritius (seafood), Zambia, Malawi (oilseeds), South Africa, Zimbabwe, eSwatini, Madagascar (rice, maize, beans, peas), Namibia, Tanzania (maize, rice, oilseeds)
Minerals and beneficiation	Energy minerals	Angola (oil), Botswana, South Africa, Madagascar, Zimbabwe, eSwatini (coal), DRC (oil, gas, coal, uranium), Mozambique, Tanzania (gas, coal), Malawi, Namibia (uranium, gas, coal)
	Ferrous minerals	Angola, DRC, South Africa, Tanzania, Mozambique, Zambia, Zimbabwe, eSwatini, Namibia
	Base metals	DRC, Zambia, South Africa, Namibia, Mozambique, Tanzania, Madagascar, Zimbabwe
	Fertilizer	South Africa, Zimbabwe, Zambia, DRC, Malawi, Mozambique, Angola, Tanzania, Namibia
	Diamonds	Botswana, Namibia, South Africa, Zimbabwe, DRC, Lesotho, Angola, Tanzania
	Platinum	South Africa, Zimbabwe, DRC
	Cement	South Africa, Zimbabwe, Zambia, DRC, Mozambique, Namibia, Malawi, Tanzania
	Soda ash	Botswana, Zambia, South Africa, Tanzania
	Mining machinery	South Africa, Zambia
	Small-scale mining	Malawi, DRC, Tanzania

Pharmaceutical products and preparations	Antiretrovirals	South Africa, Zimbabwe, Tanzania, DRC, Namibia, Malawi
	Anti-TB drugs	South Africa, Zimbabwe, Zambia, Namibia, DRC
	Anti-malarial	Madagascar, DRC, Tanzania, South Africa, Namibia
	Condoms	South Africa, Botswana, Namibia, Malawi, DRC
	Bed nets	Tanzania, Malawi
	Medical supplies	Malawi, Namibia
Consumer goods	Leather goods, footwear	Botswana, Lesotho, Namibia, Zambia, South Africa, Zimbabwe, Mozambique, Malawi, DRC, eSwatini, Tanzania
	Textiles and garments	Botswana, Lesotho, Madagascar, Mauritius, Namibia, South Africa, eSwatini, Zimbabwe, Malawi, Tanzania, DRC, Mozambique
Capital goods	Motor vehicles	South Africa, Lesotho, Mozambique, Zimbabwe, Namibia, Malawi, Botswana
Services	Tourism	Botswana, Mauritius, Seychelles, South Africa, DRC, Tanzania, Zimbabwe, Zambia, Madagascar, Lesotho, eSwatini, Mozambique, Namibia, Malawi, Angola
	Financial services	Botswana, Mauritius, Seychelles, South Africa, eSwatini, Zimbabwe, Namibia, Malawi
	ICT	All member states

* Democratic Republic of Congo

** Swaziland

Source: SADC, "Action Plan for SADC Industrialization Strategy and Roadmap", March 18, 2017, https://www.sadc.int/files/4514/9580/8179/Action_Plan_for_SADC_Industrialization_Strategy_and_Roadmap.pdf

The role of FDI in SADC's growth strategy

While public investment is critical to lay the foundation for industry (particularly through public provision of infrastructure), private investment is often the direct driver of industrial development and therefore a key enabler of economic growth. Multinational investments comprise a third of global output and 50–60% of global exports.[10] Especially in developing countries, FDI in value chains can drive growth because it is often export focused and brings skills, technology and efficient business models to local firms and suppliers. This facilitates upgrading to greater value-added activities within value chains. However, the literature cautions that greater FDI does not unequivocally lead to higher and more inclusive growth. The impact of FDI depends on other factors such as the destination country's absorptive capacity, whether FDI brings technology and skills, and the characteristics of the specific sectors receiving FDI (ie, whether they are labour-intensive with potential for value addition).[11] The SISR recognises this by prioritising value chains with further processing and upgrading potential.

10 Organisation for Economic Co-operation and Development, *FDI-SME Linkages in Regional and Global Value Chains and the Development Dimension in SADC*, January 2018.

11 Jorge Bermejo Carbonell and Richard A Werner, "Does Foreign Direct Investment Generate Economic Growth? A New Empirical Approach Applied to Spain", *Economic Geography* 94, no. 4 (2018): 425–456, DOI: 10.1080/00130095.2017.1393312

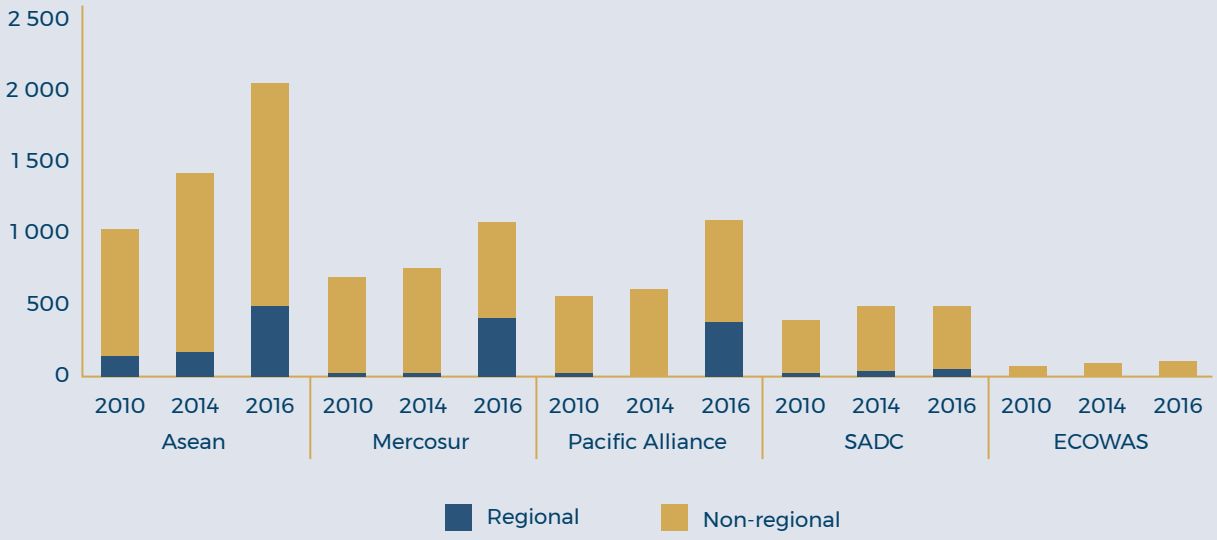
The motivations for different forms of FDI also vary, and are important to understand in the context of analysing investment in SADC. Dunning[12] classifies four main FDI drivers:

- natural resource-seeking FDI driven by the availability of natural resources in the destination country, usually in order to export;
- market-seeking FDI with investors seeking to sell to local or regional markets, often motivated by tariff regimes in destination countries;
- efficiency-seeking FDI driven by competitive advantages in the destination country, such as labour costs, quality infrastructure, innovation and specialised skills; and
- strategic asset-seeking FDI with investors seeking an asset that is strategic to the firm's long-term development strategy, possibly to strengthen its position against competitors.

While the first two may appear to be purely structurally driven, enabling policies can influence all four FDI drivers. Some examples include policies to support transportation and/or beneficiation of natural resources, tariff structures that incentivise domestic production to access local markets, and policies to develop specialised industry skills.

The SADC region has struggled to attract inward FDI both from the region and globally, especially compared to other RECs (see Figure 1).

Figure 1 Inward FDI positions by REC, 2010, 2014 and 2016 ($ billion)



Note: Intra-regional and extra-regional refer to FDI flows within and outside each REC, respectively.
ASEAN: Association of Southeast Asian Nations; MERCOSUR: Southern Common Market

Source: Organisation for Economic Co-operation and Development, Internal Report prepared by the OECD, January 2018

12 JH Dunning, *Multinational Enterprise and the Global Economy* (Wokingham: Addison Wesley, 1993).

Research has probed the barriers preventing higher investment and value chain participation within SADC. Identified barriers include access to and cost of finance, tax policies, labour cost and quality, customs regulations, macroeconomic policy restrictions, restrictions on the movement of goods and people (whether formal or informal), infrastructure development, bureaucracy/ease of setting up a business, product quality and standards barriers, corruption, and general political risk/policy uncertainty.[13]

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Recognising this challenge, the SISR denoted the private sector 'the driver of industrialisation' and called for a regional public–private dialogue platform to better understand and address specific business barriers.[14] The Southern Africa Business Forum (SABF), hosted by the NEPAD Business Foundation, was established in 2015 to achieve this objective. Since 2018 this dialogue has transitioned into the SADC Business Council (BC), which serves as the official private sector engagement mechanism under the SISR.[15] Officially, the SADC BC seeks to:[16]

- ensure private sector consultation and participation in policy processes;
- address issues that limit private sector competitiveness;
- address key obstacles to business growth;
- develop and share evidence-based position papers; and
- convey the private sector's concerns and issues in major policy areas.

Currently, the SADC BC is organising the SADC Industrialisation Week with the SADC Secretariat. This is a yearly dialogue to support the engagement of the SADC Secretariat,

13 South African Institute of International Affairs, "Regional Business Barriers Collection: Unlocking Economic Potential in Southern Africa", 2014, https://saiia.org.za/toolkits/sadc-business-barriers/regional-business-barriers-unlocking-economic-potential-in-southern-africa/; Koffi Elitcha, "The Private Sector and Regional Integration in Southern Africa: Accelerating Opportunities for Investment and Growth" (Background Paper, Southern Africa Regional Integration Stakeholder Forum, Lilongwe, June 11–13, 2018), https://www.tralac.org/images/docs/13139/the-private-sector-and-regional-integration-in-southern-africa-background-paper-stakeholder-forum-uneca-june-2018.pdf.

14 SADC, "SADC Industrialisation Strategy and Roadmap".

15 NEPAD Business Foundation, "SADC Increases the Voice of Private Sector for Regional Industrialisation and Integration", Press Release, November 7, 2018, https://nepadbusinessfoundation.org/sadc-business-council-dounding-meeting/; SADC, Business Council Brochure, 2019.

16 SADC, Business Council Brochure.

member states and businesses operating in the region. It is also continuing the SABF's pharmaceutical working group to identify and address barriers to regional pharmaceutical investments and conducting workshops to identify non-tariff barriers faced by the private sector.[17] Beyond technical considerations, garnering political will at national level to prioritise regional strategies and approaches to investment will be both important and challenging for SADC.

Structural drivers of FDI

In the following section, FDI trends are first compared with key structural drivers within the SADC context, including GDP, market size, infrastructural development and skill levels. This section informs the subsequent analysis of FDI trends by helping to realistically understand the available policy space in SADC for overcoming structural determinants of FDI.

