

# Promoting growth and economic transformation in Southern Africa: The challenges and implications of declining commodity prices





# PROMOTING GROWTH AND ECONOMIC TRANSFORMATION IN SOUTHERN AFRICA: THE CHALLENGES AND IMPLICATIONS OF DECLINING COMMODITY PRICES



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Economic Commission for Africa

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First printing June 2020

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## Executive summary

Heavy reliance on primary commodities has rendered many of the economies of Southern Africa vulnerable to fluctuations in international markets as shown by the case of the region's mineral resource and agricultural sectors. A key observation indicated in the present study is that the high dependence of resource-rich Southern African economies on commodities makes them vulnerable to commodity price fluctuations, which has resulted in the unexpected contraction of public resources and, in certain instances, created negative spill over effects into the rest of the economy.

Sound macroeconomic management is, therefore, required to enable the region's resource-rich countries to effectively address the challenges arising from declining commodity prices. Sound policies also attract investment in primary and secondary sectors and diversification of the economy and broad-based economic development will be critical for the long-term sustainable development of Southern Africa.

The macroeconomic consequences of the decline in commodity price are felt mainly through exchange rate appreciation for countries with a flexible exchange rate system, rising inflation, loss in fiscal and corporate revenue, and loss in employment. These challenges have implications on fiscal balances, foreign currency reserves and economic growth.

The fiscal space for pursuing countercyclical policies, however, has largely been eroded since the onset of the global financial crisis, apart from some commodity exporters that had managed to build up financial buffers. Such precautionary policies provide only temporary cover, where commodity price decline persists. Some countries, such as Botswana, have managed to carry out countercyclical measures through setting up Sovereign Wealth Funds. Countercyclical monetary intervention needs to be supported by countercyclical fiscal intervention.

The Southern African Development Community Industrial Development Policy Framework sets

out areas of regional cooperation to build a diversified, innovative and globally competitive industrial base, which contributes to sustainable growth and the creation of employment. The Framework provides a reference point and will guide the coordination of complex complementary policies, activities and processes. It also communicates the region's industrialization aspirations and provides direction to the private sector. It outlines a regional vision and mission for the Southern African industrial economy, and key interventions for implementation in the short, medium and longer term to move towards this vision.

The Ad-hoc Experts Group Meeting on the study on the theme "Promoting growth and economic transformation in Southern Africa: the challenges and implications of declining commodity prices" held in Walvis Bay, Namibia, on 16 and 17 November 2017 highlighted the following observations:

Continued reliance of Southern African countries on primary commodities increases their vulnerability to global commodities markets, such as fluctuations in demand and prices;

Such vulnerability compounds macroeconomic vulnerability (inflation and exchange rates);

Southern Africa can use technology to shift its comparative advantage to a competitive advantage and support economic diversification;

Despite the rhetoric on diversification, there has been limited value addition to natural resources in the Southern African countries for most of the region's primary commodities;

- a) Sovereign wealth funds offer an opportunity to smoothen revenue throughout commodity cycles;
- b) Capacity gaps in contract negotiations limit the ability of countries to derive optimal benefits from their natural resources sector;

- c) Land reform is key to the realization of the full potential of the agricultural sector;
- d) Governance challenges in the commodities sector continue to impede the management of revenues from natural resources;
- e) A scorecard on natural resources exploitation will assist member States in identifying and prioritizing actions for economic diversification and value addition;
- f) Effective regional integration – including free movement of people, goods and capital – is critical in promoting regional value chains;
- g) Affirmative procurement could serve to promote small and medium-sized enterprises, particularly those owned by women and youth.V

The following are recommendations given in the study on how the region can better prepare for future commodity super-cycles:

- a) Economies in the region need to improve the business operating environment in order to facilitate a favourable environment for diversification and industrialization efforts;
- b) Strengthening of institutional governance, coupled with sound macroeconomic management, is important for successful diversification and improved linkages at both national and international levels. Though there is no one-size-fits-all approach to

turn an economy's resources' rents into development outcomes, the experience of Chile does generally represent an empirically proven successful general model;

- c) Mineral-rich economies in Southern Africa should seriously consider diversification of the composition of exports as an important factor supporting the resilience of growth episodes in the region. The establishment of mineral diversification and linkages strategy will add more value through beneficiation than actually mining;
- d) Diversification and industrial densification through value chains is a sure route to sustained regional industrial diversification in transformation of the current Regional Economic Communities' free trade areas to a position of facilitating or implementing agents of the Tripartite Free Trade Area across borders subsequently reducing costs and helping value chains emanating from mining firms to become competitive enough in the larger economic space;
- e) Establish sovereign wealth funds as special purpose investment funds or arrangements that are owned by governments. Because mineral resource revenue largely originates from abroad, they often give rise to sizable rents, having the potential to encourage rent-seeking and corruption by public officials and business leaders. It also increases the risk of civil unrest as rival groups squabble over mineral or oil deposits.



# 1. Introduction

## 1.1 Background and context of the study

As the Southern African region is richly endowed with diverse mineral resources, the extraction of these resources has historically been an integral part of its socioeconomic development and growth. For many countries in the region, the mineral resources sector has been an important source of foreign exchange and economic growth. Nevertheless, despite the long mining history in most of the region's countries, mineral exports are still in the form of unprocessed and semi-processed commodities. The heavy reliance on primary commodities has rendered many of the economies in Southern Africa vulnerable to fluctuations in international markets.

Similar to many resource-rich countries in the recent past, Southern African economies benefited immensely from the commodity super-cycle, with commodity prices reaching their peak between 2011 and 2012 (United Nations Conference on Trade and Development (UNCTAD, 2015). From 2000 to 2011, the UNCTAD<sup>1</sup> broad index of commodity prices tripled while price indices of minerals, ores and metals and crude petroleum nearly quadrupled (UNCTAD, 2016). As a result, regional member States experienced an upturn in real GDP growth rates, following the firming up of commodity prices.

Since 2013, however, economic growth in Southern Africa has been sluggish, owing to the persistent decline in commodity prices and reduced global demand. Moreover, the transition of China towards a more domestically oriented and consumption-based economic model, in conjunction with anaemic global gross domestic product (GDP) growth and oversupply of some commodities, has exerted significant downward pressure on prices for most primary commodities. The prolonged uncertainty in global markets as

shown by the rapid and extensive nature of the price declines, together with the bleak forecasts for most commodities and the slow pace of recovery in advanced economies, continues to weigh in on growth recovery prospects for the Southern African economies.

Resource governance, in particular the existence of good institutions, is also a determinant in whether a mineral boom will be beneficial. In cases in which resource inflows from endowments are better managed, the commodity boom has enabled governments to invest in development projects in some cases and, in other cases, save windfall profits for the future in the form of sovereign wealth funds. The rapid growth in export revenues from resource extraction, usually associated with a commodity boom, is invariably accompanied by exchange rate appreciation pressures, or the so-called Dutch Disease, that reduces competitiveness of other traded sectors of the economy.<sup>2</sup>

The low levels of diversification and heavy dependence on primary commodities render economic growth for most of Southern Africa unsustainable in the medium to long term. The region's economic growth and development prospects are being further undermined by an increasing population and recurring droughts. The population growth rates of between 2 and 3 per cent per year in most Southern African nations exerts pressure on the need to create adequate jobs to keep pace with the growing number of people. The negative effects of El Niño and other weather-related phenomena have compounded the adverse effects of the commodity price decline, putting food security at risk.

A similar trajectory as in the mineral resources sector pervades the region's agricultural economy. As in the mineral sector, the region's agricultural sector – especially its commercial

<sup>2</sup> See [https://ieg.worldbankgroup.org/Data/reports/chapters/ccpe-synthesis\\_ch4.pdf](https://ieg.worldbankgroup.org/Data/reports/chapters/ccpe-synthesis_ch4.pdf).

segment – has historically been geared towards the production of commodities for external markets, while there is a limited number of agro-industry value chains, which ideally should form the basis for transformative industrialization of the typically Southern African economies. This is partly because the quality of land, inputs and production techniques are high in the commercial sector, whereas in the small-scale sector, they are low. The commercial sector's production is geared predominantly towards export, while it is also dependent for its capital-intensive inputs largely on imports. There is little or no integration between these two sectors, thus reflecting dualism in these economies.

The marginalization of Africa in general is closely correlated with the continent's vulnerability to primary commodity price fluctuations. This is the *raison d'être* for this study. That is, instead of waiting for some structural break in commodity prices in favour of these countries, there is every reason for a structural transformation from reliance on the production and export of commodities to developing both upstream value addition, namely, backward linkages (upstream linkages - providing feedstock for manufacturing and broader industrialization) and forward linkages (downstream beneficiation sectors such as manufacturing, agriculture and infrastructure).

The recent calls for accelerated industrialization in Southern Africa through the Southern African Development Community (SADC) Industrialization Framework and Roadmap and attendant national industrial policies has once again elevated the need for this structural transformation and diversification of the Southern African economies.

As shown in this study, the key problem in the lack of breakthrough from the commodity cycle impasse is that, in spite of the many declarations of pursuing industrial development as the core of the developmental integration agenda, the nature of the regional economy has remained the same enclave economy as it was four decades ago.

The rich mineral sector has a growth momentum of its own linked to the whims and cycles of

international markets and continues to relate to other domestic industries and especially the non-formal sector in ways that marginalize the latter. This cyclic existence of growth spurts – recovery-recession-recovery – has failed to give these economies the blueprints required to navigate towards a different future. Thus, though cycles are the very ethos of investments, structural transformation lifts the growth path to a different level as we have seen in the growth and structural transformation of the North-East Asian countries, starting with Japan, Taiwan Province of China and the Republic of Korea.

It is often acknowledged that industrial development is central to diversification of the economies of the region – through developing productive capacity and creating employment so as to reduce poverty and set these economies on a more sustainable growth path. The countries in question, however, have not faced the key challenge of taking practical steps to move off the current economic growth path built on consumption and commodity exports onto a more sustainable developmental path based on industrialization, which is what sets the tone for the discussion below.

## 1.2 Study objectives

The purpose of the present study is to review the consequences of dependency on primary commodities in Southern Africa in the face of low and declining prices, and explore policy options and recommendations towards addressing the challenge. Specifically, the study includes the following:

- a) A review of the development of prices and markets of primary commodities produced in Southern Africa and the global environment to establish an understanding of the current landscape and the consequences, implications and impacts of the situation on the subregion's economic development prospects;
- b) An evaluation of the importance of primary commodities to the economies of the subregion;

- c) A review on how pro-cyclical and countercyclical policies during the commodity boom have positioned resource-rich countries in Southern Africa for the current low-price environment;
- d) An assessment of the impact that commodity prices have had on long-term investment and the ability of the Government of Southern Africa to renegotiate contracts with the extractive industry;
- e) An evaluation of subregional and national frameworks, policies and initiatives on economic diversification, and progress in their implementation;
- f) A discussion on the opportunities for economic diversification from commodities and the risks posed by low commodity prices;
- g) A review of options for facilitating subregional and international cooperation on economic diversification initiatives, including participation in regional and global value chains;
- h) An assessment of the prospects of industrialization vis-à-vis the commodity price declines;
- i) A review of regional initiatives to promote industrialization, and how these initiatives can help overcome the declining commodity prices in the future;
- j) An investigation on how the value addition to mineral resources can assist Southern Africa withstand better any future decline in commodity demand and prices;
- k) Recommendations of policy options to address the consequences of the commodity price declines in the short, medium and long term;
- l) Recommendations on how Southern Africa can better prepare for future commodity super-cycles.

The study objectives are in sync with the objectives of the SADC Industrial Development Policy Framework, which sets out areas of cooperation at the regional level to build a diversified, innovative and globally competitive industrial base that contributes to sustainable growth and employment creation for the mutual benefit of its people.

The departure point for the SADC Industrial Policy Framework is the Industrial Upgrading and Modernization Programme, adopted by the SADC Committee of Ministers of Trade in June 2009. The objective of the Industrial Upgrading and Modernization Programme is to enhance the competitiveness of existing industrial capacity and promote the development of regional value chains in selected sectors across the region.

In this context, ultimately, the study shall provide critical recommendations on policy options to address the consequences of the commodity price declines in the short, medium and long term and how Southern Africa can better prepare for future commodity super-cycles.

### 1.3 Methodology

The study is analytical in approach and is based on the review of the relevant literature and data sources. Quantitative and qualitative techniques are used to highlight the importance of primary commodities in the Southern African region and challenges arising from the dependence on them. The study includes an assessment of the broad consequences of commodity price fluctuations in the affected Southern African countries, and an analysis of some of the driving forces behind these fluctuations, and brings out the implications of declining commodities on the region's macroeconomy. To understand country-specific implications of commodity prices and compare them with other countries in the region, in the study, inferences on literature on commodity terms of trade are made. Commodity terms of trade is defined as a ratio of weighted real commodity export prices to weighted real commodity import prices.<sup>3</sup>

<sup>3</sup> For recent analysis of commodity price cycles, see IMF (2016).

In the study, the role played by monetary and fiscal policy in stabilizing economies during commodity price peaks and lows is investigated and the impact of declining prices on long-term investments in primary commodities is examined.

An in-depth review of regional literature is carried out to evaluate the levels of diversification, industrialization and value chains, and options for diversification are proposed.

## 2. Role of commodities in economic growth and development in Southern Africa

### 2.1 Overview of the structure of Southern African economies

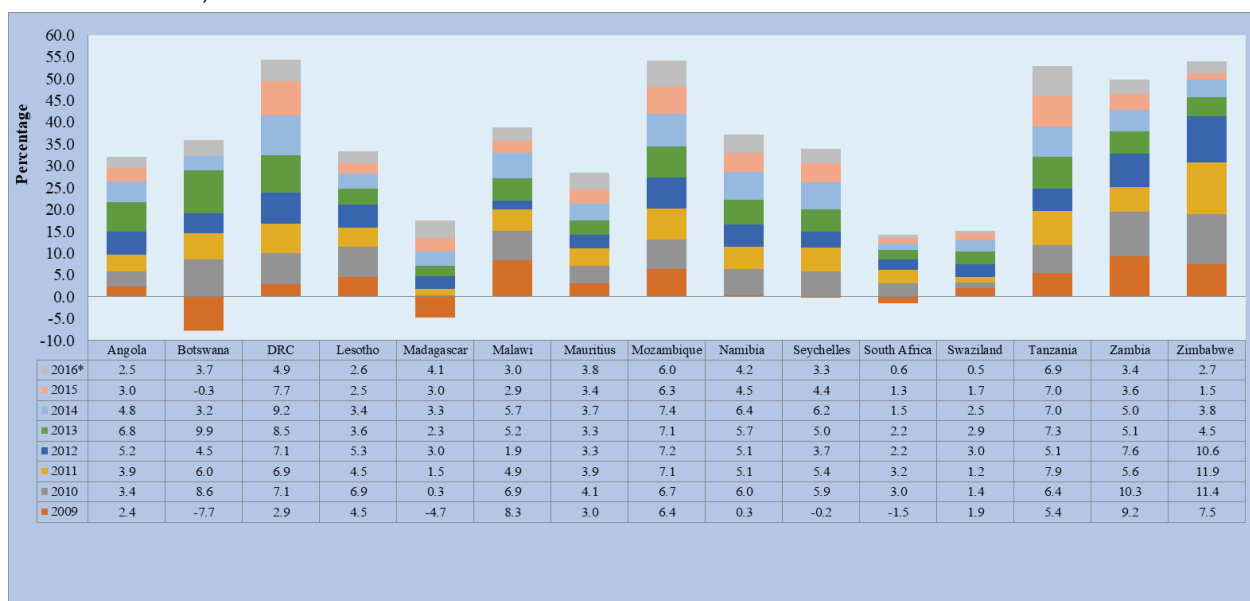
The industrial structure of most Southern African countries is relatively little diversified, except for that of Mauritius and South Africa. The structure of production is characterized by primary commodity sectors, mainly agriculture and mining. The contribution of these sectors to GDP is high (as explained in section 2.2). The performance of the agricultural and mining sectors, accordingly, has a strong influence on the rate of economic growth, the level of employment and demand for other goods and services. Agriculture is the primary source of subsistence, employment and income for about 61 per cent of the population of the region. Fishing is also increasingly becoming an important sector.

South Africa is the region's largest economy, contributing, on average, 60 per cent of the region's GDP over the period 2000–2014.<sup>4</sup> The

country grew at an average rate of 2.4 per cent during the period 2010–2014. Angola is the region's second largest economy, contributing around 12 per cent of the region's GDP. It grew by an average rate of 4.3 per cent during the period 2000–2014. Over the same period, the Democratic Republic of the Congo and United Republic of Tanzania contributed on average about 5 per cent of the region's GDP each, and grew by 7.4 and 6.7 per cent, respectively.

The remaining SADC member States' contribution to the region's GDP each averaged below 3 per cent for the 15-year period. Notable two-digit growth rates were recorded in Zambia and Zimbabwe in 2010, of 11.4 and 10.3 per cent respectively, owing to impressive growth in the mining sector, aided by the increase in commodity prices (figure I).

**Figure I: Gross domestic product growth rates of Southern African Development Community member States, 2009–2016\***



Source: Figure based on statistics from IMF (2016).

\* Year 2016 growth rates are IMF estimates.

<sup>4</sup> SADC (2017) averages for the period 2000–2014.

**Table 1:** Share of agriculture and mining to gross domestic product at current prices

	14 Years average (2000-2014)	
	Agriculture (%)	Mining (%)
Angola	5.5	45.2
Botswana	2.7	28.6
DRC	24.4	11.5
Lesotho	8.9	4.8
Madagascar	27.6	0.2
Malawi	33.7	0.9
Mauritius	4.9	0.3
Mozambique	25.2	1.7
Namibia	9.3	12.5
Seychelles	3	0
South Africa	2.9	8.3
Swaziland	8	0.2
United Republic of Tanzania	31.6	3.4
Zambia	13.3	9.2
Zimbabwe	15.7	6.2

**Source:** Authors compilation based on data from SADC (2014).

## 2.2 Contribution of primary commodities to growth and development in Southern Africa

### 2.2.1 Contribution of primary commodities sector to gross domestic product

The mining sector contributes directly to the economy through output, employment and taxes. It also affects the economy indirectly through backward linkages, such as mineral inputs, transport, capital goods and professional services, and forward linkages, such as electricity generation, processing mineral resources into intermediate or finished goods, as explained in more detail in section 2.3 below. For the period from 2000 to 2014, the mining and quarrying sector had the highest contribution to GDP in Angola, contributing on average 45 per cent of GDP,<sup>5</sup> in Botswana (28.6 per cent) and in Namibia (13 per cent)<sup>6</sup> (table 1).

The agriculture<sup>7</sup> sector was a major contributor to GDP in SADC member States, United Republic of Tanzania (31.6 per cent), Malawi (33.7 per

cent) Madagascar (27.6 per cent), Mozambique (26.2 per cent) and the Democratic Republic of the Congo (24 per cent). The agriculture sector is also significant to the economies of Zimbabwe (15.7 per cent) and Zambia (13 per cent). Growth in the agricultural sector has been low and highly variable across the region, averaging only 3 per cent per annum in the last decade (2006–2014).<sup>8</sup>

For South Africa, the extractive sector contribution to GDP averaged \$26.2 billion, about 8 per cent of GDP for the period 2007–2016. However, 2016 was a difficult year for the country's mining sector, contributing 7.3 per cent to the country's GDP, a decline of 4.7 per cent from 2015 (Chamber of Mines, 2017).

### 2.2.2 Contribution of primary commodities to exports

Commodities from the extractive sector dominate the region's exports. For the period 2009–2012, mineral oils, fuels and distillation products, among others. (HS 27) contributed more than 36 per cent of SADC total exports,

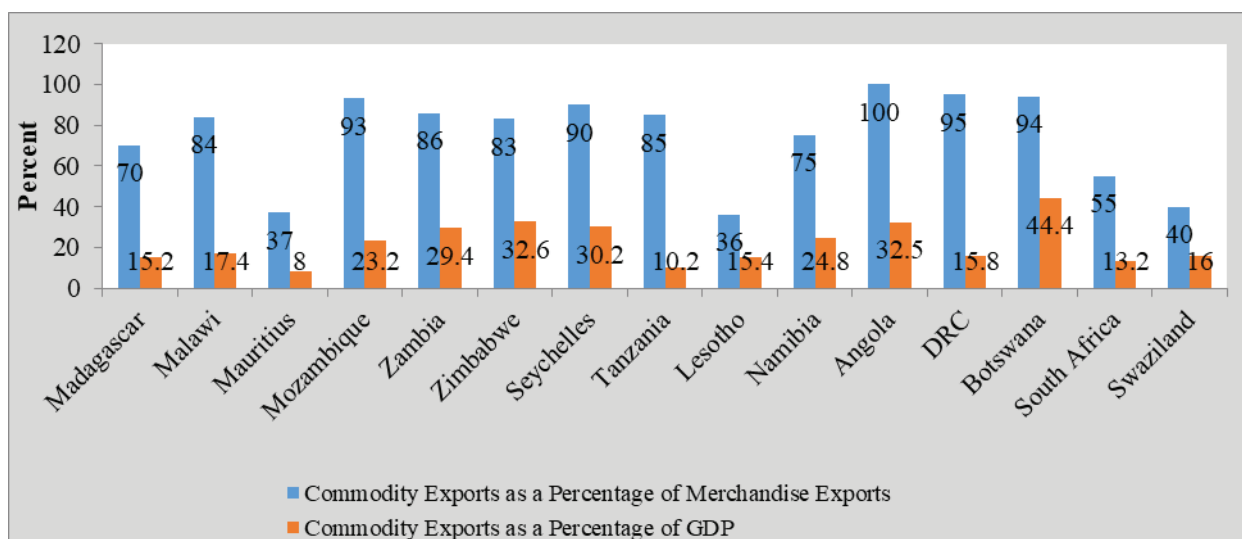
<sup>5</sup> Country average shares for the period 2002–2013 (Southern African Development Community, Statistics Yearbook 2014).

<sup>6</sup> Average shares for the period 2000–2014.

<sup>7</sup> Agriculture includes Fishing, Hunting and Forestry.

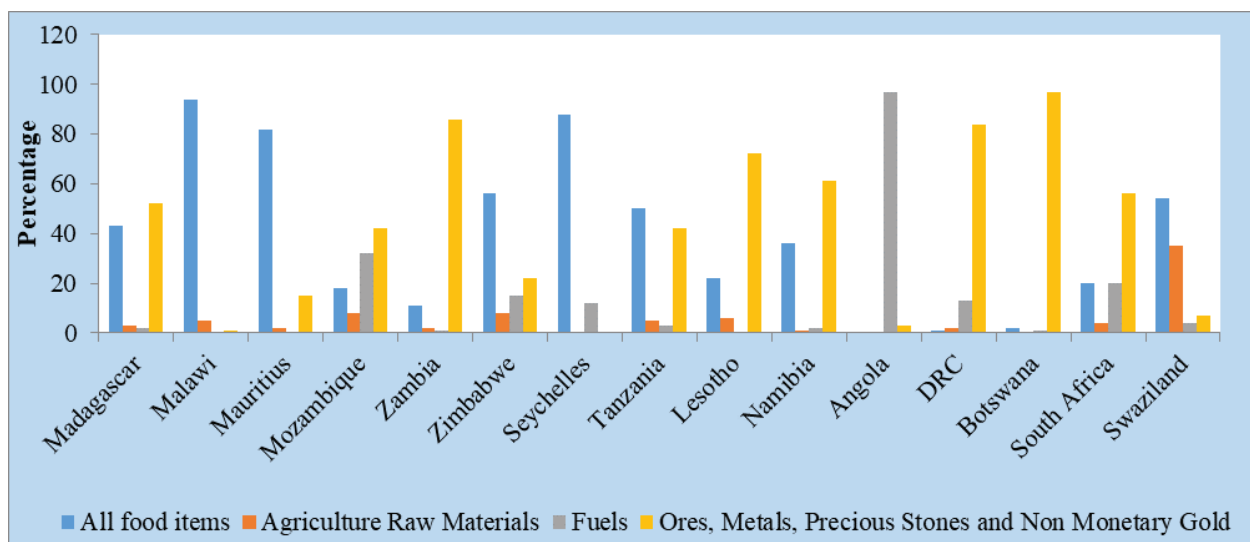
<sup>8</sup> Southern African Development Community, Statistics Yearbook 2016.

**Figure II: Commodity exports as percentage of merchandise exports and gross domestic product in 2014/15**



Source: UNCTAD (2016).

**Figure III: Southern African Development Community exports by group as a percentage of total exports, 2014/15**



Source: UNCTAD (2016).