FDI averages between 1% and 3% of GDP for 10 of the 16 SADC countries, and the SADC average is 1%. This is only slightly lower than the world average of 1.5%

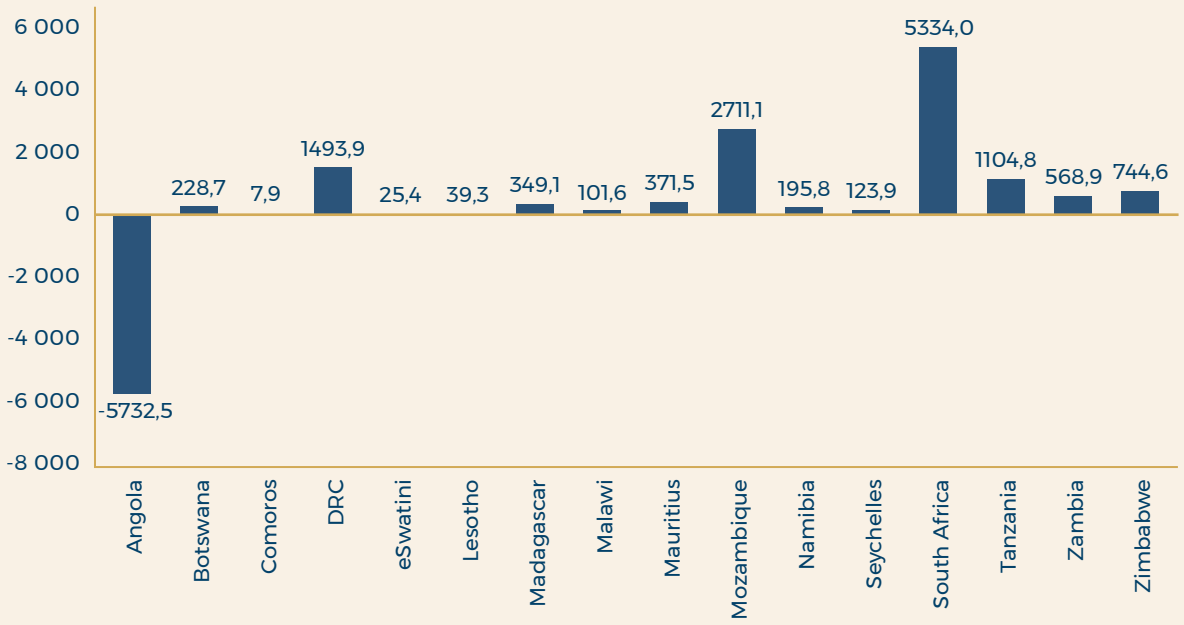
GDP is expected to correlate positively with FDI, as any or all of Dunning's four FDI drivers may also contribute to higher national GDP. Correlation tests (using FDI and GDP data from 2004–2018) confirm that GDP and FDI in SADC show a low to moderate correlation over time of .48.[18] An analysis of FDI as a percentage of GDP is also conducted in order to compare across countries. Although actual FDI dollar values vary greatly among SADC countries (see Figure 2), Figure 3 shows that FDI as a percentage of GDP is largely consistent across countries. FDI averages between 1% and 3% of GDP for 10 of the 16 SADC countries, and the SADC average is 1%. This is only slightly lower than the world average of 1.5%. This supports the theory that economic size plays an important role in determining levels of FDI (and explains why South Africa has a much higher level of net FDI, as it is proportionate to its GDP). Figure 4 also shows FDI as a percentage of GDP to be relatively consistent over time in the majority of SADC countries. However, the SISR advocates investment-driven growth, and envisions proportions much higher than the region's average. Therefore, insights can also be derived from outliers. Angola is an anomaly because foreign oil companies domiciled in Angola made significant intra-company transfers to the home country over the time period, leading to negative net FDI. This explains the

17 SADC, Business Council Brochure.

18 Data analysis available upon request.

negative percentage of GDP. Angola's dependence on volatile oil prices has led to more volatile FDI over time. Seychelles is the only high-income country in the SADC region and has capitalised on investment in a luxury tourism industry to serve its small population (estimated at 98 000 people), explaining the high FDI-to-GDP percentage.

Figure 2 Net SADC FDI 2018 ($ millions)



Source: Author's calculations from UNCTAD, "FDI Statistics", https://unctad.org/en/Pages/DIAE/FDI%20Statistics/FDI-Statistics.aspx

Mozambique is the most interesting case, with FDI at 18.6% of GDP. As can be seen from Figure 2, this is a trend not limited to 2018. Explanations for Mozambique's disproportionately high levels of FDI point to a confluence of factors, with the primary driver being natural gas discoveries in 2009 (and to a lesser extent aluminium discoveries in the 1990s).[19] These investments created a multiplier effect driving investment in other sectors in anticipation of the economic boom and increased demand in post-war Mozambique.[20] While the business environment is weak (Mozambique ranked 138 out of 190 countries in the World Bank Ease of Doing Business Report in 2019), it is still a better operating environment than other resource-rich countries such as Angola and the DRC.[21] FDI was also

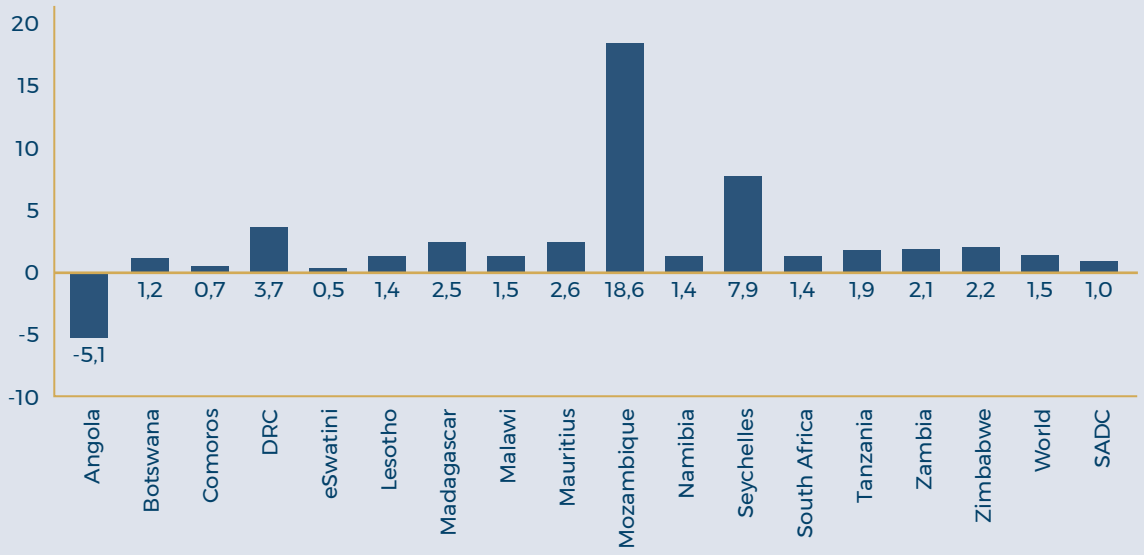
19 *Mail & Guardian*, "Mozambique: Why Natural Resource Finds Are More Than Just a Curse", April 3, 2008, https://mg.co.za/article/2018-04-03-mozambique-why-natural-resource-finds-are-more-than-just-a-curse/; UNCTAD, *Investment Policy Review: Mozambique* (Geneva: UNCTAD, 2012).

20 International Trade Centre, *Investment Guide for Mozambique: Agroprocessing and Light Manufacturing Sectors* (Geneva: ITC, 2018).

21 KPMG, *What Influences Foreign Direct Investment into Africa* (Amstelveen: KPMG, 2016).

catalysed by a massive influx of donor funding and public investment after Mozambique's economic liberalisation (leading to an unwanted side effect of skyrocketing debt).[22] However, the net gains for inclusive growth from the primarily megaproject-driven FDI have been widely questioned.[23]

Figure 3 FDI as % of GDP (2018)



Source: Author's calculations from World Bank, "World Development Indicators", https://databank.worldbank.org/source/world-development-indicators

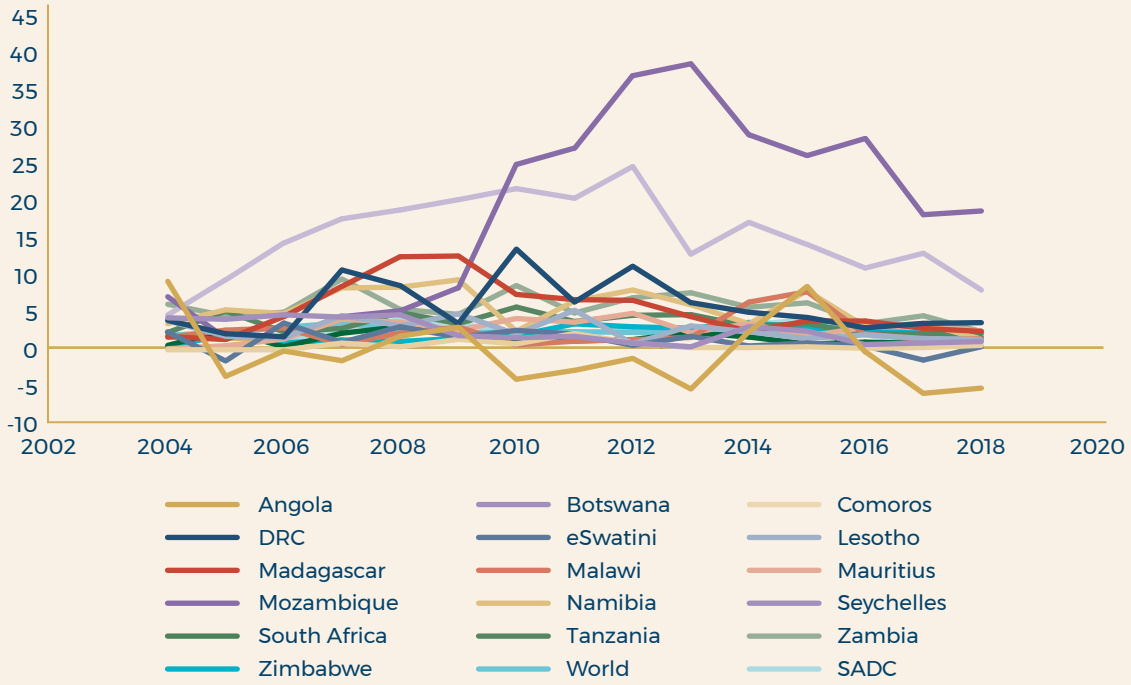
Resource-driven FDI is predicted to be prominent in SADC, given that the region is endowed with many minerals, metals and energy sources. Destination countries are not subject to the same competition as with other types of FDI because natural resources are finite and only exist in specific countries. A t-test was performed to determine whether the mean FDI of resource-dependent SADC countries is greater than that of non-resource dependent countries using net FDI from 2004–2018. For the purposes of this paper, countries were labelled resource-dependent if natural resources comprise 15% or more of GDP. These countries include Angola, Botswana, the DRC, Mozambique and Zambia. The other SADC countries were labelled non-resource dependent. When including Angola in the t-test the result was not significant, as Angola's volatile alternating positive and negative flows are an outlier compared to the rest of the series. However, when Angola is removed the result is significant, with resource-dependent countries receiving mean FDI of

22 Lesley Wentworth, "Mozambique: Options for Multi-Sector Approaches to FDI" (Occasional Paper 237, SAIIA, Johannesburg, 2016); KPMG, *What Influences Foreign Direct Investment*; Gerhard Toews and Pierre-Louis V´ezina, "Resource Discoveries and FDI Bonanzas: An Illustration from Mozambique" (Working Paper, University of Oxford, November 2017).

23 Wentworth, "Mozambique: Options for Multi-Sector Approaches"; African Development Bank, "Mozambique Country Strategy Paper 2018–2022: Supporting Mozambique Towards the High 5s" (Country Strategy Paper, AfDB, Abidjan, 2018).

$1,347.2 million and non-resource-dependent countries receiving mean FDI of $720.million over the time period.[24] This confirms that natural resources have a strong relationship with higher FDI levels, especially when considering that the result is still significant despite South Africa's substantially higher levels of FDI as a non-resource-dependent country.