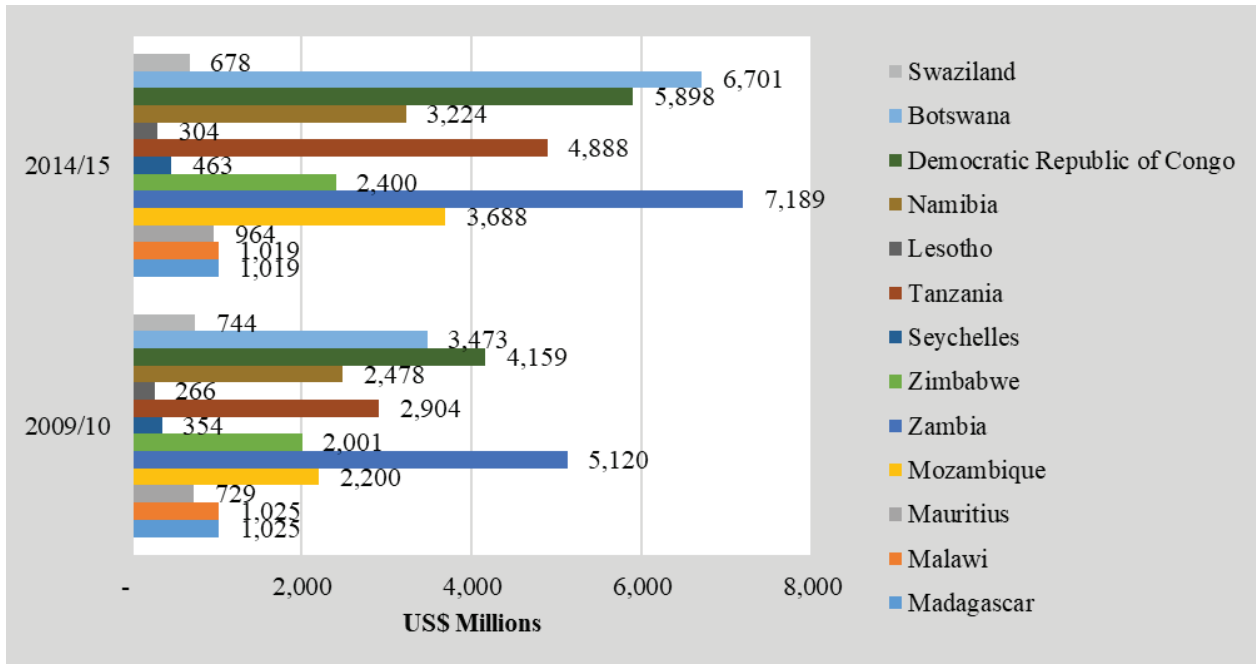
followed by precious minerals and stones (HS 71), which contributed more than 10 per cent. Leading agricultural commodities among the top ten commodity exports from the region were fruits and edible nuts (HS 08), and tobacco (HS 24) contributing just more than 1 per cent, respectively.

Angola had the largest share of commodity exports in merchandise exports, constituting 99 per cent (\$45.3 billion) in 2009/10, 100 per cent (\$69.8 billion) in 2012/13 (UNCTAD, (2004a)) and 100 per cent (\$47.0 billion) in 2014/15 (figure II). In 2014/15 commodity exports contributed a significant share to the GDP of

Botswana of about 44 per cent, Zimbabwe (32.6 per cent), Angola (32.5 per cent), and Seychelles (30 per cent). The least contribution to GDP of 8 per cent was recorded in Mauritius, a more diversified economy in the region with commodity exports constituting only 37 per cent of merchandise exports.

The leading commodities of Angola are petroleum oil and oil from bitumen material, which averaged 96 per cent of the total commodity exports for the period 2012–2014 (AfDB, 2016). Apart from Angola, fuels also made up a sizeable share of total exports in Mozambique (32 per cent), South Africa (20 per cent) and the Democratic Republic

**Figure IV: Commodity export values 2009/10 and 2014/15 (millions of United States dollars)\***



Source: UNCTAD (2016).

\* Excluding Angola and South Africa.

of the Congo (13 per cent) in 2014/15 (UNCTAD (2014a). Mineral commodities also dominated exports in Botswana, making up to 97 per cent of total exports in 2014/15, and in Zambia (86 per cent), the Democratic Republic of the Congo (84 per cent), Lesotho (72 per cent), South Africa (56 per cent) and Namibia (61 per cent) (figure III).

Diamonds contributed, on average 82 per cent, \$5.9 billion free on board, of the total exports of Botswana between 2012 and 2014 (United Nations Comtrade, 2015). Copper is the major export commodity in Zambia, constituting more than 70 per cent in 2012 and on average 66 per cent (\$9.9 billion) of total commodity exports between 2012 and 2014. Copper is also a major commodity in the Democratic Republic of the Congo.

Minerals accounted for \$1.4 billion of the total value of the exports of the United Republic of Tanzania in 2015, compared with \$1.6 billion in 2010, and \$1.3 billion in 2009. Gold represented about 90 per cent of the country's minerals export.

Between 2007 and 2016, South African mining industry exports averaged \$26.7 billion per year.

The primary commodity exports were 32 per cent of total South African merchandise exports (Chamber of Mines of South Africa, 2017). Primary mineral commodity exports made up 23.8 per cent of total exports. Between 2012 and 2014, iron ore concentrates and platinum unwrought each constituted, on average, 8 per cent of total exports, while gold made up 7.6 per cent.

In 2014/15, food commodity exports dominated total exports in Malawi (94 per cent), Seychelles (88 per cent), Mauritius (82 per cent) and Swaziland (56 per cent). For the period 2012–2014 (United Nations Comtrade, 2016), the largest export commodity in Mauritius was prepared or preserved fish; with caviar contributing an average of 14 per cent to total export value, followed by cane or beet sugar making up 11 per cent. In Seychelles, fishery products dominate commodity exports, making up 90 per cent of exports. The top commodity exports of Madagascar were cloves (whole fruit, cloves and stems) and unwrought nickel, contributing 10 and 11 per cent to total country exports.



In 2014/15, agricultural raw materials were significant commodity exports in Swaziland, representing 35 per cent of total exports. Zimbabwe commodity exports as a share of total merchandise in 2009/10 was 73 per cent (\$2 billion) and 85 per cent (\$3.1 billion) in 2012/13 before declining to (\$2.4 billion) in 2014/15. The country's top commodity export was unmanufactured tobacco, 40 per cent in 2014/15 (figure IV). Tobacco is as important cash crop for the United Republic of Tanzania, it grew from \$169 million in 2010 to \$319 million in 2015.<sup>9</sup>

### 2.2.3 Contribution to fiscal revenue

The mining sector's direct contribution to government revenue is mainly through fees, taxes, royalties and corporate income tax. The mining sector contribution (excluding diamond taxes) to total government revenue in Zimbabwe grew from 5.8 per cent in 2009, to 7.2 per cent in 2010 to reach 12 per cent (\$340.3 million) in 2011.<sup>10</sup> Botswana minerals percentage of government revenues averaged 50.9 per cent between 1985 and 1994, increased to 52 per cent for the period 1995–2004 and declined to an average of 39.9 per cent between 2005 and 2014.

The Zambian mining sector contributed less than 0.1 per cent of GDP to government revenue, while accounting for about 6.2 per cent of GDP during the period 2000–2007. To increase revenue from the sector, the Government increased both the corporate income tax and the royalty rate in 2007 (royalty further increased in 2012). A variable income tax was introduced in 2008, and the depreciation rate for capital expenditures for non-exploratory activities reduced. The mining sector's direct contribution to revenues increased from an average of 0.7 per cent of GDP in the period from 2005 to 2009 to close to 3 per cent of GDP in 2010 (IMF, 2015b).

### 2.2.4 Contribution to employment

Being a capital-intensive industry, mining employs many people. For example, during the period 2007–2016, the South African mining industry direct employment averaged 498,396 and the sector's employment as a percentage of total non-agricultural formal employment averaged 5.9 per cent. In Zambia, in 2014, the mining sector employed only 1.4 per cent of the total labour force.

The agricultural sector, on the other hand, provides the highest employment in the region. In Zambia, agriculture (combined with forestry and fisheries) is by far the largest employer, engaging 48.9 per cent of the total labour force (Zambia, 2015). In Malawi, it employs 64 per cent of the labour force (Malawi, 2013).

### 2.2.5 Corporate social responsibility

The contribution of mining to the economy goes beyond taxes, fees and royalties. Towns and cities have been built around mines – for example, Bindura, Kwekwe, Hwange and Zvishavane in Zimbabwe; Kitwe, Ndola and Luanshya in Zambia; and Elizabeth Bay in Namibia. Through corporate social responsibility, roads, bridges and dams have been constructed. Power and communication systems have been set up. The mining companies have also established schools and hospitals.

## 2.3 Backward and forward linkages with other economic sectors

### 2.3.1 Backward linkages

Backward linkages start with mining companies employing local people and procuring goods and services from local companies. The backward linkages, mainly represented by mineral inputs, are dominated by capital goods, such as vehicles, rolling stock, plants and machinery, services, such as technological, engineering, analytical, financial, labour and consumables, such as

<sup>9</sup> See <http://www.tanzaniainvest.com/economy/trade>.  
<sup>10</sup> KPMG Zimbabwe 2012, cited in Jourdan, P. (2012).

explosives, fuels, wear and spare parts, grinding media and reagents.

Numerous factors affect the growth, competitiveness and sustainability of the upstream cluster, including: access to engineering and technical skills, access to skilled artisans, access to government incentives and finance for research and development for “home-grown” firms, awareness of projects and business opportunities, lack of adequate business training and management, certification, high cost of imports and, lack of resources to identify assistance programmes. However, experience from countries that managed to make the transition from resource-based economies to industrialized economies with full employment, such as the Nordic countries, strongly suggests that the most important instruments that facilitate the growth of the backward linkages industries are: (a) production of engineers, scientists and technicians; (b) research and development (technology development), State and private; and (c) access to capital.

### 2.3.2 Forward linkages

Forward linkages, on the other hand, boost broader economic development by processing mineral resources into intermediate or finished goods, instead of exporting them in their raw states. In the forward linkages value chain, the locational advantage created by the production of mining resources can provide a basis for establishing viable resource-processing industries (beneficiation) and also providing feedstock for manufacturing and broader industrialization.

The Southern African countries accordingly, need to structure their resource contracts or leases to provide incentives or disincentives for mineral resources downstream beneficiation. The first steps of beneficiation are often energy intensive (smelting), which is constrained by power shortages in most of the region’s countries. Consideration should be given to creating more robust intraregional trade in low cost and sustainable hydroelectric power from other SADC States, which have enormous potential (estimated at 200 GW). These could be ring-fenced imports, thereby placing the supply risk with the beneficiation (mining and smelting) companies.

The two linkage (forward and backward) strategies can help retain more of the mineral resource wealth in the Southern African region, promote job creation, industrialization, economic diversification, beneficiation and value addition along various mineral value chains; and bring significant social and economic benefits, with a multiplier effect of wages and revenue spent locally in providing a further boost to local economic development.

However, the success of a local content and supplier development strategy depends on the political will of Southern African national Governments, the willingness of the private sector to engage, and the feasibility of building the capacity of the local economies to meet the mining companies’ demands for particular goods, services and types of labour, in terms of both quantity and quality. Based on that logic, an appropriate local-intent policy and a

#### **Box 1: The need for State intervention on beneficiation**

One of the Southern African beneficiation enigmas is manganese in South Africa, where two thirds of this high-grade resource is exported as crude ore, despite the next step (smelting to produce manganese ferro-alloys) being electricity intensive and South Africa having had low electricity prices over the previous 30 years. The manganese export ore price was controlled by a global oligopoly of four companies, which resulted in monopoly ore prices and very high returns for mining. Any downstream investment in capital intensive smelting would consequently have yielded lower returns on capital than selling ore at monopoly prices. In this way, one distortion (monopoly pricing) led to another (lack of beneficiation) and this would be a good example of the necessity for State intervention to effect a correction through, for example, applying a correcting export tax on manganese ore exports, a resource rent tax on the excess profits or using infrastructure tariffs.

*Source:* Jourdan and other (2012).

related strategy for its implementation should be the absolute top priority for most extractive-resource-intensive Southern African economies.

### 2.3.3 Policy support for backward and forward linkages

To facilitate the establishment of the backward and forward linkages, the national Governments of the Southern African States in the mineral-intensive economies of both SADC and the Common Market for Eastern and Southern Africa (COMESA) should improve their domestic procurement policies, in particular, local-content policies, for greater local impacts. In a recent paper, Zhang (2017) advises that it is important that in drafting local-content policies, drafters should be mindful that if the local-content policy targets are too high and are not accompanied by an adequate assessment of the local economic base, the development of a well-conceived capacity-building and monitoring strategy will not be realized.

The result may be a mismatch of demand and supply for mining projects, unduly onerous costs for mining investors, and unmet local expectations that, in turn, will fuel local strife. According to Zhang (2017), local-content policies should be able to enhance understanding among local communities of the implications of local-content demands by being transparent about the negotiating process and the extraction deal, and build consensus about the objectives of their local-content policies among key stakeholders, including local citizens. The local-content policies should also establish a clear system for monitoring mining multinational corporations' obligations to build further trust, at the same time empowering oversight institutions with relevant capacities, to monitor and enforce compliance with local-content policies commitments.

## 2.4 Growth inclusivity

There is a predominance of non-productive labour in developing countries, with sub-Saharan Africa being at the centre of the problem. It is obviously the tragedy of the countries in Southern Africa, including those supposedly rich

in mineral extractive resources, that most of its labour force, mainly young people and women, is trapped in pre-capitalist forms, which are not driven by the need to employ labour to generate profit and the further expansion of capital.

Another legacy of colonial forms of production in these economies is the absence of an internal dynamism for growth and transformation since the economies are dependent on and constrained by external factors, which resulted in these countries being implanted on the enclave economy with its three broad economic sectors: the formal economy; the urban informal economy; and the rural (or communal) economy.

According to Zhang (2017), Southern Africa can draw on the experience and lessons of Chile, and promote a Pareto-efficient purchasing power parity in developing its regional mining clusters, though this would have to be done without too ambitious expectations in the short run. Fast tracking the Tripartite Free Trade Area can play a vital role in helping not only to diversify regional economies away from dependence on the export of just a few mineral products, but also to enhance regional food and energy security, bring about the creation of decent jobs for the increasing youth population; and alleviate poverty for improved livelihood and shared prosperity.

This stance is based on a two-way relationship between natural resource extraction on the one hand, and regional integration and diversification, on the other. This is because mineral deposits do not always fit neatly inside the borders of individual countries in the region, tending instead to span multiple borders (including landlocked countries), green cross-border mining infrastructure, power pools and regional container ports in particular, as well as resource-based development corridors.

Accordingly, deeper regional integration needs to be fast-tracked in the implementation of the Tripartite Free Trade Area and their respective regional free trade area protocols. Regional value chains in minerals and metals along the planned development corridors, for example, will create demand for services and goods that feeds into

that value chain, thereby deepening and creating a regional inclusive economy.

In addition, member States must explore policies in both the mining and agricultural sectors that strengthen gender and affirmative procurement in value chains, as in the case of South Africa. While it is important that the Government should have the responsibility of providing the conducive environment, the markets have the prerogative to explore and choose the value chains. This is expected to lead to the linking up of small-scale firms with their large counterparts, thus paving the way for economic transformation and ultimately economic structural change in these economies.

The deeper integration of regional markets through the elimination of non-tariff barriers can reduce trade and operating costs. It can also

remove the constraints faced by many mining firms in gaining access not only to demand for their products but also to the essential services and skills that they need to boost productivity and diversify into higher value-added areas.

Deepening the regional economy, however, also provides challenges to the sound management of extractive resources and translating wealth from these resources into diversified economies and equitable growth. For example, to turn challenges into opportunities, the COMESA secretariat has collaborated with ECA in drafting a report on profiling mineral beneficiation in the region, with the objective of leveraging opportunities from the COMESA free trade area for resource-driven economic diversification and transformation through a group of regional mineral priority projects (Pearson, 2017).

# 3. Fall in commodity prices: impacts and implications

## 3.1 Review of global developments in primary commodity markets and prices

Price fluctuations of commodities, such as minerals, metals, ores, agriculture raw materials and oil, tend to follow developments in the world economy, as they have a bearing on the demand and supply of those commodities. Sharp fluctuations and long-run trend movements in commodity prices present serious challenges for many developing countries, owing to their large impacts on real output, the balance of payments, and government budgetary positions, and because of the consequent difficult problems they pose for the conduct of macroeconomic policy (Cashin and Mc Dermott, 2002).

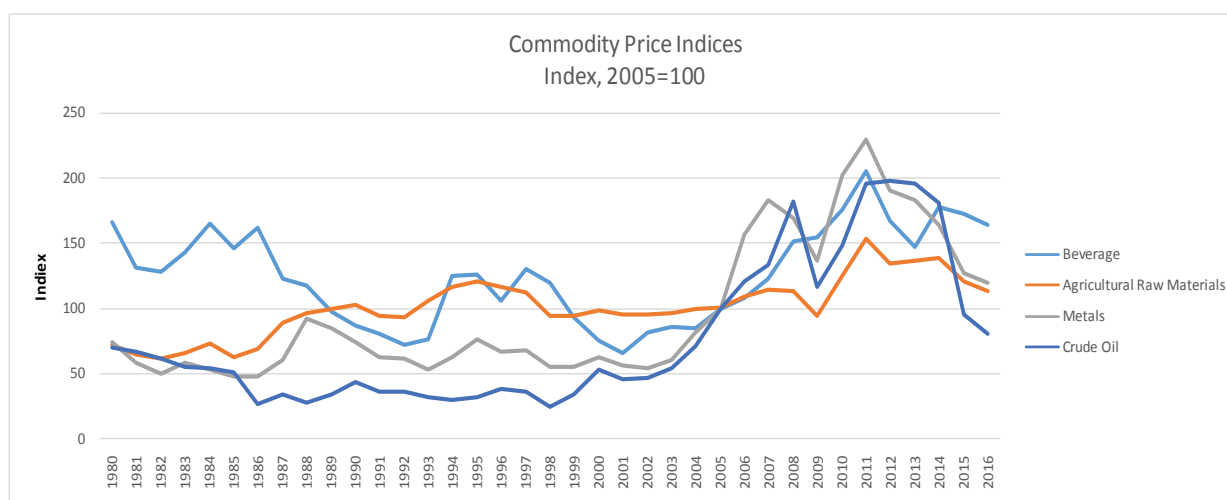
Fluctuations in commodity prices are not uncommon to the recent experiences, as they have occurred in the past.<sup>11</sup> Previous episodes of a commodity prices boom occurred during the post-World War II period (1950s), and 1973–1974, as well as between 2008 and 2009. In the 1950s, the post-War rebuilding process

and the associated fears of shortages, drove up the prices of metal. On the other hand, poor harvests increased agricultural commodity prices. However, during this period oil prices remained relatively unchanged. The 1970s boom was characterized by increases in agricultural and oil prices, while metal prices initially rose and then declined because of a fall in demand. The decline in prices was associated with a sharp slowdown in world output, which eased demand pressures at the same time as supply was rebounding.

An analysis of commodity price indices trends from 1980 to 2016 shows that prices have broadly been low in the decade covering 1990s until the turn of the twenty-first century (figure V). From 2000, prices rose persistently, reaching very high levels by mid-2008, before falling rapidly in 2009, owing to the slowdown of the global economy as a result of the financial crisis.

The 2008 boom was more sustained, and was characterized by weak supply response and sustained global growth. Price increases in the 2008 boom were comparable to those of 1974.

**Figure V: Commodity price indices, 1980–2016**



**Source:** Yearly averages computed from IMF Primary Monthly Commodity Prices Database (<https://www.imf.org/en/Research/commodity-prices>).

<sup>11</sup> Typically, a commodity price boom or super cycle is followed by a bust, as demand reacts to high prices by contracting and supply reacts by expanding.

Crude oil prices increased approximately fourfold between 1972 and 1974 and tripled between 2007 and mid-2008. However, the agricultural commodities (cereal grains and vegetable oils) and energy (oil) were behind the 1973–1974 boom, whereas in 2008 metals prices also rallied. The emergence of the global financial crisis in September 2008 together with global economic slowdown led to the decline in commodity prices.

Almost all the commodity price indices rebounded in 2010, to reach their peak in 2011–2012 before declining in 2013–2014. Despite the recent decline in prices from 2013 to 2014, commodity prices have remained at much higher levels in real terms than at any time in the past two decades.

Prices of many commodities responded strongly to changes in global growth or industrial activity. This reflects the role of commodities in global industrial activity, especially intermediate inputs in manufacturing such as metals and agricultural raw materials, but also oil and, for other commodities such as food, the role of income as a determinant of demand (IMF, 2015a).

### 3.1.1 Energy – oil

The crude oil market has been the most volatile and leading one in commodity price fluctuations. Prices increased from about \$10 per barrel in 1999 to almost \$150 per barrel by mid-2008, only to fall sharply by the end of 2008 to approximately \$30 per barrel. Prices remained around this level in the first quarter of 2009, but progressively recovered towards the end of 2009 to between \$70 and \$80 a barrel. The major factors behind the sharp decline in the price of oil in 2008 are the easing of speculative positions, a contraction in demand for crude oil due to the global economic crisis, and the drying-up of access to finance as a result of financial meltdown.

From a relatively stable position since April 2011, with fluctuations between \$100 and \$120 per barrel, crude oil prices plummeted in the second half on 2014 (UNCTAD, 2015).<sup>12</sup> The price of

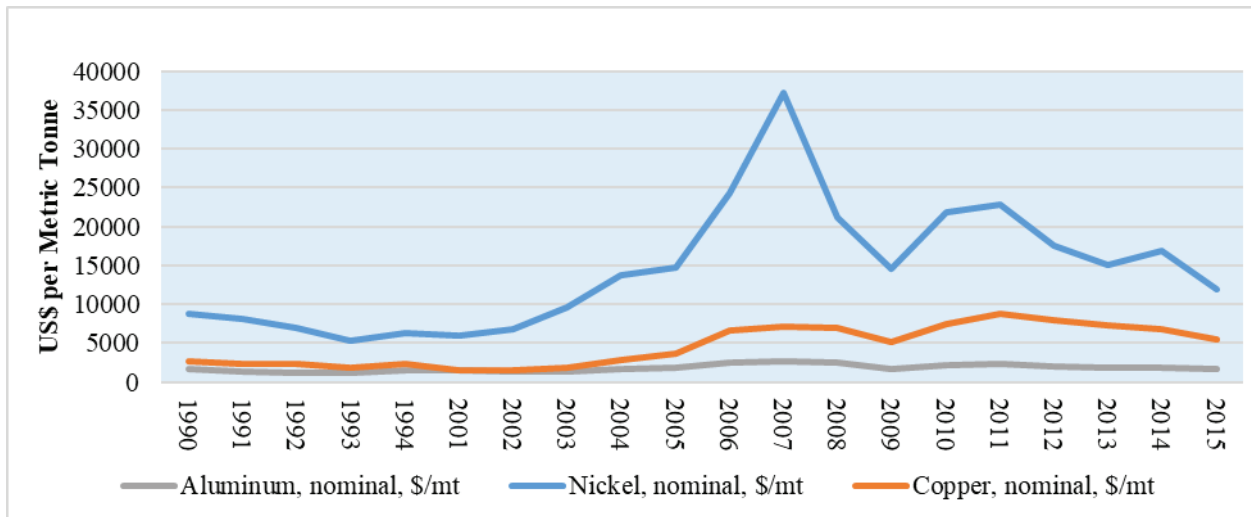
Brent, for example, fell from a monthly average of \$112 in June 2014 to a low of \$48 in January 2015, its lowest since 2009. This decline can be attributed to the abundant supply coming from increased production, in particular shale oil, in the United States of America. In 2014, global oil production increased by 2.3 per cent, whereas in the United States it grew by 15.9 per cent (between 2011 and 2014, oil production in the United States increased by 50.6 per cent (UNCTAD, 2015).

In 2015, oil prices had initially recovered in response to a sharp drop in investment in the sector, but they have since declined again because of excess supply. Natural gas and coal prices, which are mainly indexed to oil prices, albeit with a lag, also declined (World Bank, 2016). In the United States, the number of oil rigs apparatuses for on-land oil drilling is half what it was at its peak in October 2014 while among members of the Organization of Petroleum Exporting Countries (OPEC), production has been increasing despite low oil prices, exceeding the OPEC target of 30 million barrels a day (mbd) by more than 1.5 mbd in August. The Russian Federation has also been producing at record levels. Non-OPEC supply, which peaked in the fourth quarter of 2015, began falling year-on-year in 2016, with an average reduction of 1.1 mbd over the last three quarters of the year. For 2016, non-OPEC oil production fell 0.9 mbd, with the largest declines in the United States.

OPEC, which abandoned production and price targets in November 2014, reversed course in the fourth quarter of 2016, returning to managing supply to address a global oil imbalance and record level of stocks (World Bank, 2017).<sup>13</sup>

The above trend failed to take hold in Southern Africa. Angola is the largest oil producer in the region, with exports of oil averaging \$1.9 billion from 2002 until 2016, reaching an all-time high of \$63.9 billion in the fourth quarter of 2008 and a record low of \$5.4 billion in the first quarter of 2016.

**Figure VI: Aluminium, nickel and copper nominal prices (US\$/metric tonne)**



Source: World Bank Global Economic Monitor Commodities Databank (World Bank Global Economic Monitor Commodities Databank).