Figure 4 FDI as % of GDP (2004–2018)



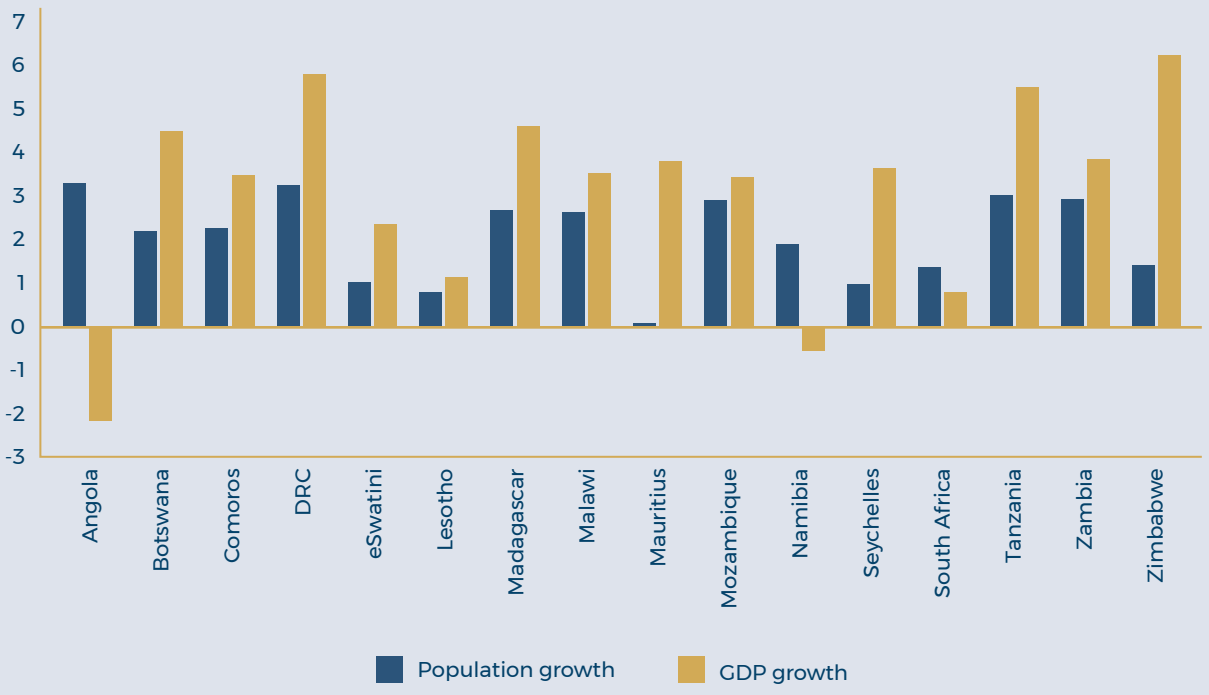
Source: Author's calculations from World Bank, "World Development Indicators", https://databank.worldbank.org/source/world-development-indicators

Population growth, as a proxy for market-seeking FDI, is another possible structural determinant. A growing population represents a growing market, which opens up opportunities for investment to provide staple goods and services. When measuring the correlation between population growth and FDI on aggregate across countries, the result is not significant. When Angola is removed, there is a .18 weak correlation. However, when disaggregating by country, the DRC, Tanzania, Zambia and Zimbabwe show moderately to significantly high correlations of 0.74, 0.59, 0.70 and 0.74, respectively. In Mauritius, population growth and FDI display a moderately negative correlation of -.68. When considering the economic meaning of these correlations, Figure 5 shows that the DRC, Tanzania and Zambia have growing populations and growing GDP, from which one can hypothesise a growing demand for staple goods such as food and beverages, which

24 Data analysis is available upon request.

presents an opportunity for market-seeking FDI. This explanation seems especially likely in Tanzania, where mineral resources make up a much smaller percentage of GDP but net levels of FDI are high. Tanzania, Zimbabwe and Zambia also have substantial tourism industries that drive investments in goods and services. Overall, the evidence for market-seeking FDI in SADC exists but is less encompassing.

Figure 5 SADC population & GDP growth, % (2018)

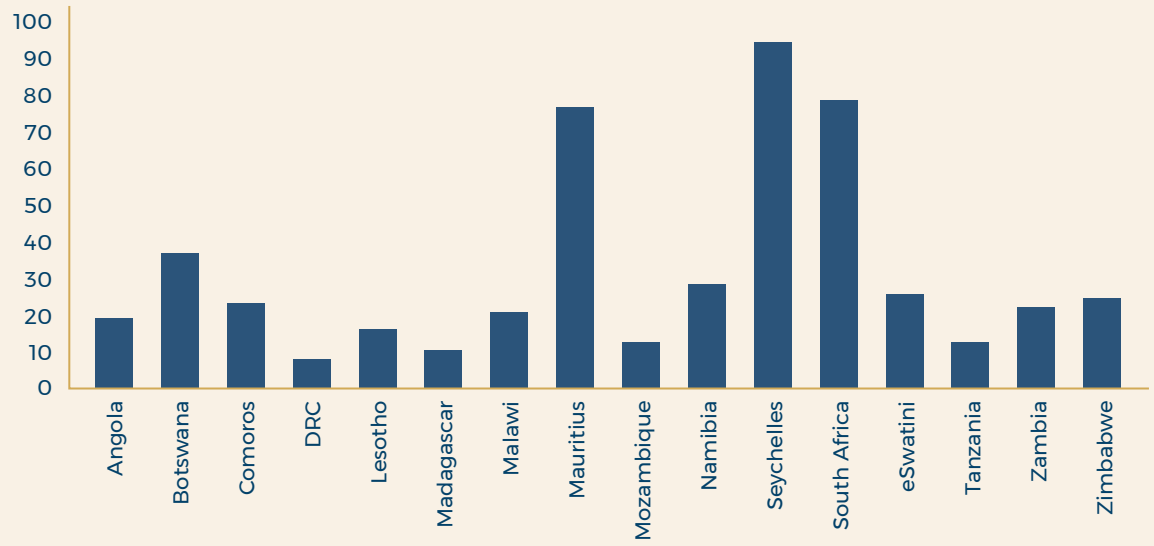


Source: Author's calculations from World Bank, "World Development Indicators", https://databank.worldbank.org/source/world-development-indicators

Lastly, infrastructure development and skills (which are components of efficiency-seeking FDI) are compared to FDI levels. Investors frequently cite infrastructure as a barrier to FDI, and infrastructure development can serve as a broader proxy for economic development. Figure 6 shows the 2018 African Infrastructure Development Index (AIDI) scores, which measure infrastructure development based on four components: information and communications technology (ICT), electricity, transport and water & sanitation. Infrastructure development and FDI show a very weak correlation of .14. Given that Mauritius, Seychelles and South Africa show significantly higher levels of infrastructure development from Figure 6 (these countries receive scores above 70 compared to the rest of the region's scores of below 40) a t-test was also conducted to see if these three countries have received significantly higher mean FDI levels than the rest of the region. The results confirm that these three countries receive an average of $1,691.3 million FDI

compared to $686.7 million for the rest of the region. Therefore, it can be concluded that infrastructure development is a moderate determinant of FDI.

Figure 6 AIDI infrastructure development levels in SADC (2018)



Source: Author's calculations from Africa Infrastructure Knowledge Program, "Africa Infrastructure Development Index (AIDI), 2019", https://infrastructureafrica.opendataforafrica.org/rscznob/africa-infrastructure-development-index-aidi-2019

Skills have been highlighted as a determinant of FDI in literature, and labour quality has also been cited as a barrier to FDI by investors. In this paper, skill level is proxied by percentage of gross enrolment in secondary and tertiary education. While tertiary education denotes the highest skill level, the skills needed for the industrial FDI desired within SADC often only require secondary education. Correlation tests for these variables are less accurate owing to an incomplete data set (some countries only had data availability for select years, and no data was available for Namibia). For the available data, no correlation was evident between FDI and secondary or tertiary education. A t-test was also conducted comparing FDI in countries with secondary enrolment above 50% for the majority of the time period (Botswana, Comoros, eSwatini, Lesotho, Mauritius, Seychelles, South Africa and Zimbabwe) to those with less than 50% enrolment (the DRC, Madagascar, Malawi, Mozambique, Tanzania and Zambia). Angola and Namibia were omitted for reasons outlined above. In this case, the result was significant and countries with secondary enrolment below 50% actually received higher mean FDI levels at $1,160.1 million compared to $722.4 million in countries with enrolment above 50%. Therefore, data in SADC contradicts the theory that skills are a determinant of FDI levels. However, these results likely vary based on the type of FDI (ie, skills development may be important for efficiency-seeking FDI but less important for resource-seeking FDI, which dominates in SADC).

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GDP and the presence of natural resources, and to a lesser extent markets and infrastructure, all thus influence FDI to varying degrees in SADC.[25] These broad structural factors are useful to identify and filter out broader trends and stark country-level differences and limitations. For example, the massive gap between South Africa and the rest of the region in dollar investments is due to South Africa's large, diversified economy and developed infrastructure, and the heavy dependence of FDI on natural resource dynamics in Angola and the DRC. However, a more valuable and nuanced understanding of FDI in the region can only come from a further segmentation of FDI.

Analysis: FDI trends and insights in SADC

FDI trends in the region can be unpacked further using data covering the 17-year period from 2003–2019. Also included are analyses broken up into three blocks: 2005–2009, 2010–2014, and 2015–2019 (hereafter denoted Time Period 1, 2 and 3, respectively), and occasionally broken down into smaller time periods of interest. The section first gives an overview of FDI trends in the region, then delves into specific detail in three core sectors from the 37 sectors listed in the database: natural resources, food & beverages, and financial services. It then analyses FDI in the region in terms of job creation, regional value chains, and alignment with export potential, ending with insights on three emerging sectors. Analyses are also broken down by activity, namely primary, secondary and tertiary activities designated by the author.[26] Primary activities include extraction and electricity, secondary activities include manufacturing and construction, and tertiary activities include a range of service activities (see Appendix A for the full listing of the sector and activity categories in the data).

The analysis is primarily based on data from fDi Markets, which tracks global cross-border investments, tabulated by 'number of projects', 'capital investment ($)', and 'number of jobs' created. While the previous section analysed FDI based on total dollar values, this section primarily analyses FDI based on the *number* of investment projects and/or number of new capital injections into existing projects. This is done for two reasons. Firstly, analysing the

25 Strategic asset-seeking FDI was not analysed separately in this paper, as it is less prevalent in the SADC region than in developing countries in the context of geopolitics.

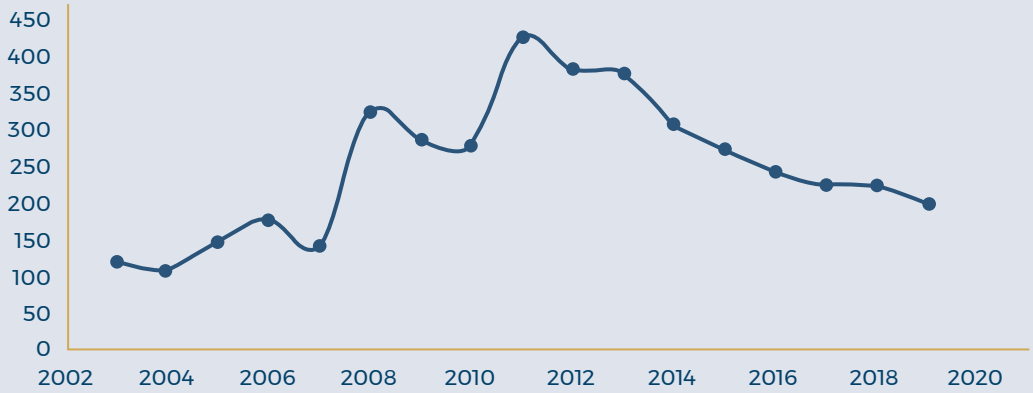
26 Primary sector activities relate to products extracted from the earth, secondary activities refer to the transformation of raw materials, ie, manufacturing, and tertiary activities refer to service activities.

number of projects may give a better gauge of emerging sectors of interest or countries receiving increased FDI, whereas, when measuring with dollar values, one large project may crowd out or distort overarching trends. In particular, large natural resource investments that are purely extractive may dominate, and these are not of primary interest for inclusive growth. Secondly, within the fDi Markets data many of the 'capital investment' and 'number of jobs' figures are based on estimates when data is unavailable. While estimates are determined based on a large amount of data and similar projects, the 'number of projects' is still the most accurate indicator of FDI trends. It is also important to note that this analysis is based solely on inward FDI data. However, inward FDI is only one component in analysing sectoral potential and regional growth strategies. Therefore, this paper should be considered in combination with other regional studies (covering trade flows, national policies and institutions, domestic investment, human capital development, etc.) for a holistic assessment of the region.

Trend overview

Figures 7 and 8 show the number of FDI projects per year (with Figure 8 broken down by country, from 2003–2019). FDI projects increased significantly from 2008, reaching their peak in 2011 and gradually decreasing thereafter. This is likely owing to the commodities boom in the region, as well as the general growth in emerging markets over the last few decades.[27] Figure 8 and Table 2 (which displays FDI projects by country broken down into the three time periods) show that South Africa has attracted significantly more FDI than the rest of the region, again owing to its modern, diversified economy.

Figure 7 FDI in SADC, # of projects (2003–2018)

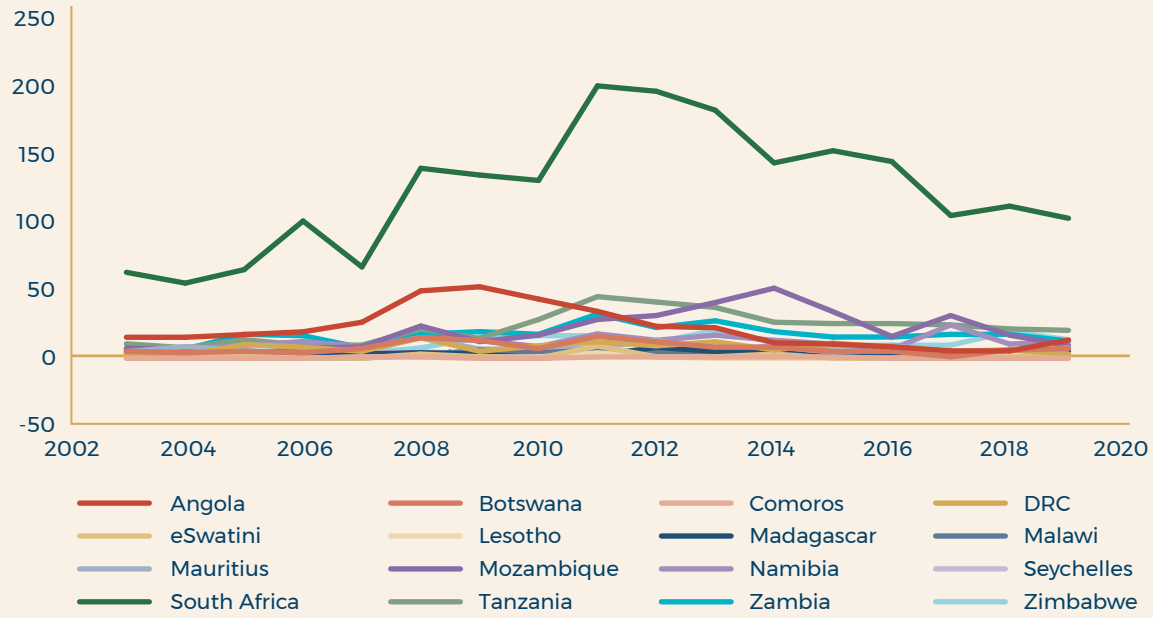


Source: Author's calculations from fDi Markets database by Financial Times, 2020[a]

a FDI Markets is a database provided by the *Financial Times* that tracks cross-border investments, including new projects and expansions of existing projects. Information is retrieved from media sources, paid market research, industry associations/ investment promotion agencies, and *Financial Times* internal sources. Projects are classified by date, investing company, source country, sector, cluster and activity, among others. Job creation and capital investment per project are also estimated from algorithms when this information is not available.

27 Thorsten Beck et al., *Financing Africa: Through the Crisis and Beyond* (Washington DC: World Bank, 2011).

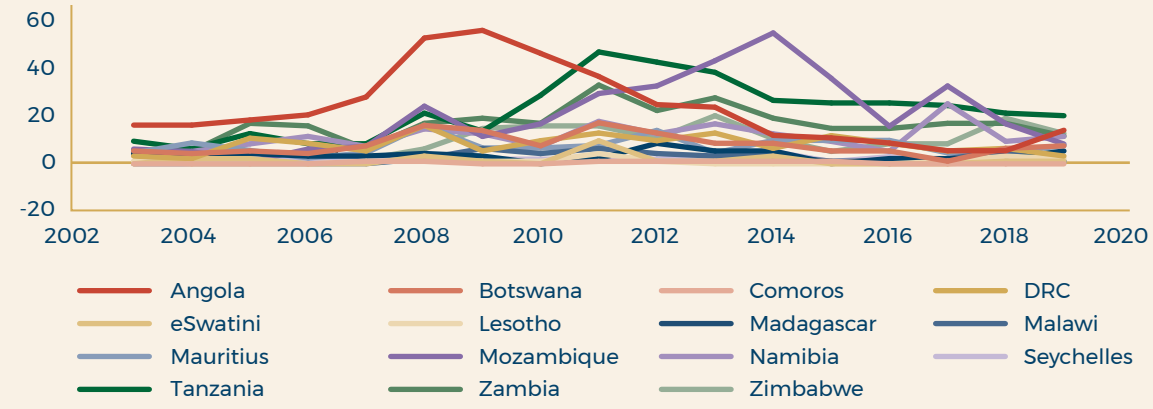
Figure 8 FDI projects (2003–2019)



Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

Figure 9 gives a better picture of FDI in the region by omitting South Africa. Most countries reached individual peaks in FDI projects between 2011 and 2014, and no country received a significantly higher number of investments in Period 3. Overall, Table 2 shows that South Africa, Angola, Mozambique, Tanzania and Zambia have been attracting a significantly high amount of FDI compared to the rest of the region. For the most part, SADC country rankings in terms of number of projects and total capital investment are similar; however, some resource-rich countries have higher levels of capital investment but fewer total projects.

Figure 9 FDI projects (2003–2019, South Africa omitted)



Source: Author's calculations from fDi Markets database by *Financial Times*

TABLE 2	TOP COUNTRY RECIPIENTS OF FDI BY # OF FDI PROJECTS, BROKEN DOWN BY TIME PERIOD				
	2005–2009 (Period 1)	2010–2014 (Period 2)	2015–2019 (Period 3)	Total number of projects	Total capital investment 2003–2019 ($ million)
South Africa	493	841	603	1937	101,233.3
Angola	163	133	41	337	78,940.2
Tanzania	56	167	105	328	21,773.4
Mozambique	43	163	99	305	58,760.3
Zambia	66	107	66	239	22,599.3
Namibia	47	59	53	159	12,203.4
Zimbabwe	25	64	46	135	18,711.4
DRC	43	48	33	124	18,269.7
Botswana	44	51	24	119	7,133.2
Mauritius	32	39	33	104	4,896.1
Madagascar	17	20	11	48	8,413.9
Malawi	8	20	10	38	2,969.1
Seychelles	8	9	6	23	1,000.7
eSwatini	6	14	2	22	6,84.2
Lesotho	3	6	6	15	1,328.1
Comoros	2	4	1	7	161.4

Source: Author's calculations from fDi Markets database by Financial Times, 2020

Table 3 shows the top 15 sectors receiving investment in SADC over the three time periods. Of these sectors, only real estate and textiles have received more investments in Period 3 than in the previous two periods. Food & beverages, chemicals and renewable energy show only small decreases in Period 3. The table also shows that 'number of projects' and 'capital investment' levels vary significantly by sector. Renewable energy has much higher value per investment than all other sectors, with an average of $706.6 million per project. Real estate and metals also average over $200 million capital investment per project. This is owing to the high sunk costs required for investments in these sectors.

TABLE 3	TOP 15 SECTORS BY # OF FDI PROJECTS WITHIN SADC, BROKEN DOWN BY TIME PERIOD				
	2005–2009 (Period 1)	2010–2014 (Period 2)	2015–2019 (Period 3)	Total # of projects	Total capital investment 2003–2019 ($ million)
Financial services	172	344	122	638	7,044.6
Business services	75	170	122	367	6,509.2
Communications	60	145	104	309	15,942.2
Software & IT services	66	140	88	294	3,806.6
Food & beverages	64	106	93	263	10,879

Metals	134	78	46	258	65,759.6
Transportation & warehousing	44	85	55	184	15,581.6
Industrial equipment	40	87	46	173	1,639
Coal, oil & gas	55	68	47	170	15,581.6
Renewable energy	22	62	48	130	91,862
Automotive original equipment manufacturer (OEM)	42	48	28	118	10,2228
Chemicals	22	49	38	109	11,036.7
Textiles	15	32	59	106	1,509.5
Real estate	19	34	43	96	28,348.5
Minerals	48	29	15	92	4,765.6

Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

Sector profiles: Natural resources

Some overarching trends in natural resource investments are visible from the figures and tables below. Firstly, there has been a gradual decrease in natural resource investments over the time period (see Table 4). From Period 1 to Period 2, 'the number of investments' category saw a 72% decrease. Specifically, sectors that experienced declines include the coal, oil & gas sector in Angola, the minerals sector in Botswana, and the metals sector in Tanzania. In other countries such as Mozambique, the DRC and Zambia, metals investments are steady but not increasing. The only country that has seen consistent increases in natural resources is Mozambique in the coal, oil & gas sector.[28]

TABLE 4 NATURAL RESOURCES FDI IN SADC (# OF PROJECTS)

	2005–2009 (Period 1)	2010–2014 (Period 2)	2015–2019 (Period 3)
Coal, oil & gas	55	68	47
Metals	134	78	46
Minerals	48	29	15
Total	237	175	66

Source: Author's calculations from fDi Markets database by Financial Times, 2020

The metals sector creates significantly more jobs than minerals and coal, oil & gas. From the database, the metals sector creates an average of 614 jobs per project (which is high compared to all other sectors in SADC), with minerals creating 246 jobs per project and coal, oil & gas 183 jobs. Natural resource sectors also see large capital investments on average. The coal, oil & gas sector has the highest average capital investment at $621.3 million, with $224.4 million for metals and $43.7 million for minerals. Despite the high

28 Country-specific analyses are available upon request.

capital investment figures, much of the natural resource value-add is not captured within the source country but rather in countries that complete upstream and downstream activities. Profitability is also heavily dependent on commodity price fluctuations and will ultimately continue to decrease owing to the finite nature of resources and global shifts towards sustainable energy generation.