Angola exports mostly crude oil (more than 90 per cent of total exports) and small quantities of diamonds, coffee, sisal and fish. Its main exports partners are China (more than 40 per cent of total exports), followed by the United States, India, France, Taiwan Province of China, South Africa and Canada.

### 3.1.2 Metals

Metals are key intermediate inputs in industrial production and construction, and therefore play a pivotal role in the world economy.<sup>14</sup> As a result, changes in volume and composition of global supply and demand determine the performance of metals markets. China represents approximately 50 per cent of global demand for major base metals and the country has been the main engine of global growth since 2002. As a result, the economic activities of the country affect metal prices.

#### Base metals: iron ore, copper, aluminium, nickel

Prices of metals rose steadily from 2000, reaching a peak level in 2008 before collapsing in the wake of the 2008–2009 global financial crisis. Thereafter, prices regained strength, increasing almost continuously. The World Bank metals price index reached a high of 229 per

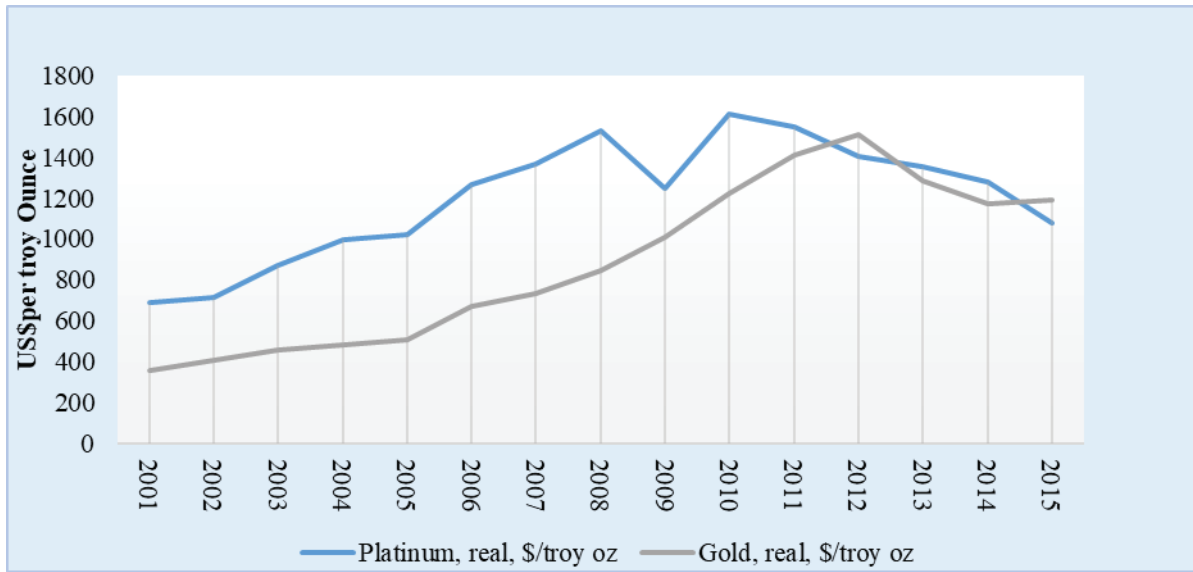
cent in February 2011, up 164 per cent since its December 2008 low.

The Southern African region is well endowed with leading metals – iron ore, copper, aluminium and nickel; These metals constitute significant shares of exports. According to the IMF (2015), iron ore is by far the most important base metal, representing a \$225 billion annual industry in terms of global sales. In the past, iron ore prices were mostly determined by negotiations between Japanese steelmakers and producers. More recently, the market has become more transparent, with the price on delivery at Chinese ports used as the benchmark price. The top iron-ore-producing country is China, whose share is about 50 per cent of the world’s production, followed by Australia and Brazil.

Copper is the second-most-important base metal by value, accounting for about a \$130 billion industry annually. Copper is used for construction and electrical wire. Chile is the largest producer, followed by China and Peru. Copper prices have been more transparent than those for iron ore because copper futures markets and London Metal Exchange settlements are used as benchmarks. China consumes about 50 per cent of the world’s refined copper. The third most important base metal is aluminium, with an annual \$90 billion industry. The fourth most important base metal is nickel, accounting

<sup>14</sup> Metals include both soft (precious) metals like gold, platinum, platinum group metals, silver and hard (base) metals like iron, copper, nickel.



**Figure VII: Gold and platinum nominal prices (US\$/ Troy ounce)**

Source: World Bank Global Economic Monitor Commodities Databank (World Bank Global Economic Monitor Commodities Databank).

for a \$40 billion market. Nickel is used for alloys such as stainless steel.

Notable increases were recorded in nickel prices in 2008, \$37,229 per metric tonne on average (figure VI). In May 2008, nickel traded at a high \$51,600/mt, owing to strong global economic growth before a drastic fall resulting from the global financial crisis. Though nickel prices recovered in 2010, they fell again in 2011. The downward trend reversed early 2014, driven by supply concerns from Indonesia, the world second largest producer of nickel (producing approximately 15 per cent of world production).

### Precious metals

Precious metals, especially gold, play a crucial role as a currency, safe haven and an asset for preserving wealth. Accordingly, performance of gold is linked to global economic, financial and geopolitical events. Precious metals prices are also affected by decisions taken by major central banks and volatility in bonds and stock markets. Platinum prices are influenced by its value as a form of jewellery, medical devices, electrodes and catalyst converters.

The price of gold trended higher starting in 2001, from an average of \$270.9/oz t until 2012, when it peaked in 2012, with an average price of

\$1,669/oz t. From 2013, the price of gold has been trending downward, reaching a low of US\$ 1,160.7/oz t in 2015.

Platinum has been following a similar trend as gold, though trading at higher premiums. In 2009, the platinum prices suffered from the effects of the global financial crises, declining to \$1,203.4/oz t from \$1,574.5 in 2008 before recovering to and then peaking in 2011 to an average price of \$1,719.5/oz t. Platinum prices, however, have been declining since 2012, reaching a low average of \$1,053.20 in 2015 (figure VII).

Precious metal price indices rose 8 per cent in the third quarter of 2015, supported by strong investment demand and safe-haven buying, amid continued low interest rate policies. Gold prices increased by 6 per cent to average \$1,335/oz t (World Bank, 2015). Silver rose by 16 per cent, supported by strong investment demand and increased physical demand from China photovoltaic production. Platinum prices decreased by 8 per cent, owing to the appreciation of the South African rand. Platinum is influenced by the value of the rand, as more than 70 per cent of the world's platinum is produced in South Africa.

During the last quarter of 2016, platinum prices dropped 13 per cent because of falling investment demand, but physical demand was



also weak, especially in China, where shifting consumer tastes have been reducing demand for jewellery towards other products. Silver prices fell 13 per cent on declining investment demand and similar market sentiment towards gold.

Gold prices declined 9 per cent, averaging \$1,157/oz t in December 2016, down from a monthly high of \$1,340/oz t in August, on decelerating investment demand given expectations of higher real interest rates and a stronger dollar.

### 3.1.3 Agricultural raw materials and food prices

Climatic conditions continue to have an enduring impact on the supply of almost all agricultural commodities, triggering price movements. El Niño often adversely affects agricultural production in the southern hemisphere, especially in countries in Latin America and East Asia, and in Australia. Southern African economies have also not been spared from suffering the El Niño effects through series of droughts. However, El Niño impacts on commodity prices are likely to be local rather than global if global markets are well supplied.

The World Bank Raw Material Price Index in the third quarter of 2015 was 9 per cent lower than 2014 and one third below its early 2011 peak (World Bank, 2015). The pattern of the raw material index is similar to the declines in energy and metals indices. Cotton prices were 8 per cent lower in the third quarter of 2015, compared with same period in 2014 as the market returned to deficit after six consecutive years of surpluses. The surplus of the past five years went mostly to stock building by China, which currently accounts for 57 per cent of world stocks.

Grain prices declined by 13 per cent in the third quarter of 2015, compared with the same period in 2014. The World Bank Edible Oils and Meals Price Index declined by almost 20 per cent in the third quarter of 2015, compared with the previous year.

## 3.2 Consequences and impacts of the declining commodity prices

### 3.2.1 Impact on economic growth

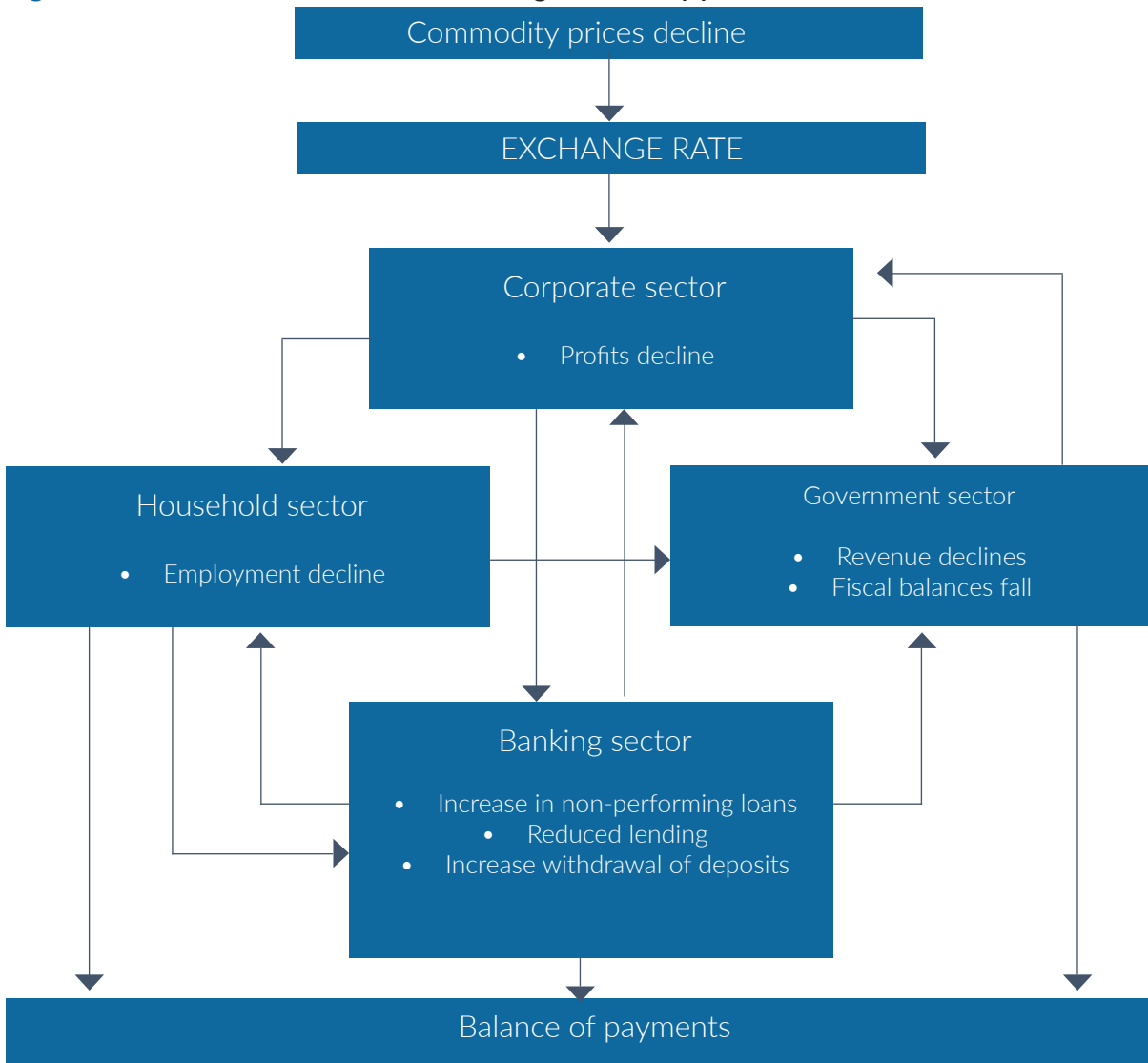
Southern African economies benefited immensely from the rise in commodity prices from 2010 to 2012. The SADC GDP growth rate increased from 0.4 per cent in 2009 to a high of 4.7 per cent in 2013, but the downward trend in prices that followed has resulted in a contraction in economic growth. Consequently, the region's GDP declined in 2013 to 3.9 and further to 2.2 in 2015.<sup>15</sup> Some countries, such as Zambia and Zimbabwe, registered double-digit growth rates in 2010, of 10.3 and 11.4 per cent respectively, supported by the favourable commodity prices, only to contract in 2011 to 5.6 per cent for Zambia and in 2013 to 4.5 for Zimbabwe (see figure I).