> The metals sector creates an average of 614 jobs per project (which is high compared to all other sectors in SADC)

In light of these challenges, the SISR advocates for processing and beneficiation of natural resources as a key growth path. The call for beneficiation is not new within SADC or on the continent; the AU has promoted this policy stance since the early 2000s. In practice, enhancing upstream and downstream processing is a complex process that depends on favourable economic conditions, reliable and affordable energy and transport infrastructure, skills, significant capital and/or energy investments, sizeable regional end markets and/or favourable agreements with other off-taking countries, and competitive sourcing of other key inputs.[29] Investments establishing processing facilities in various SADC countries have been met with mixed success.[30]

> Manufacturing activities within natural resource investments have increased only marginally, from 28% to 31%, which likely confirms that beneficiation has not increased over time

This is confirmed by Figure 10, which profiles the types of activities taking place in natural resource investments. Manufacturing is deemed a proxy for beneficiation and processing. Even countries that engage in little value-add usually complete rudimentary processing to remove residuals/waste materials after extraction and decrease transport costs.[31]

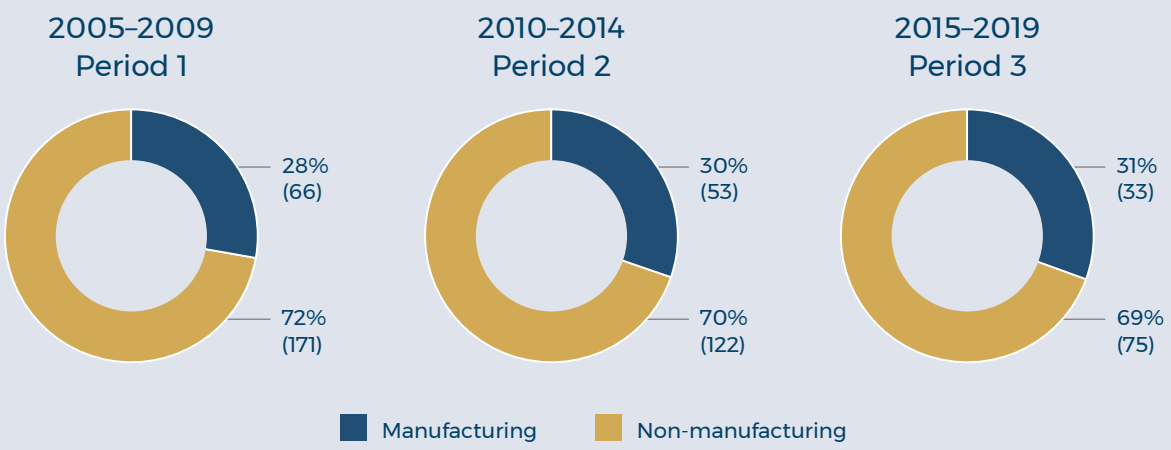
29 Roman Grynberg and Kedibonye Sekakela, *Case Studies in Base Metal Processing and Beneficiation: Lessons from East Asia and the SADC Region* (Research Report 21, SAIIA, Johannesburg, 2016); Neva Makgetla, Saul Levin and Sithembiso Mtanga, "Moving Up the Copper Value Chain in Southern Africa" (WIDER Working Paper 2019/52, UNU-WIDER, Geneva, 2019); Paige Muller, "Re-evaluation of SA's Mineral Beneficiation Strategy Urged amid Slow Progress", *Engineering News*, February 15, 2019, https://m.engineeringnews.co.za/article/re-evaluation-of-sas-mineral-beneficiation-strategy-urged-amid-slow-progress-2019-02-15.

30 Grynberg and Sekakela, *Case Studies in Base Metal Processing*; Eunomix, *Africa's Mineral & Beneficiation Policy Monitor*, 2, December 2015.

31 Grynberg and Sekakela, *Case Studies in Base Metal Processing*.

These activities likely comprise the majority of the blue portion. Activities that are 'non-manufacturing' include design, development & testing, extraction, maintenance & servicing, retail, sales, and marketing & support. It is evident that in the full time period studied, including since the release of the SISR, manufacturing activities within natural resource investments have increased only marginally, from 28% to 31%, which likely confirms that beneficiation has not increased over time beyond rudimentary levels. However, it is also important to note that this data structure may not effectively capture some upstream or downstream processes that are related to a resource (for example, a smelting investment to treat copper may be captured in the chemicals sector and a road built to transport the copper may be captured in the transportation & warehousing sector, rather than in the metals sector). Individual country analyses show that growth in natural resources is often accompanied by growth in financial services, industrial equipment, food & beverages, and real estate.

Figure 10 Percentage manufacturing in natural resources FDI



Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

This analysis does not suggest that beneficiation objectives are ill advised; arguably they are necessary in the long run. However, such activities are definitely not as easy to initiate in the short term within SADC as other manufacturing activities such as clothing production, and especially during a resource downturn. Beneficiation/processing initiatives must be preceded by assessments, which weigh the potential value that can be captured (in terms of both jobs and dollars) for processing activities against potential costs incurred in areas of initial competitive disadvantage. Importantly, beneficiation can only be effectively implemented as part of an end-to-end industrial policy strategy, rather than as sporadic and isolated processing investments as have sometimes been the case in SADC.[32]

32 Grynberg and Sekakela, *Case Studies in Base Metal Processing*.

Sector profiles: Food & beverages

High population and GDP growth on the African continent signify an expanding market for consumables. Food & beverages is one of the fastest growing sectors on the continent and is predicted to reach $740 billion by 2030.[33] Poultry imports alone, for example, tripled in Africa between 2010 and 2014.[34]

Based on FDI data, SADC is experiencing a similar trend. As seen in Table 3, food & beverages received the fifth highest 'number of investments' in the region from the combined three periods of 2005–2019, and received the highest number of investments outside of the service sectors: 64 investments in Period 1, 106 investments in Period 2, and 93 investments in Period 3. The growth in agro-processing is also underestimated, as 33 of the 119 total chemicals sector investments in the region (28%) also fall under the agribusiness cluster. In the last three years, three fertiliser investments have averaged over 2 000 jobs per project, representing an area of future potential. Mozambique, Tanzania, Zambia and Zimbabwe have individually experienced growth in the food & beverages sector over time, while Angola and the DRC have experienced large increases in investments in 2008–2013 and 2008–2010 respectively.[35] Across the region as a whole, beverages manufacturing is a key subsector receiving investment in both soft drink/juice and brewery manufacturing (especially in Angola), in addition to sectors involved in the poultry value chain (maize, oilseeds, feed & poultry).

The food & beverages sector and especially agro-processing activities present opportunities for inclusive growth. Agro-processing is the second pillar of the SISR and many of the focus value chains chosen by SADC countries (see Table 1) are in this cluster.[36] Figures 11 and 12 show that 209 of the 275 food & beverages investments over the full time period were in agribusiness, and approximately 80% of agribusiness investments comprised manufacturing activities, with manufacturing activities generating the highest number of jobs as well as the largest capital investments (291 average jobs and $56.5 million average capital investment per project for manufacturing activities, compared to 108 average jobs and $13.8 million average capital investment per project for non-manufacturing activities). In terms of job creation, two ethanol investments have created the most individual jobs, while investments in sugar and beverages have also been large job creators. Therefore, both sugar to soft drink/juice value chains and ethanol to alcohol value chains show potential from the data.

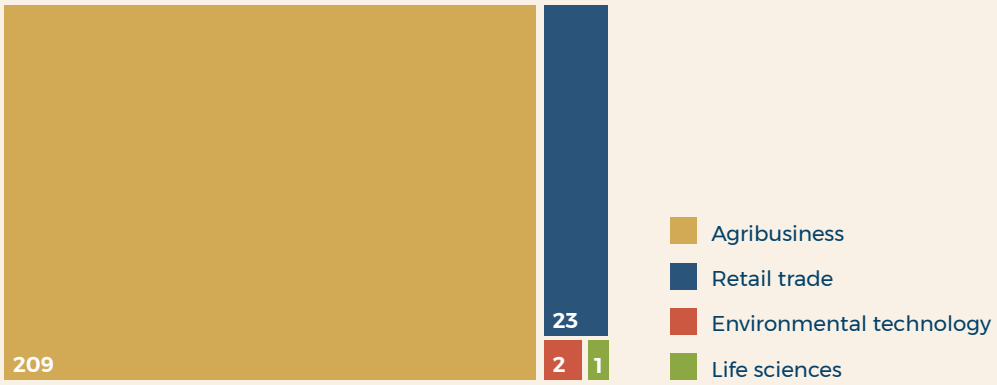
33 Landry Signé, *Africa's Consumer Market Potential: Trends, Drivers, Opportunities, and Strategies* (Washington DC: Brookings, December 2018).

34 The Poultry Site, "USDA International Egg and Poultry: Sub-Saharan Africa", July 17, 2014, http://www.thepoultrysite.com/reports/?id=3982

35 Country-specific analyses are available upon request.

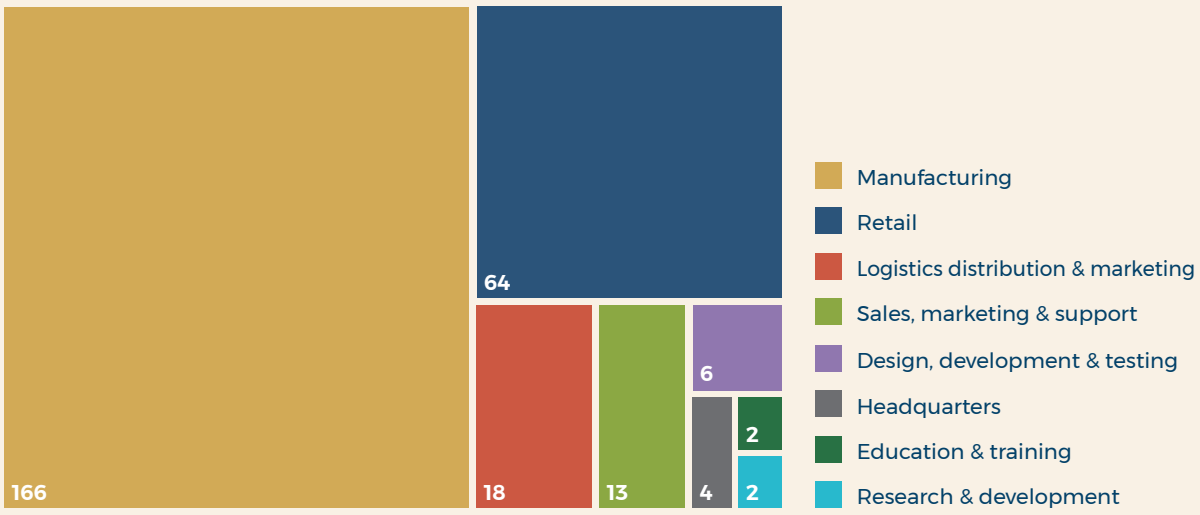
36 fDi Markets data also categorises investments by subsector or cluster.

Figure 11 Cluster breakdown of the food & beverages sector (# of projects)



Source: Author's calculations from fDi Markets data

Figure 12 Activity breakdown of food & beverages sector (# of projects)



Source: Author's calculations from fDi Markets data

Most remaining food & beverages investments are in retail trade (64), which on average were small capital investments creating fewer jobs. These findings support the SISR's assertion that industrial activity will bring both inclusive growth and greater economic value-add. However, almost all retail investments originated from regionally domiciled supermarket chains, and therefore constitute regional value chains. SADC is especially well placed to target improved local and regional procurement by these supermarkets.

Studies have addressed the challenge of supplying regional supermarkets,[37] and SADC can focus on addressing their recommendations, including local supplier upgrading programmes, improved logistics, and improved regional competition and standards policy. Additionally, many of the agribusiness/manufacturing investments come from multinational manufacturing companies such as Nestlé, Coca Cola, Lonrho Springs and various brewing companies. Understanding and enhancing SADC farmers' ability to supply these companies, based on the agro-processing sectors that countries have prioritised in Table 1, could also be an important area for regional focus.

Sector profiles: Financial services

In every country except South Africa, the financial services sector received either the first or second highest amount of FDI over the period (2003–2019) under review. The spike in total SADC FDI between 2011 and 2013 was also most distinctly caused by financial services investments in multiple countries. In a number of countries, a couple of other sectors spiked in FDI along with financial services in Period 2, such as business services in Mauritius, real estate in Mozambique, business services and food & beverages in Tanzania, and business services and software & IT services in South Africa. A number of countries also saw growth in various natural resources, along with financial services. However, this boom did not last. In Period 1 the region received 172 financial services investments, which increased by 100% to 344 investments in Period 2, but then decreased by 182% to 122 investments in Period 3.

Most financial services investments comprised new commercial banks or capital injections into existing banks. However, the average capital investment per project was only $11 million, the smallest investment among the top 15 FDI recipient sectors in SADC. Growth in the sector can be attributed to a number of factors, including the liberalisation of financial sectors, deepening capital markets, regional financial sector regulatory reforms in the past decade, the 2010–2014 commodity price boom, and the opportunity to service the growing middle class in the region (the mirror spikes in other sectors support the theory of general regional growth).[38] Financial services investments were primarily directed at resource-rich countries/regions with newer resource discoveries and growing economies (such as Angola, Tanzania and Mozambique) or countries with established favourable business environments (such as Mauritius, South Africa and Namibia). Additionally, many Portuguese, French and English banks invested in former colonies. Cross-border bank lending increased drastically and formed a large proportion of these investments.[39] Financial sector investments also shifted in the past 10 years from primarily international banks to pan-African banks (such as

37 UNU-WIDER, "Supermarkets and Regional Growth in Southern Africa" (WIDER Research Brief 2016/2, UNU-WIDER, Helsinki, 2016); Rosemary Emongor and Johann Kirsten, "The Impact of South African Supermarkets on Agricultural Development in the SADC", *Agrekon* 48, no. 1 (2009); Reena das Nair, "The Spread of Supermarkets in the SADC Region: Impact on Competition and on Suppliers" (Paper, TIPS Development Dialogue: The Retail Sector an Opportunity for Industrialisation?, Pretoria, October 24, 2017).

38 European Investment Bank, *Recent Trends in Banking in sub-Saharan Africa From Financing to Investment* (Kirchberg: EIB, July 2015); Makhtar Diop et al., "Africa Still Poised to Become the Next Great Investment Destination", World Bank, June 30, 2015, https://www.worldbank.org/en/news/opinion/2015/06/30/africa-still-poised-to-become-the-next-great-investment-destination; Beck et al., *Financing Africa*.

39 EIB, *Recent Trends in Banking*.

Standard Bank and EcoBank).[40] While financing industrialisation is an important element of the SISR, access to finance from commercial banks is quite restrictive, and therefore this financial services boom does not translate into increasing access to finance for regional development projects or small businesses.[41] Only a small portion of financial service sector investments originated from development finance institutions (such as the World Bank and African Development Bank) or microcredit institutions. Notwithstanding the dominance of FDIs in this sector, this growth has not had a meaningful impact on SADC's industrialisation.

Job creation

A key SISR objective is to increase industrial employment from 20% to 40% of total employment by 2030. As stated in the SISR, 'the positive spill-overs from industrialization will stimulate employment and substantially raise income levels'.[42] In order to probe this relationship empirically, the activities categories from the FDI database were grouped into primary, secondary and tertiary activities (outlined in Appendix A).

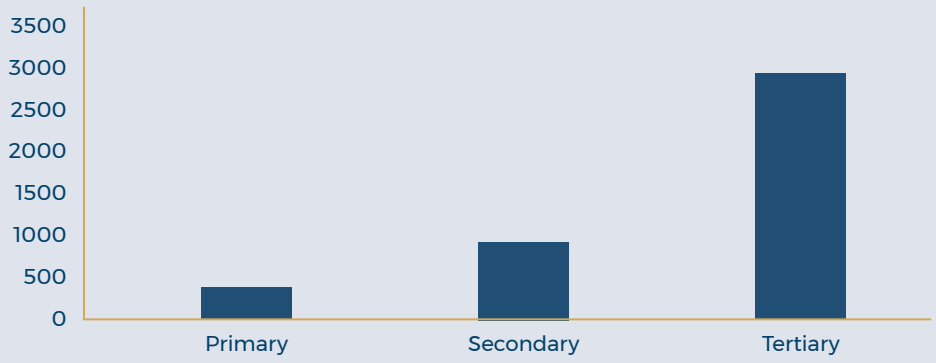
As shown in Figure 13, tertiary activities comprise the lion's share of FDI in SADC, with much of these investments attributed to financial sector investments, and then to business services investments. However, when examining job creation and capital investment (Figure 14), the picture is much different. Tertiary activities create the fewest jobs and comprise the smallest capital investments, with secondary activities creating the most jobs. On average, primary activities create 393 jobs per project, secondary activities 412 jobs, and tertiary activities 53 jobs. The high job creation and capital investment from some primary activities should not obscure the known challenges in capturing value domestically. Overall, secondary activity investment trends in SADC empirically confirm the link between industrialisation and employment/inclusive growth, validating the SISR focus. These findings are especially important when considering the recent policy narratives around the rise of services on the continent and their positioning as a potential growth enabler. The limitations of tertiary activities, at least as they are currently structured in the region, must not be overlooked.

In spite of this general trend, in Mauritius business processing outsourcing investments created relatively high employment. These investments came in the form of technical support centres, customer contact centres and shared services centres. Growth in this sector was driven by a targeted economic policy strategy, financial incentives and infrastructure investments.[43] While job creation is still not as high as manufacturing activities, the Fourth Industrial Revolution is also reducing manufacturing opportunities through automation and insourcing of previously outsourced labour-intensive activities. Considering these changes, business services could be an alternative area for SADC to consider as an ICT regional policy focus in the digital age. On average, job creation is

40 EIB, *Recent Trends in Banking*.
41 EIB, *Recent Trends in Banking*; The Economist, *Scrambled in Africa* (London: The Economist, 2010).
42 SADC, "SADC Industrialisation Strategy and Roadmap", 5.
43 Natasha Beschorner, Siou Chew Kuek and Junko Narimatsu, Information & Communication Technologies for Jobs in the Pacific (Washington DC: World Bank, November 2015).

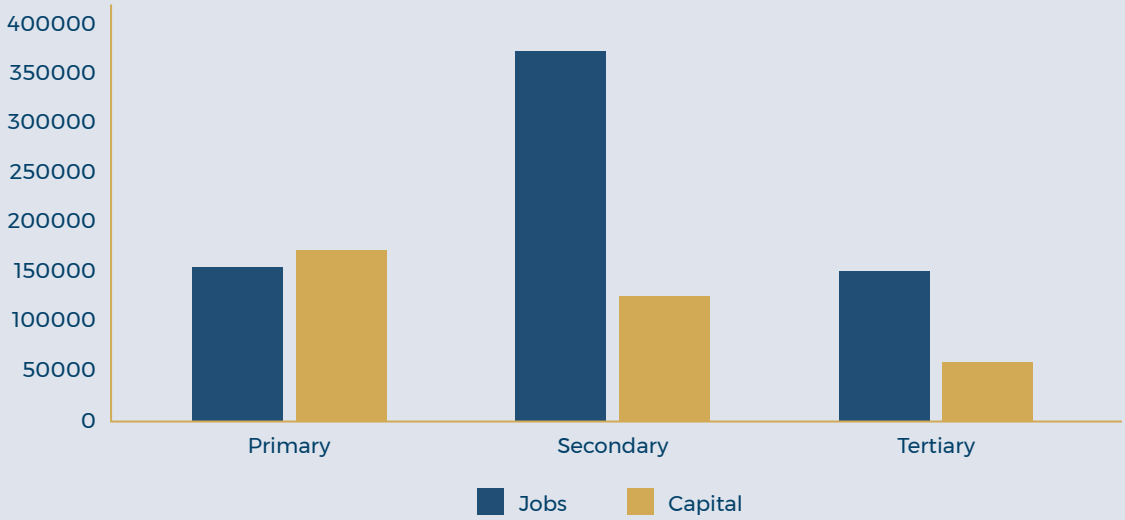
higher than in other service sectors, but the sector's success crucially depends on digital connectivity. Supporting this subsector involves policies targeted towards ICT infrastructure development and digital skills/training.

Figure 13 SADC FDI, tabulated by # of projects (2005–2019)



Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

Figure 14 SADC FDI, tabulated by jobs created and capital investment (2005–2019)



Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

Job creation can also be analysed by sector. The top 15 projects generating the most jobs (3 000 and above) span the wood, food & beverages, automotive OEM, chemicals, building materials, real estate, coal, oil & gas, metals, and transportation & warehousing sectors. The second tier (generating 2 000 jobs and above) includes paper, printing & packaging, textiles, software & IT services, pharmaceuticals and minerals projects. In many resource-

dependent countries, metals generate the most jobs, but in South Africa, Mozambique and Zambia high job creation is diversified across sectors. When analysed by *average* job creation per project, Table 5 shows that metals, automotive OEM, real estate, minerals, food & beverages and textiles all create over 200 jobs on average. This validates the focus of the SISR on beneficiation, agro-processing and manufacturing-intensive activities, as all the top job creators are within this focus area. Among these job-generating sectors, only food & beverages is also a top five FDI recipient, reinforcing it as a standout sector for policy focus.

Table 5 also confirms the importance of a continuing policy focus on 'traditional' labour-intensive sectors such as automotives and textiles, which policy dialogues have downplayed in recent years in the pursuit of emerging service sectors. Industrial and trade policies have played a key role in driving investment in both automotives & textiles. For example, South Africa's Motor Industry Development Programme (1995–2012) and Automotive Production and Development Programme (APDP, 2012–2020) target the automotive sector, and the Clothing and Textiles Competitiveness Programme (CTCP, 2009–present) targets the textiles sector. At a regional level, the African Growth and Opportunity Act (AGOA, 2000–2025) has an impact on textiles.[44] The APDP provides incentives for investments geared towards exports, OEM assembly and component production. The CTCP provides incentives for manufacturing value-added products and drives competitiveness through cluster creation, while AGOA provides duty-free access to US markets for select products.

TABLE 5 AVERAGE JOBS CREATED IN 15 SECTORS RECEIVING THE MOST INVESTMENT

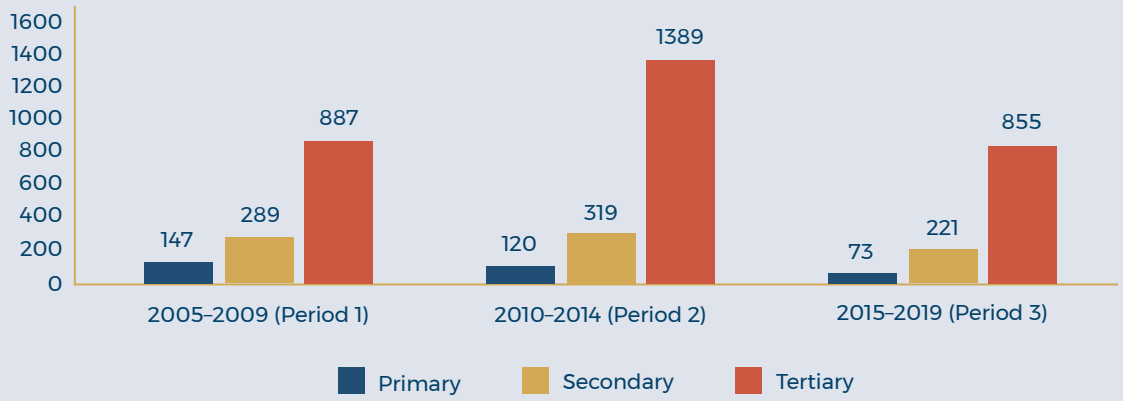
Sectors	Average jobs per project	Sector rank (# of projects)
Metals	614	6
Automotive OEM	473	11
Real estate	393	14
Minerals	246	15
Food & beverages	218	5
Textiles	205	13
Coal, oil & gas	183	9
Chemicals	124	12
Transportation & warehousing	89	7
Industrial equipment	82	8
Communications	75	3
Software & IT services	57	4
Renewable energy	57	10
Business services	52	2
Financial services	27	1

Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

44 NAACAM, "Automotive Production and Development Programme", https://www.naacam.co.za/automotive-production; Government of South Africa, "Clothing and Textiles Competitiveness Programme (CTCP)", https://www.gov.za/services/business-incentives/clothing-and-textile-competitiveness-programme-ctcp; AGOA.info, "About AGOA", https://agoa.info/about-agoa.html

From this analysis, the activity (and specifically the secondary activities of manufacturing and construction) is more important for inclusive growth than the specific sector of investment, as there is a range of sectors in which industrial activities create jobs. When analysing time trends, Figure 15 shows that primary activities experienced the greatest decrease in projects from Period 1 to 3. Secondary activities, of most interest, experienced a 10% increase in projects in Period 2 and a 30% decrease in Period 3. This Period 3 decrease is less than that in primary and tertiary activities (39% and 38% decreases respectively), although still not a positive prospect considering this is the first period since the release of the SISR.