Some empirical literature on the impact of commodity prices on economic growth and output growth suggests a direct relationship between the two. Gruss (2014) suggests that the end of the commodity price boom will entail a significant drag on growth for the average commodity exporter in Latin American countries. More precisely, if prices were to remain stable at their 2013 average levels, average annual GDP growth over the medium term (2014–2019) would be almost 1 percentage point lower than in 2012–2013 and more than 1.5 percentage points lower than over 2003–2011.<sup>16</sup>

According to Aslam and others (2016) both actual and potential output move together with commodity terms of trade, but actual output moves twice as strongly as potential output. Aslam further asserts that during upswings, real GDP grew by about 1.5 percentage points more per year than in downswings, real consumption about 2.0 to 2.5 percentage points more, and investment about 8.0 to 8.5 percentage points more. Investment and consumption contribute about equally to the difference in the growth of real GDP, as the stronger response of investment makes up for its smaller share in overall spending.

<sup>15</sup> See [https://www.sadc.int/files/7315/0996/2411/SADC\\_-\\_Selected\\_Indicators\\_2016.pdf](https://www.sadc.int/files/7315/0996/2411/SADC_-_Selected_Indicators_2016.pdf).

<sup>16</sup> Gruss (2014) analysed the relationship between commodity prices and output growth based on global vector auto-regression model, which includes the 12 largest commodity exporters in the Latin American region and a rich set of country-specific commodity price indices.

**Figure VIII: Transmission channels for falling commodity prices\***

\* Adapted from Christensen (2016), Paper No. 81. Bank for International Settlements.

The study estimates the weak commodity price outlook to subtract 1 to 2.25 percentage points from actual output growth annually on average during the period 2015–2017.

Aslam and others (2016) note that certain country characteristics and policy frameworks can influence how strongly output growth responds to the swings in the commodity terms of trade. Growth is perceived to respond more strongly in countries specialized in energy commodities and metals, and in countries with a low level of financial development. Less flexible exchange rates and more pro-cyclical fiscal spending patterns (that is, stronger increases in fiscal spending when the commodity terms of

trade are improving) also tend to exacerbate the cycle.

### 3.2.2 Macroeconomic consequences

The initial consequences of declining commodity prices affect the macro-economy through a decline in exports values, investment and output, which ultimately has a bearing on corporate and household incomes (figure VIII). The downturn tends to be stronger in countries with fixed exchange rate arrangements, where an exchange rate change cannot ease the adjustment, than in countries with less financial depth, where financing constraints rapidly become binding on economic activity (Christensen, 2016).<sup>17</sup>

<sup>17</sup> Christensen, B.V. (2016). Bank of International Settlements. No. 81.

### Exchange rate depreciation

In commodity-exporting countries where the exchange rate has been flexible (for example, Ghana, South Africa and Zambia), lower commodity prices and weaker capital inflows have led to substantial currency depreciation. In countries with more flexible exchange rate regimes, at the onset of the adverse commodity price shock their exchange rate was a shock absorber on real activity (IMF, 2016).

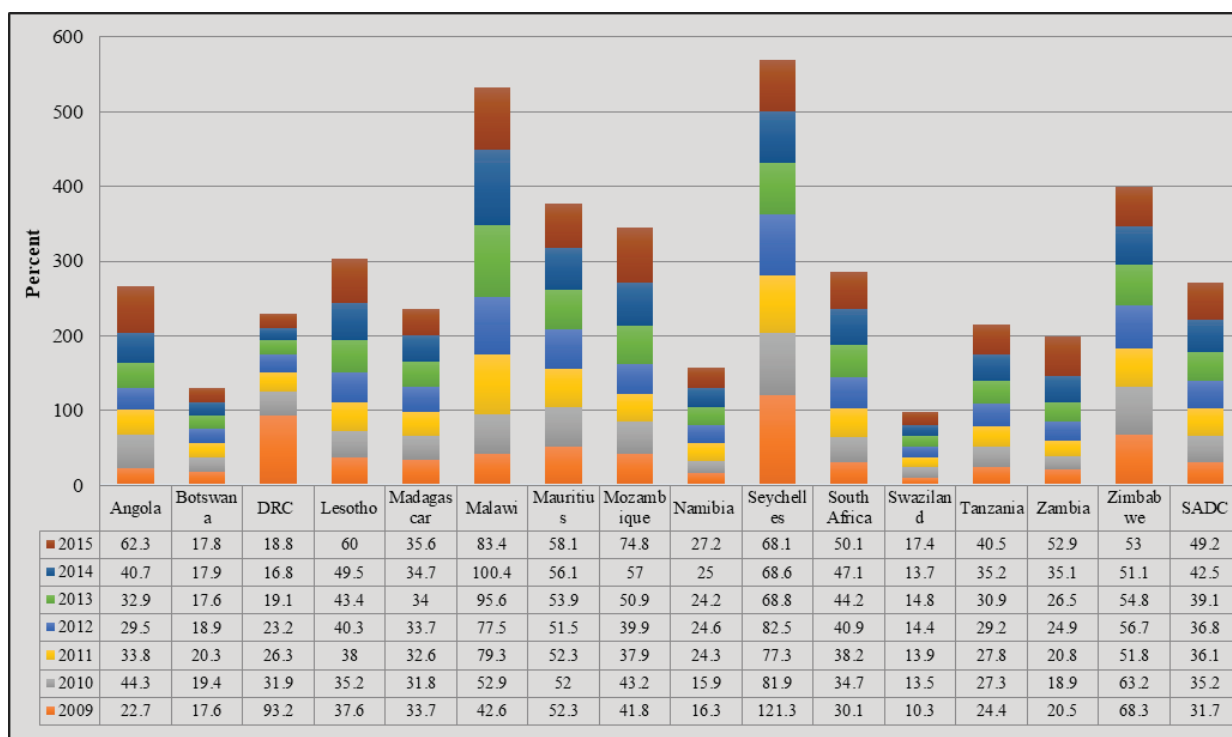
### Rising inflation levels

As a reflection of the policy response to external pressures and the effect of currency depreciations, inflation has been rising in some of the commodity-exporting countries in the region. In 2016, end-of-year inflation in Angola reached 42 per cent and remained slightly above the upper target band in South Africa, although it has fallen in Zambia because of tight monetary policy over the past year.

Lower global crude oil prices have not fully passed through to domestic retail prices, as the extent to which domestic prices respond depends on price setting (market-based versus regulated), tax structure and policy responses. Analysis of retail price data suggests that the median pass-through to gasoline and diesel prices was about 50 per cent in the second half of 2014 (Husain and others, 2015). Retail fuel prices fell in most countries in the second half of 2014, but at a slower pace than the drop in international prices. In some sub-Saharan African countries (Angola, Cameroon, Ghana, and Madagascar), domestic prices rose in reaction to fuel pricing reforms. As in other regions, the pass-through among net oil exporters was smaller (close to zero).

Some countries with flexible exchange rate regimes in place prior to the shock generally had higher inflation than countries with fixed regimes, but they were on average able to contain inflation during the downswings triggered by the pass-through of exchange rate depreciation to domestic prices (IMF, 2016).

**Figure IX: Government debt as a percentage of gross domestic product**



Source: IMF (2015a).

## **Loss in corporate profitability and employment**

A decline in commodity prices tends to reduce company profitability,<sup>18</sup> leading to adjustments of cost structures, which may have detrimental effects on employment and wages. According to the Chamber of Mines of South Africa (2017), some 40,000 jobs were lost from the beginning of 2015 (more than 1,500 per month). This slowed at the end of 2016 to approximately 400 jobs per month. The negative trend in recorded profits by the sector also appears to have bottomed out in 2016. Average quarterly profits reported by the mining sector started to improve during 2016. Owing to improved commodity prices and profits, production started to improve during the first quarter of 2017 (+3 per cent compared with the same period in 2016).

## **Loss in fiscal revenue through reduced tax revenue**

Fiscal instability caused by sudden drops in State revenues (boom or bust resource rents) at the end of the cycle, which cannot be matched by associated contractions in State expenditure, results in government deficits, increasing recourse to debt and inflationary pressure on the local currency. This occurred in Zambia in the 1980s with the fall in copper prices. However, countries that had, on average, a lower debt-to-GDP level prior to the shock were more resilient to commodity price shocks, as this provided more fiscal space to increase borrowing and to smoothen the impact of the shock once it happened, while still preserving debt sustainability (IMF, 2016). Figure IX shows the debt-to-GDP ratio for the SADC member States between 2009 and 2015.

## **Increase in non-performing loans**

Weakening commodity exports, the subsequent sharp slowdown in economic activity, and the build-up of government payment arrears to contractors tend to restrict the capacity of

private firms to service their loans to various degrees across the region. This has resulted in a widespread increase in non-performing loans, triggering higher provisioning, straining bank profits, and weighing on solvency (IMF, 2017). As a consequence, bank lending to the private sector has declined and lack of credit registry has compounded the situation.

## **Loss in investment**

The decline in commodity prices adversely affects investment in commodity extraction and consequently, supporting industries tends to weaken. This implies that not just actual output weakens, but also potential output that declines. Falling commodity prices have also reduced capital inflows for investment and increased the risk premium on external sovereign borrowing. At the regional and national levels, the impact of lower commodity prices on inflows of foreign direct investment (FDI) varies according to the economic weight of extractive industries versus energy-dependent industries, and as trading positions when it comes to minerals and hydrocarbons (UNCTAD (2016). Economies whose exports and FDI inflows rely heavily on oil and metals are in a particularly challenging situation. In Africa, FDI inflows to the metal mining industry has decreased significantly in major metal exporting countries, such as Zambia (see section 3.3).

## **3.3 Impact on long-term investments**

A primary catalyst of decreasing FDI in developing and transition economies has been the continued decline in commodity prices, especially for crude oil and for metals and minerals (UNCTAD, 2014b). The sharp fall in oil prices that occurred in the second half of 2014 weighed heavily on FDI flows to oil-exporting countries in Africa, South America and transition economies.

In 2014, FDI flows to Southern Africa fell by 2 per cent to \$10.8 billion, though they increased

<sup>18</sup> However, this is also subject to other factors, including cost structures and productivity of the company.

by the same percentage in 2015 to reach \$17.9 billion, mainly driven by large inflows into Angola.

After several years of negative flows, Angola attracted a record \$8.7 billion of FDI in 2015, becoming the largest FDI recipient in Africa, as a result of loans provided to local affiliates by their foreign parents. The declining oil prices and the depreciating national currency and rising inflation have severely affected the country's economy. Consequently, foreign affiliates in the country increased their borrowing from their parent companies to strengthen their balance sheets (UNCTAD, 2016). Nonetheless, expansion in energy-related infrastructure continued to occur. For instance, Puma Energy (Singapore) opened one of the world's largest conventional buoy mooring systems in Luanda Bay.

Mozambique FDI flows declined by 21 per cent to \$4.9 billion in 2015, despite a significant rise in cross-border mergers and acquisitions in the oil and gas industry.<sup>19</sup> After years of record inflows, FDI to Mozambique declined. The country attracted a considerable \$3.7 billion which, though 24 per cent lower than 2014 inflows, still made Mozambique the third largest FDI recipient in Africa. The decline was primarily the result of uncertainty related to the 2015 elections and low gas prices. In addition, the mining giant Anglo-American (United Kingdom of Great Britain and Northern Ireland) closed its office in Mozambique in 2015, 18 months after cancelling the \$380 million purchase of a majority stake in a coal asset in the country. Intra-African FDI, however, helped support investment in the country: for example, Sasol (South Africa) announced it would build a second loop line to move gas from Mozambique to industrial customers in South Africa.

In 2015, FDI into South Africa decreased by 69 per cent to \$1.8 billion, the lowest level in 10 years in part because of lacklustre economic performance, lower commodity prices and higher electricity costs. Divestments during the first quarter from noncore assets in manufacturing, mining, consulting services and telecommunications contributed to the decline in FDI. However, excluding divestments, inflows

were considerably lower than in 2014, owing to the economy's continued reliance on mineral-based exports (UNCTAD, 2016).

Foreign direct investment flows in Zambia declined by 48 per cent to \$1.7 billion in 2015, as electricity shortages and uncertainties related to the mining tax regime continued to constrain FDI into the mining sector. Lower prices for copper, which accounts for more than 80 per cent of Zambian exports), the collapse of the national currency and surging inflation all affected reinvested earnings.