Figure 15 Primary, secondary and tertiary investments in SADC (# of projects)



Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

It is important to note that this data only captures primary job creation – for example, a large-scale mining investment also likely brings employment in food, transportation, accommodation and other activities to service the mine. This FDI data is limited in that it does not connect secondary and tertiary waves of job creation to specific investments.

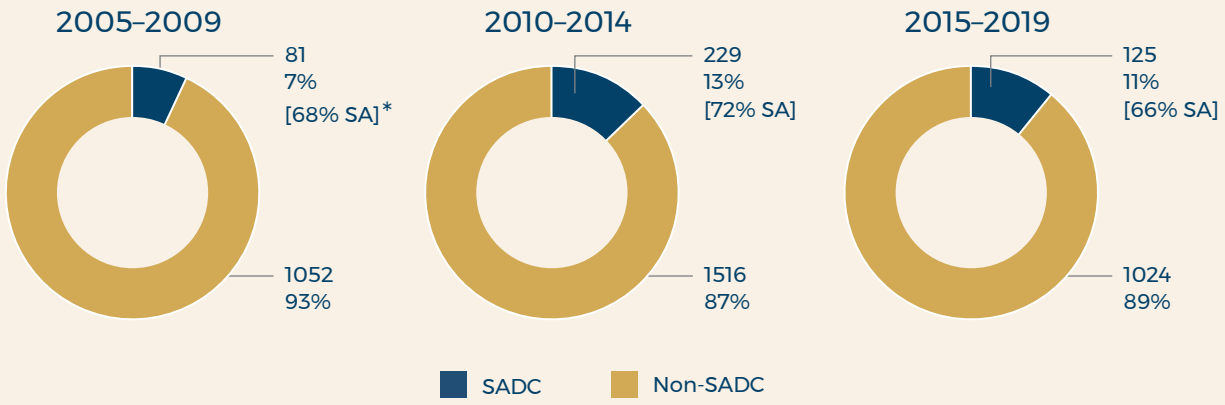
Regional FDI

Regional value chains are at the core of the SISR. For a value chain to be considered 'regional', links of activities within the value chain must be completed by two or more countries within the same geographic region. Most often this manifests as investment by one regional country in another regional country (however, RVCs can also occur when a non-regional country invests in two different value chain activities in two countries within the region). Therefore, regional inward FDI flows are an important indicator of the presence of RVCs. However, it is also important to note that inward FDI is only one indication of RVCs. Outward FDI flows from SADC countries are also important indicators of RVCs, and RVCs

can also be formed through domestic investment and regional trade without FDI. These other indications are not reflected in this data.

Noting these limitations, the available data shows little evidence of SADC's policy push for regional integration. Figure 16 shows that most investments in SADC are non-regional, and inward regional investments have not increased significantly over time. Overall, the greatest amount of FDI in SADC comes from the US and UK; however, this varies by country. In Mozambique and Angola FDI is influenced by colonial ties, with Portugal having the largest presence by far. In Malawi and Mauritius the greatest number of investments comes from India. In Namibia, Zambia and Zimbabwe the greatest number of investments comes from South Africa. Zambia has the most diversified regional presence, with 58 investments from South Africa, eight from Botswana, six from Mauritius, and five from Zimbabwe (See Appendix B for investments tabulated by source country). Of the regional originating investments, at least two-thirds have consistently come from South Africa. From the database, South Africa's investments in the region are primarily in business services, chemicals, retail, financial services, food & beverages, minerals and metals. Additionally, Mauritius has made a moderate number of ICT investments in the region, while Botswana's presence in the region is growing through investments by its retail supermarket chain, Choppies. Overall, the food & beverages, financial services and textiles sectors enjoy the most regional investments.[45]

Figure 16 Number of projects segmented by source country



* figure in [ ] shows % of the total projects from South Africa

Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

Evidence suggests that regional FDI from South Africa presents more opportunities for upgrading in some sectors given the more permanent nature of the investments, closer

45 Sectoral data breakdown is available upon request.

locus of control, and more relaxed standards.[46] However, when comparing South African FDI to other FDI source countries, the latter's number of investments in secondary activities is slightly higher than that of South Africa (22%). Non-South African investments also have slightly greater job creation with an average of 165 jobs per project, compared to an average of 133 jobs per project from South African investments. This calls into question the assumption that South Africa is an inclusive-growth driving investor, considering it generally invests in sectors that create fewer jobs.

FDI and exports

The SISR aims to increase manufactured exports from 20% to at least 50% of total regional exports by 2030, and to increase exports of intermediate products to 60% of total manufactured regional exports.[47] Theoretical and empirical research has probed the impact of FDI on exports (and, as a corollary, on economic growth). The primary hypothesis is that through skills and technology transfer, FDI can lead to higher quality exports, as well as upgrades to higher value products within a single sector, satisfying the goals of the SISR. Empirical evidence is mixed but generally supports some impact of FDI on export quality (but only specific types of FDI).[48]

This paper analysed SADC country exports through two metrics: top export sectors in dollar values (using data from ITC Trademap) and the ITC 'Export Potential' Map, which considers the supply capacity in the chosen country, global demand, and the objective of export diversification. The purpose of this analysis is to examine the alignment between competitive export sectors and FDI sectors. The analysis found that, as expected, the greatest alignment exists between FDI and export potential in natural resource sectors (minerals and metals). This is considering that natural resource-seeking FDI is solely concerned with the exploitation of scarce minerals to export globally. For the reasons outlined previously, this FDI–export relationship is not the most attractive in terms of the SISR.

Outside of resources, the crossover between export potential and FDI is generally weak. In Angola, Madagascar, Mauritius, Seychelles and Namibia fish and/or shrimp are identified as competitive export sectors (2018 export values are $79.8 million, $146.6 million, $437.7 million, $358.9 million and $774.1 million, respectively),[49] yet these sectors do not receive significant FDI. According to the fDi Markets database, only two countries have seen investments in seafood sectors, with two investments in Namibia and one in Madagascar. In Namibia and Botswana the bovine (meat) sector also exports competitively (2018 export

46 Cornelia Staritz and Mike Morris, "Local Embeddedness, Upgrading and Skill Development: Global Value Chains and Foreign Direct Investment in Lesotho's Apparel Industry" (Working Paper 32, Österreichische Forschungsstiftung für Internationale Entwicklung, Vienna, 2012); OECD, *FDI-SME Linkages*.

47 SADC, "SADC Industrialisation Strategy and Roadmap".

48 Muhammad Tariq Majeed and Eatzaz Ahmad, "FDI and Exports in Developing Countries: Theory and Evidence", *The Pakistan Development Review* 46, no. 4 (2007): 735–50; Majid Mahmood, "Foreign Direct Investment, Exports and Economic Growth: Evidence from Two Panels of Developing Countries", *Economic Research* 29, no. 1 (2016).

49 These figures are derived by combining ITC Trademap HS codes 3 (Fish and crustaceans, molluscs and other aquatic invertebrates) and 16 (Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates).

values are $73.8 million and $94.9 million, respectively)[50] but has not received any FDI, according to the database. In Tanzania and Malawi legumes and oilseeds are export-competitive but have not received FDI (2018 export values are $116.2 million and $42 million, respectively).[51] In-depth regional studies examining these sectors' value chains and their bottlenecks are available. However, SADC member states can still focus on policies attracting FDI to these comparatively competitive sectors displaying mismatches.

Prospects for the future: Emerging sectors

Certain sectors with a smaller number of investments have shown recent positive growth trends. From Table 3, of the top 15 sectors, textiles and real estate were the only two sectors that received an increased number of investments in Period 3, with the former receiving an 84% increase and the latter a 26% increase in projects.

Despite low capital investment, the textiles sector has traditionally been a core sector for some SADC economies owing to high job creation and low skill requirements. However, the increase in textiles investments in the last five years was primarily directed towards retail activities, evidenced by 55 retail and four manufacturing investments in Period 3. The difference in 'average job creation' between these activities is substantial – textile retail investments created an average of 63 jobs while textile manufacturing investments created an average of 1 460. Textiles manufacturing investments also declined substantially after Period 1. This picture does not appear promising initially, yet it might still show potential. The past textile boom in the region (excluding South Africa) was primarily driven by multinational cut, make and trim (CMT) manufacturers and ginners investing to take advantage of AGOA preferences and export to American retailers.[52] This strategy left little room for upgrading and/or local sourcing. However, the current growth in the sector is driven by growing regional consumables demand, potentially creating more room for regional supply. While some of the recent SADC retail investments are from luxury brands and thus not a feasible market to tap into, many mid-tier clothing brands have also increased investment in the region. Among the biggest investors, South African retail brands such as Mr Price have sourced cotton from SADC, and international brands such as Cotton On have indicated a desire to source locally – a testament to the growing consumer pressure for sustainable supply chains.[53] This is an opportunity into which SADC countries prioritising cotton and CMT manufacturing can tap. The SISR states that 'most Member States have prioritized links in the cotton-textiles-apparel value chain for which there would seem to be greater regional than global opportunities',[54] which is validated by the

50 These figures are derived from ITC Trademap HS code 2 (Meat and edible meat offal).

51 These figures are derived by combining ITC Trademap HS codes 12 (Oilseeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder) and 15 (Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes).

52 Staritz and Morris, *Local Embeddedness*.

53 Report prepared for the OECD, *FDI-SME Linkages*.

54 SADC, "Action Plan for SADC Industrialization Strategy and Roadmap", March 18, 2017, 37, https://www.sadc.int/files/4514/9580/8179/Action_Plan_for_SADC_Industrialization_Strategy_and_Roadmap.pdf

above FDI trends. Developing a regional textiles framework under the SISR, which provides incentives/conditions for investment, promotes skills development, and links to existing retailer sustainable supply chain programmes, may be an opportunity to capitalise on both FDI retail trends in the region and the priorities of the SISR. Such an initiative could benefit from drawing heavily on South Africa's experiences in textile promotion policy.

Developing a regional textiles framework under the SISR, which provides incentives/conditions for investment, promotes skills development, and links to existing retailer sustainable supply chain programmes, may be an opportunity to capitalise on both FDI retail trends in the region and the priorities of the SISR

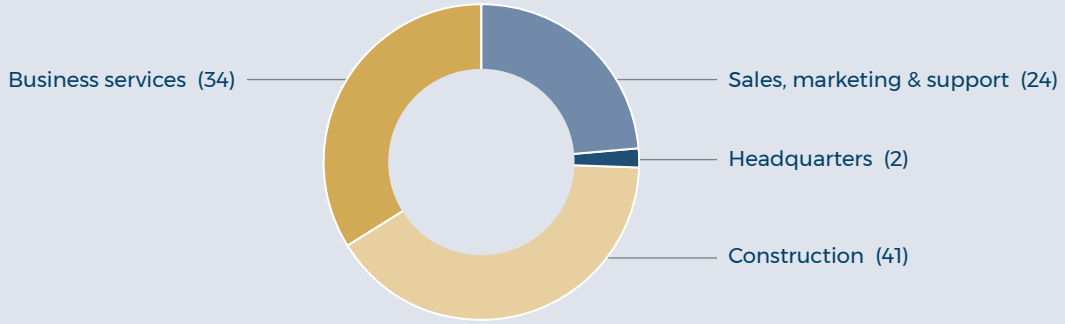
It is difficult to make policy analyses of the real estate sector in isolation because real estate investments are generally closely linked to other trends. For example, industrial real estate might be linked to natural resource investments, or residential real estate to population growth, etc. Additionally, Figure 16 shows that real estate boasts comparatively high average job creation (ranking third among regional sectors) and a high average capital investment per project (of $295 million). In general, the performance of the real estate sector can serve as a proxy for growth in the economy, but can also lead to national indebtedness. Thus, real estate growth can be viewed as a positive signal for the SADC region depending on the specific activities.[55] When examining the specific activities of recent real estate investments from Figure 17, the greatest number of projects (41) is in construction (ie, office/workspaces). Many of these investments are linked directly to government-driven growth-inducing projects such as an industrial development zone in Namibia, a bridge in Mozambique and a multipurpose business park in Malawi. The second highest number of investments (34) is in business services, and these are primarily office space investments.

While textiles and real estate were the only two sectors where investments increased in Period 3, the renewable energy (RE) sector grew the most from Period 1 to 3, with the number of investments increasing by 118%. The RE sector also boasts the highest average capital investment per project by far. This trend will likely continue in future as the climate case for sustainable energy generation heightens. Namibia and Botswana have comparative advantages in this sector because they are sparsely populated, with open spaces and significant sunlight. These two countries are currently in the initial phases of a project to develop massive solar capacity in partnership with the World Economic Forum.[56]

55 Joseph Nguyen, "4 Key Factors that Drive the Real Estate Market", *Investopedia*, June 25, 2019, https://www.investopedia.com/articles/mortages-real-estate/11/factors-affecting-real-estate-market.asp.

56 Emiliano Bellini, "Namibia and Botswana Mull 20-year, 4.5 GW Solar Push", *PV Magazine*, September 4, 2019, https://www.pv-magazine.com/2019/09/04/namibia-and-botswana-mull-20-year-5-gw-solar-push/.

Figure 17 Real estate sector activity breakdown



Source: Author's calculations from fDi Markets database by *Financial Times*, 2020

The increase in RE is greatest in South Africa. This can be attributed to the Renewable Energy Independent Power Producer Programme initiated in 2011 to attract public–private partnerships in the RE sector. However, the past five years have also seen an uptick in RE investments in other SADC countries, with five investments in Zambia and Mozambique and four in Namibia and Mauritius. However, job creation in this sector is small, with an average of 120 jobs per project. Although RE will not be a core industrial sector given its projected growth, SADC countries can still explore the feasibility of different avenues for better value creation from these investments. These might include education and training programmes to ensure local jobs during each phase of the project (ie, project planning, manufacturing, grid connection, operation and maintenance and decommissioning), local content and technology transfer incentives, matching programmes that link investors with local companies, research and development (R&D) and incentives for community projects.[57]

The renewable energy (RE) sector grew the most from Period 1 to 3, with the number of investments increasing by 118%. The RE sector also boasts the highest average capital investment per project by far. This trend will likely continue in future as the climate case for sustainable energy generation heightens. Namibia and Botswana have comparative advantages in this sector because they are sparsely populated, with open spaces and significant sunlight

57 Rabia Ferroukhi, *Value Addition in Renewable Energy Sector and its Implications for Diversification and Economic Development* (Geneva: UNCTAD, 2018); International Renewable Energy Agency, *The Socio-economic Benefits of Solar and Wind Energy* (Abu Dhabi: IRENA, May 2014).

It is important to note, however, that growth in these emerging sectors comes from a smaller base. Other service sectors such business services and communications already have high FDI levels and will likely continue to see growth in the era of the Fourth Industrial Revolution. The low job creation and average capital investment in these sectors present similar challenges in terms of strategies to derive value-add from local ownership and involvement within the project development process for service sectors.

Summary and takeaways for SADC

Table 6 is a summary of key points from the paper, derived from the analysis of FDI patterns in the SADC region. These insights are then grouped into six takeaways for SADC, including more targeted recommendations for policymakers to support regional inclusive growth and development.

TABLE 6 SUMMARY OF KEY INSIGHTS
FDI in SADC is highly correlated with resource endowments and GDP, and to a lesser extent with market growth and infrastructure development. There is little correlation between skill levels and FDI.
Mozambique is an exception to the FDI–GDP relationship, with FDI levels consistently between 15% and 40% of GDP. This has been driven by recent natural resource discoveries and a subsequent influx of public and donor investment, catalysing FDI. The relatively stable political and economic environment compared to other resource-endowed countries has led to FDI spillovers into other sectors.
FDI projects in SADC reached a peak from 2008–2011 owing to the commodity price boom and general growth in consumption on the African continent. The greatest number of investments was in financial services.
South Africa, Angola, Mozambique, Tanzania and Zambia have attracted significantly high amounts of FDI compared to the rest of the region, with South Africa attracting at least five times as much investment as any other country.
Financial services, business services, communications, software & IT services and food & beverages received the most investments in SADC over the period under review.
Renewable energy, real estate and metals sectors received the highest capital investment per project.
Only the real estate and textiles sectors saw an increase in investments from Period 1 to 3. Recent textile investments have primarily been in retail, while recent real estate investments have been in offices/ workspaces and industrial projects. RE has grown the most in aggregate over the three periods (albeit from a small base).
Natural resource investments in SADC continue to drop. Manufacturing activities within the natural resource sectors have seen marginal increases over time.
The food & beverages sector shows strong growth potential in SADC, particularly beverage investments. Mozambique, Tanzania, Zambia and Zimbabwe, the DRC and Angola have seen growth in this sector. The greatest percentage of activities in this sector is in agribusiness manufacturing, with comparatively high job counts and capital investments. Retail investments in the sector are primarily from regionally based retail supermarkets.

Financial services receive the most FDI in the region with an increase in investment from pan-African banks. However, these investments are not geared at financial inclusion. Many financial sector investments follow natural resources.
Activity is a more important determinant than sector in job creation. The greatest amount of FDI is in tertiary activities (services). These activities, however, create on average only 13% of the jobs created by secondary activities (manufacturing and construction).
Metals, automotive OEM, real estate, minerals, food & beverages and textiles sector investments create the highest average number of jobs in the region. Sectors with high job creation have benefited from industrial policies (automotive & textiles in South Africa, business process outsourcing in Mauritius).
Mauritius' growth in business process outsourcing activities creates more jobs on average than all other service activities, but average jobs are still fewer than manufacturing activities.
Inter-regional investment is low. Over two-thirds of SADC FDIs consistently originate from outside the region. The majority of regional investments are from South Africa, with slightly lower job creation than investments from outside of South Africa.
Zambia receives investments from the most diversified range of countries within SADC.
Business services, chemicals, retail, financial services, food & beverages, minerals and metals have received the most investments from other countries within SADC.
Natural resource sectors display a crossover between high export levels and high FDI. Other sectors such as aquaculture, beef, and oilseeds and legumes are export-competitive but receive low FDI.

Recommendations for SADC

- Secondary activities generate high job creation in the region, supporting the SISR's focus on industrial activity to achieve inclusive growth and value addition. Narratives around the rise of services do not negate the lower value-add of tertiary sector investments (in terms of both jobs and capital investments) derived from this analysis. The push to build domestic industries and drive regional policies in traditionally manufacturing-intensive sectors such as automotives should therefore not be abandoned.
- Consumer demand and investment patterns in agro-processing show significant opportunities for growth. The increase in retail supermarket investments in the region presents opportunities for SADC countries to supply agricultural and/or processed products to these stores based on the priority sectors in the SISR, and to supply to multinational agro-processing plants increasingly investing in SADC. From the data, beverages and fertilisers present areas of high potential, specifically soft drink/juice and alcohol value chains. Sector action plans under the SISR should leverage recommendations from available food & beverages research, focusing on supplier development and upgrading programmes, improved logistics, and improved regional competition and standards policy.
- The growth in retail textile investments creates an opportunity for a renewed manufacturing push to supply regional retailers different to the past Asian CMT multinational-driven textile boom. The shift towards sustainable sourcing creates new opportunities for regional cotton supply and CMT. Developing a regional textiles

framework under the SISR, which provides incentives, promotes skills development and promotes business-to-business linkages under sustainability programmes, would capitalise on both recent FDI trends in the region and the priorities of the SISR.

- Beneficiation of natural resources is an important long-term goal, but should not be the first priority at present in SADC. Declining FDI trends in these sectors do not support a beneficiation push at this point in time, which requires groundwork that cuts across sectors in order to be sustainable. However, during boom times resource investments have been a powerful FDI multiplier in other sectors and can be leveraged through policy incentives in growth-inducing supportive sectors such as transportation, building materials and chemicals.
- Growth in services cannot replace labour-intensive activities, which must be the bedrock of industrial development within SADC. However, renewable energy, communications and business services will all likely continue to grow based on emerging trends of digitalisation and sustainability. Exploring opportunities to better capture value-add from already growing service sectors does not preclude a policy focus on industrial activities (and can potentially provide industrial linkages). Examples of value creation may include training/skills development, and local content/procurement/technology transfer incentives.
- Outside of South Africa, industrial policy is not a major driver in FDI trends in comparison with natural resource endowments and growing consumer demand. This points to a need to develop targeted policies and incentives in specific sectors with high export potential but low levels of FDI. Sectors identified by this study include aquaculture in a range of coastal countries, meat in Botswana and Namibia, and oilseeds/legumes in Tanzania and Malawi.

Appendix A

fDi Markets categorises of all the investments that it records by sector and activity. The full list of categories is included below:

TABLE A.1 FDI MARKETS SECTOR CATEGORIES		
Aerospace	Electronic components	Pharmaceuticals
Automotive components	Engines & turbines	Plastics
Automotive OEM	Financial services	Real estate
Biotechnology	Food & beverages	Renewable energy
Building materials	Healthcare	Rubber
Business machines & equipment	Hotels & tourism	Semiconductors
Business services	Industrial equipment	Software & IT services
Ceramics & glass	Leisure & entertainment	Space & defence
Chemicals	Medical devices	Textiles
Coal, oil & gas	Metals	Transportation & warehousing
Communications	Minerals	Wood products
Consumer electronics	Non-automotive transport OEM	
Consumer products	Paper, printing & packaging	

TABLE A.2 FDI MARKETS ACTIVITY CATEGORIES		
Business service	Extraction	Recycling
Construction	Headquarters	Research & development
Customer contact centre	ICT & Internet infrastructure	Retail
Design, development & testing	Logistics, distribution & transportation	Sales, marketing & support
Education & training	Maintenance & servicing	Shared services centre
Electricity	Manufacturing	Technical support centre

Note: The author has grouped the above categories into primary (orange), secondary (blue) & tertiary (gold) activities for the purposes of this analysis (see corresponding colours above). While the electricity category includes renewable energy projects, most of the electricity projects are coal, oil & gas related, which is why electricity is denoted as a primary sector activity.

Appendix B

TABLE B1 NUMBER OF INVESTMENTS IN SADC COUNTRIES TABULATED BY SOURCE COUNTRY (2003–2019)

Angola	
Portugal	145
US	34
UK	32
South Africa	28
Spain	19

Botswana	
South Africa	29
US	16
India	11
UK	11
Canada	9

Comoros	
Tanzania	5
US	1
Qatar	1

DRC	
China	13
South Africa	13
Australia	10
Canada	8
India	8

eSwatini	
South Africa	6
UK	4
US	4
Egypt	2
Taiwan	2

Lesotho	
UK	5
South Africa	5
Canada	2
[Multiple countries]	1

Madagascar	
France	15
UK	7
US	6
India	5
Canada	4

Malawi	
India	6
UK	4
South Africa	4
China/Australia/Togo	3

Mauritius	
India	21
South Africa	18
US	15
UK	14
France	13

Mozambique	
Portugal	54
South Africa	43
UK	33
US	20
Italy	12

Namibia	
South Africa	55
UK	19
Canada	11
US	10
Australia	9

Seychelles	
United Arab Emirates	10
India	4
Sri Lanka	3
Canada	2
[Multiple countries]	1

South Africa	
US	414
UK	376
Germany	153
India	94
China	91

Tanzania	
Kenya	60
UK	48
India	37
South Africa	26
US	17

Zambia	
South Africa	57
China	25
UK	20
US	17
India	15

Zimbabwe	
South Africa	29
UK	22
China	17
Botswana	12
Togo	11

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Cover image

Mauritius, Mahebourg Market (Walter Bibikow/Getty Images)

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