Given the decline in commodity prices, host countries and investors involved in development projects in the extractive industries must conduct deeper and more strategic analyses on how to maintain certainty and flexibility in long-term commercial contracts despite extreme changes of circumstances by limiting the impacts of external factors. Various other factors and risks have an impact on the investor decision-making process. Among them are the following:

- a) Proven reserves and geological risks: the difficulty to access deposits or the existence of resources that are lower than estimated;
- b) Political risks (uncertainty): owing to political decisions made by a host country, creating instability, which affects the certainty of the investment and induces changes in the legal and regulatory environment;
- c) Supply and demand risks (market risks): has a high impact on price volatility. A good example is the current slowdown in China, which is affecting demand for commodities and commodity prices;
- d) Costs risks: high operational risks make extractive a very capital-intensive industry;
- e) Legal risks: linked to the ability of the host country's legal system to provide enough protection and guarantees to investors, such as ability to enforce a contract, and the quality of the judiciary system.

<sup>19</sup> For example, ONGC Videsh Ltd (India) acquired a 10 per cent stake in Rovuma Offshore Area 1 for \$2.6 billion.

- f) Moreover, the macroeconomic factors prevailing in a host country and the status of the global market have also been influential as they affect access to capital for investors.

### 3.3.1 Capacity of governments to renegotiate contracts

The reasons for renegotiating contracts are many and varied. Commodity prices, however, are a key external factor that can prompt the renegotiation of contracts. High prices generally trigger reforms of fiscal regimes by host countries, and investors may refuse to accept those changes, in particular if they are making windfall profits. On the other hand, depressed prices put pressure on investors to argue for alleged unforeseen events to review the contracts and mitigate the risk exposure.

A review of the legal and regulatory framework by host countries to be in line with key regional, continental and international standards, such as the African Mining Vision, may also spark the renegotiation of contracts. A country generally reviews its national laws mainly with respect to the fiscal regime and local content mandatory targets for increasing its share of benefits. Changes of the political regimes, often linked to corruption allegations, may also result in contract renegotiations.

According to the African Minerals Development Centre, the renegotiation process is generally complex and the difficulties faced by governments and investors usually revolve around the following issues:

- a) Finding the right balance between contract stability and durability, and flexibility to maintain the economic equilibrium of the contract despite unforeseen changes of circumstances;
- b) Handling corruption and political instability as the main reason for a host country to request renegotiation;
- c) Considering a renegotiation when the contract does not cover review mechanisms or contain stabilization clauses covering key matters;

d) Whether the alleged circumstances by one party can justify a renegotiation;

e) How to frame and regulate the negotiation process;

f) How to control the mechanism and define the event that gives right to renegotiation in order to avoid unlimited demands of review and political interference (Busia, 2016).

Given the current commodity prices and markets outlook, the African Minerals Development Centre is of the view that the outcomes of projects, in particular high-scale ones, will mainly depend on how well stakeholders, in particular the host countries, negotiate their position by trying to shift, share or mitigate the risks when and where needed depending on the disposition of the parties towards those risks. The ability of governments of resource-rich countries to effectively steward the exploitation of natural resources wealth is predicated on their ability to effectively represent the interests of current and future generations in negotiations in global forums and with investors (AfDB, 2015). It is crucial for them to use effective negotiation skills and techniques. Governments that take on the wrong risks or too many risks undermine the success of a project.

The allocation of risks depends on the industry. Potential scenarios are project specific. The use of innovative legal and financial instruments to mitigate, allocate and manage certain types of risks, is crucial: stabilization clauses are used to immune investor's activities from changes in the legislative environment as a result of an unilateral decision of the host country; indemnity clauses: a fundamental method for allocating risk between the parties; insurance; operating agreements involving operators managing the day to day operations of the project; and guarantees from a third party (Busia, 2016).

Despite the appropriate allocation of risks that should be considered at the inception of a project, contracts are likely to be reviewed and renegotiated at some point. This exercise, however, can be complicated, especially when



the request for renegotiation comes from only one party.

Negotiations themselves are a final milestone in a process of enabling governments to adequately leverage their global position and natural resources wealth. It is critical to invest in knowledge of the global economic and sector-specific nuances to ensure the effective engagement of third parties. The African Natural Resources Centre aims to create tools to guide policy, legal and institutional capacity-building to contextualize negotiations at national and regional levels. The tools will be the basis for capacity-building and supporting negotiations through sector knowledge.

### 3.4 Commodity terms of trade – country implications

Movements in commodity prices tend to affect countries differently, depending on the composition of their exports and imports. Many Southern African countries export non-fuel primary commodities, but import fuel. The booms in commodity prices may not necessarily translate directly into terms-of-trade booms for all commodity exporters and busts for commodity importers. To explore the country-specific dimension of global commodity-price movements, it is useful to also consider the commodity terms of trade, which is the ratio of commodity export prices to commodity import prices, with each price weighted by the share of the relevant commodity in the country's GDP or total trade (Spatarofa and Tytell, 2009). The use of commodity terms of trade, allows for the defining of country-specific commodity price cycles, complements the literature describing cycles in specific commodities. For the present study, a commodity terms of trade analysis could not be carried out because of limited data availability and time constraints. However, in recent studies carried out by IMF commodity

terms of trade implications for countries in the sub-Saharan region are clearly articulated.

The commodity terms of trade analysis conducted in the IMF regional outlook report for sub-Saharan Africa in 2016 Regional Economic Outlook for Sub-Saharan Africa report brings out the important implications of declining commodity prices on the Southern African economies.<sup>20</sup> The analysis indicates the following:

- a) Economies that are highly concentrated around oil production, such as Angola, have experienced sharper declines in their terms of trade. With cumulative decline in commodity terms of trade since 2011, the decline in income has ranged between 25 and 45 percentage points of GDP.<sup>21</sup>
- b) Terms-of-trade movements for the sub-Saharan region's metal exporters have been more subdued, even when compared with metal exporters outside the region, mainly because of the following:
  - i. Sub-Saharan African countries often depend on a wider range of metals with heterogeneous price developments, such as copper, iron ore, diamonds and gold, and the dependence on each of these metal exports tends to be lower with respect to the size of the economy.
  - ii. Oil prices rose in tandem with the rising metal prices in the 2000s, raising the sub-Saharan countries energy import bills and muting the net impact on their commodity terms of trade. Now that commodity prices are trending down, the reduced oil import bill is acting as a cushion.
- c) The period 2000–2011 for metal exporters was associated with high economic growth and modest changes in commodity terms of trade because the increase in the price of their commodity exports went hand in hand

<sup>20</sup> The calculation of the commodity terms-of-trade index in IMF publication, Regional Economic Outlook – Sub-Saharan Africa: Multispeed Growth, follows the approach taken by Spatarofa and Tytell (2009) and Gruss (2014). The commodity terms-of-trade index weighs the changes in international prices of individual commodities according to country-specific net commodity exports as a share of GDP. A country is classified as an exporter of commodities if exports of commodities (oil, metals, food, and raw materials) comprise more than 25 per cent of goods exports, and net commodity exports represent more than 5 per cent of goods trade (exports plus imports). On this basis, for the period 2010–2014, 22 out of the 45 sub-Saharan African countries are classified as net commodity exporters.

<sup>21</sup>

with the increase in the price of imported oil, leading to an apparent absence of the correlation between growth and terms of trade for them.

- d) Metal exporters, however, have experienced significant losses since 2011, although to a varied extent. The most affected countries in Southern Africa were the Democratic Republic of the Congo and Zambia, whose commodity terms of trade have dropped by about 5 to 10 percentage points of GDP since 2011, as the decline in iron ore and copper prices, respectively, more than offset the beneficial impact of the drop in oil prices on their import bill.
- e) Movements in metal and oil prices have also been net negative on the commodity terms of trade for South Africa, although to a lesser extent.
- f) Contrary to the experience of other countries in the region, in Botswana and Namibia, commodity terms of trade actually increased during the period 2011–2015, benefiting from the increase in diamond prices during the period 2009–2014.
- g) Potentially large macroeconomic impacts from relatively smaller declines in commodity terms of trade (or export prices) for metal exporters cannot be discounted. It would be the case, in particular where discrete events, such as the closure of mines are leading to substantial job layoffs, as already experienced in the Democratic Republic of the Congo, Sierra Leone, South Africa and Zambia.
- h) Some food and raw material exporters in the region also experienced cumulative declines in their commodity terms of trade between 2000 and 2014, mainly because of increased oil import bills. Despite the adverse commodity terms-of-trade developments facing these countries, many sustained solid growth over that period, averaging 4 per cent.

### 3.5 The implications of declining commodity prices

Although price fluctuations are an integral part of commodity markets, high price volatility can be detrimental to both commodity-exporting and commodity-importing developing countries. Highly volatile commodity prices may distort the development process, through hindering forecasts of rents creation and allocation, which affects investment planning and technological upgrading. They also make it difficult for net commodity-importing countries to make a provision for the required foreign exchange to pay for their imports.

Countries with stronger external positions, more robust policy frameworks and more developed financial markets are, however, better placed to deal with some of the growth impacts arising from the decline in commodity prices discussed above (section 3.2).

Declining commodities prices have the following implications for Southern African economies:

#### *Exchange rate pressures*

In response to the large terms-of-trade shocks and tighter external financing conditions, many countries appropriately let their exchange rates depreciate to help absorb external pressures. Oil-exporting countries, such as Angola, were affected the most by the decline in prices. For them, the commodity terms-of-trade shock since mid-2014 has represented an income loss from oil price fluctuations of about 20 per cent of GDP. A shock of such a magnitude typically cuts 3 to 3.5 percentage points off annual growth for several years, which is broadly consistent with the growth deceleration observed for oil exporters since 2014 (IMF, 2016). However, some of the hardest-hit countries also have resorted to harmful exchange rate restrictions to stem the depletion of reserves (IMF, 2017). For instance, Angola has a priority list for foreign exchange access at the official rate, a special tax on service payments, and stricter limits on foreign currency for travel introduced in 2015. The scarcity of foreign currency led to the widening of parallel



market rates from 5 to 10 per cent in mid-2014 to around 130 per cent at the end of March 2017.

To minimize losses from the decline in commodity prices, countries that are not part of a currency union need to be more flexible in dealing with their exchange rate. This should be supported by sound monetary and fiscal policies (IMF, 2016). It is essential that the effects of exchange rate depreciations on balance sheets, and on inflation, are closely monitored. According to IMF, it is important that actions to take a more flexible stance with regard to foreign exchange should not be delayed, especially in an environment with persistent commodity price shocks, as a build-up of balance of payments pressures must be counteracted either through sales of scarce external reserves or exchange rate restrictions that take a toll on activity.

### **Increased pressure on international reserves**

Given that reserves are finite, they must be better managed and also preserved to deal with other shocks. International reserves for most countries in the region tend to be lower than for commodity exporters in other emerging market and developing economies, partly as a result of countries' efforts to expand infrastructure investment to address longer-term development needs. Oil exporters, however, have entered the period of lower oil prices with relatively higher reserves than others in the region and higher than at the onset of previous shocks. External reserves have provided buffers to face the shock, but care should be taken to limit the drawdown, particularly in view of the expected persistence of the oil price shock.

### **Fiscal pressures**

Many commodity exporters in the region (oil exporters, in particular) have allowed their deficit to widen as fiscal revenues dwindled. With the increasing public debt and borrowing costs, fiscal space has rapidly disappeared. Because of this, some countries in the region, such as Zambia, entered the period of declining commodity prices with already weak fiscal positions. Accordingly, the region's commodity exporters need to

create more fiscal space, through adjustment and discipline. Although in principle fiscal policy can provide support, given the persistence of commodity price declines, fiscal adjustment is increasingly being called for to maintain macroeconomic stability (IMF, 2016).

Some countries in the region, such as Botswana, have successfully turned their natural resources into wider growth opportunities, mainly because they managed natural resources rents well. Adequate policy space is essential for the effective management of resource rents, and fiscal measures, such as taxes and public spending, are the main instruments that governments can employ to improve the share of benefits accruing to the public sector. Nevertheless, strong and transparent systems of public financial management are also needed if benefits from the extractive industries are to be more widely shared.

### **Increased inflation pressures**

Inflation has been trending higher since 2015 in some sub-Saharan African countries, as exchange rate depreciations associated with the commodity price declines and increased global risk aversion have passed through to inflation, although weather-related increases in food prices may have also played a role in this. Monetary and fiscal policy should be aimed at avoiding spill over to more generalized inflation, including to achieve the real depreciation needed to help minimize output losses from the ongoing terms-of-trade shocks (IMF, 2016).

### **Low growth**

Strong dependence on export revenues from extractive industries may undermine economic growth, increase inequality, and be a source of political instability. Low economic growth rates are linked to the extractive sector through high volatility of resource revenue, difficulties in absorbing and managing these resources, and the policy problems they create through distorted exchange rate, factor and other markets for the development of other productive sectors, particularly those that could add significantly to unskilled job creation in the formal sector.

## 4. Managing the commodity price cycles in Southern African economies

### 4.1 Pro-cyclical and countercyclical policy measures

#### 4.1.1 Fiscal policy

The fall in commodity prices has presented macroeconomic policy challenges, as economic growth has weakened substantially among the region's commodity exporters. The fiscal space for pursuing countercyclical policies has largely been eroded since the onset of the global financial crisis – apart from some commodity exporters that had managed to build up financial buffers. Such precautionary policies, however, provide only temporary cover, in where commodity price decline persists.

Issing (2005) notes that fiscal policy plays an instrumental role in promoting macroeconomic stability through sustaining aggregate demand and private-sector incomes during periods of economic downturn and by moderating economic activity during periods of strong growth. An important stabilizing function of fiscal policy operates through “automatic fiscal stabilizers”, which work through the impact of economic fluctuations on the government budget and do not require any short-term decisions by policymakers.

In principle, stabilization can also result from discretionary fiscal policymaking, whereby governments actively decide to adjust spending or taxes in response to changes in economic activity. Discretionary policies have not been very effective in stimulating demand. They tend to undermine the healthy state of budgetary positions, and governments find it easier to decrease taxes and boost spending in times of low growth than doing the opposite during economic upturns. Discretionary fiscal policies aiming at aggregate demand management have tended to be pro-cyclical in the past, as tax adjustments often need parliamentary approval and take time before actual implementation. As a result, they are effective only after cyclical

conditions have already reversed, thereby exacerbating macroeconomic fluctuations.

The short-term stabilizing function of fiscal policy can become especially important for countries that are part of a monetary union, as nominal interest rates and exchange rates do not adapt to the situation of an individual country, but instead to that of the union as a whole. Fiscal policy can then become a crucial instrument for stabilizing domestic demand and output, which remains in the domain of individual governments. However, the limitations of active fiscal policy may be greater when there is increased uncertainty about future income developments.

Discretionary policies are needed to implement long-term structural changes in public finances and to deal with exceptional situations, in particular when the economy experiences extraordinary shocks. Unfortunately, fiscal policy often has accentuated the impact of the commodity price cycle on economic growth by increasing expenditures during upswings and decreasing expenditures during downturns (IMF, 2015). Much of the commodity price windfall accrues to the government in commodity-producing economies, especially in energy exporters. Consequently, the commodity price boom may loosen the government budget constraint and allow the government to finance a higher level of spending.

#### 4.1.2 Monetary policy

Optimal countercyclical monetary policy is best implemented when the monetary authorities have a good understanding of their economy's transmission mechanism and well-functioning financial markets. To carry out countercyclical monetary policy focused on stabilizing prices and output, it is essential to have in place an institutional framework and infrastructure similar to inflation targeting. Such a framework provides a guide to the authorities even though monetary

policy actions have limits in their effectiveness, especially in an environment in which interest rates have become too low and inflation expectations are not well anchored (Mbao, n.d.).

It is important that countercyclical monetary interventions are supported by countercyclical fiscal interventions. This, however, hinges on sufficient resources being available in the treasury. For small open economies, it is generally advisable for them to adopt countercyclical approaches to economic management. This will help with the timely and effective handling of global impulses that can adversely affect their economies from the output gap perspective (ibid).

If managed in a flexible way, the exchange rate can be one of the most important transmission channels for adjusting to changes in commodity prices. The adjustment to lower oil prices has been more difficult for most African oil-exporting countries because they are either members of a currency union, such as the Central African Economic and Monetary Community, 22 have a de facto pegged exchange rate or allow only a limited depreciation.

On the other hand, countries such as Angola and Nigeria have introduced formal or informal administrative restrictions on their foreign exchange markets which has resulted in a substantial widening of the spread between official and parallel exchange rates, a situation in which the shortage of foreign exchange has hampered private-sector activity by preventing the import of essential inputs, aggravating the deceleration of growth (World Bank, 2016). Keeping inflation under control after a collapse in commodity prices and in the exchange rate are key to sustainable growth.

## 4.2 Country experiences

The episodes of price super-cycles have prompted some commodity exporters in the region to introduce fiscal frameworks, fiscal rules or resource funds, aimed at countering the volatile

evolution of commodity prices on the budget. As mineral resource revenues largely originate from abroad, they often give rise to sizable rents that have the potential to encourage rent-seeking and corruption by public officials and business leaders. This also increases the risk of civil unrest as rival groups squabble over mineral or oil deposits.

In order to minimize the aforementioned risks in the short and the long term, a favourable feature of intervention is to establish sovereign wealth funds. This is especially appropriate when the contribution of mining to GDP and mining taxes are substantial, as often is the case during intermittent periods of commodity super-cycles. During commodity super-cycles, mineral resources pose significant policy challenges in the formulation and implementation of fiscal policies because they are very volatile and uncertain. Accordingly, there is a need to mitigate the effect of complicating fiscal management, budget planning, and the efficient use of public resources.

In the presence of constraints of absorptive capacity in the economy, the alternative is to invest in foreign financial assets through sovereign wealth funds, which will subsequently achieve the following objectives:

- a) Buffer the economy from the volatility of commodity prices;
- b) Limit Dutch Disease symptoms by spreading the conversion of resource receipts into domestic currency over time;
- c) Provide a useful source of liquidity for governments concerned with running counter-cyclical fiscal regimes;
- d) Ensure that the revenue from exhaustible resources are saved rather than consumed;
- e) In theory, serve as a “self-insurance” against capital flight and provide autonomy in macroeconomic policy, resulting from the

22 The Central African Economic and Monetary Community (CEMAC) comprises six countries: Gabon, Cameroon, the Central African Republic, Chad, the Congo and Equatorial Guinea.

accumulation of foreign reserves through such funds.

For countries that have introduced financial stabilization buffers, such as Botswana, which established the Pula Fund in 1993, it has been possible to finance counter-cyclical fiscal policies for a period of time. However, a steady decline in commodity prices over an extended period would require further fiscal policy adjustment. Accordingly, Botswana is aiming to eliminate the deficit over a three-year period and has announced a ceiling on future fiscal deficits of 40 per cent of GDP (Christensen, 2016). The

country's resource fund is widely considered to have been successful.

For sovereign wealth funds to be more beneficial for African Governments, the African Development Bank (AfDB) is proposing that the funds go beyond the stabilization motive but be positioned as instruments for achieving growth. Angola has also used the upswing in oil prices to rebuild reserves and scale up investment spending, and created a sovereign wealth fund in 2012.<sup>23</sup> Namibia instituted a minerals development fund in 1995.

## Box 2: Case study – Botswana

The Botswana public finance policy framework specifies that revenue derived from minerals, because they are derived from the sale of an asset, should be used to finance investment in other assets. The intention is twofold: to preserve the country's overall asset base; and to provide the basis for the generation of income that can replace mineral income when it eventually declines. The corollary to the asset replacement principle is that recurrent (non-investment) spending must be financed from recurrent (non-mineral) sources.

Botswana mineral revenue is not institutionally segregated from the rest of the budget; it is paid into the general revenue pool (consolidated fund). The country has never had any rules requiring a specified proportion of mineral revenue to be paid into a dedicated fund; the revenue is simply combined with other general revenue in the consolidated fund. Importantly, there are no rules regarding the payment of mineral revenue into the Government Investment Account.

The country's macroeconomic policy has been generally focused on maintaining internal and external balance through appropriate fiscal and monetary and exchange rate policies. The Government has commonly run budget surpluses and has largely avoided borrowing. Public debt has been well below the statutory debt ceiling of 40 per cent of GDP.

The monetary and exchange rate policy is an adjustable peg system. Currently, the local, the pula, is pegged to a basket comprising equal proportions the South African rand and ZAR and Special Drawing Rights. Exchange rate policy has prevented currency volatility and undue nominal appreciation, which would otherwise have resulted from successive balance of payments surpluses. The managed exchange rate has therefore been an essential component, in minimizing Dutch Disease impacts and attempting to support diversification; additionally, it has had the important benefit of the accumulation of foreign exchange reserves for stabilisation.

**Lessons for other countries:** Botswana has an effective and efficient mineral fiscal regime. Its revenue has been invested in social and economic development. Sufficient financial resources have been accumulated to provide effective stabilization buffers. However, Botswana has very high rents related to diamond mining, and the bulk of that mining is carried out by one company.

**Mining fiscal regime:** Botswana has effectively appropriated the large majority of mineral rents, while leaving mining investors with sufficient return to compensate for the cost of capital and

<sup>23</sup> Fundo Soberano de Angola, established in October 2012.

risk. This has been done through a combination of fiscal mechanisms, including royalties, variable rate profit taxes and ownership stakes. The fiscal regime is laid out in various laws, leaving limited scope for project-by-project negotiation. Accordingly, this has contributed to the predictability and objectivity of the fiscal regime.

**Investment of mineral revenue:** A principle that can be used is that all mineral revenue must be saved or reinvested in economic, social or human capital. This can be achieved even though it is a policy principle rather than a hard-and-fast, legally enforceable rule. This, in turn, leads to the conversion of mineral wealth to economic, social and human capital. The implicit assumption is that these types of assets offer higher rates of return than financial assets. To the extent that financial assets have been accumulated, these largely serve stabilization purposes rather than as a source of future annuity income (funds for future generations).

**Sovereign wealth funds:** A further lesson from Botswana is that a sovereign wealth fund works well if it invests only in financial assets outside the country. The investment and asset allocation process then becomes a largely technical, objective process, mostly insulated from domestic pressure, especially political pressure. Enabling a sovereign wealth fund to invest domestically has two disadvantages. First, it means that the fund is not be used to offset Dutch disease pressures and contributing to macroeconomic balance. Second, it is vulnerable to the pleadings of special interests and rent-seeking groups. Mineral revenue used to fund real (rather than purely financial) investments should be done through the budget rather than off-budget through the sovereign wealth fund.

**Expenditure management rules:** It is essential to maintain discipline with regard to project appraisal and other mechanisms to ensure the effectiveness of public spending, even when resources are apparently abundant.

**Consideration of intergenerational fairness:** Establish a clear target – or at least a policy – on the accumulation of financial assets set aside for future generations. This becomes particularly important as revenue peaks and the country reaches good levels of physical and human capital such that the needs of current generations become less urgent.

*Source:* African Natural Resources Centre and AfDB (2016).

## 5. Leveraging resource endowments for economic transformation and structural change

### 5.1 Diversification from mineral resources products

The diversification from mineral resources products means that mining activities lead to agriculture-manufacturing-services and allied development, with a focus on key national and regional mining value chain projects along development corridors of the Southern African region. In turn, this leads to improved economic structure, cementing the base for economic diversification, and capturing the much-needed rents for economic and product diversification. The key supporting factor behind the mineral diversification stems from adequately budgeting backward and forward linkages and spending efficiently in hard and soft infrastructures and enlarging product space for diversification. This can also be reinforced by diversified financing and risk-control instruments to support inclusive and the development of green mining.

The diversification of mineral resources products also stems from the development of resource sector linkages slowly results in the building of integrated resource-linked industrial clusters in which the different components reinforce one another and, from initially serving local demand lead to the development of competencies to export goods and services to other resource sectors in the region and ultimately globally.

The diversification from mineral resources products can be understood as development of resource-linked industrial clusters indirectly anchored on the comparative advantage of the resource sectors pertaining to the following components:

- Upstream linkage industries: plant, machinery, consumables (inputs), engineering services, financial services and consultancies;
- Downstream linkage industries: resources processing (value addition) into intermediate products, semi-manufactures, components, sub-assemblies and finished consumable goods. This process also often results in the production of co-products and by-products, which also constitute potential feedstocks for further downstream linkage industries. These resource beneficiation industries, in turn, create markets for further upstream industries (capital goods, consumables and services);
- Sidestream linkages: Power generation and supply, construction, process automation, logistics, marketing, transport infrastructure (rail, road and ports), environmental industries, human resource development and skilling entities and other resource sectors that supply inputs into the resource sector (for example, mineral inputs such as fertilizer and conditioners into agriculture, and chemicals into mining). These, in turn, create new demand for upstream industries. The evolution of resources linkages industrial clusters was developed by Joseph Ramos in 1998. Jourdan and others (2012) further developed this and amplified it as consisting of the following phases:
  - Phase 1:** Resource extraction with minimum essential local processing (for example, ore concentration, raw cacao beans, roundwood and cotton lint). Almost all the inputs (capital goods, consumables and engineering services) are imported, except for production engineering services, in this phase;
  - Phase 2:** Resource processing and export, for example, wood pulp, agri-processing, mineral smelting and refining, and initial import substitution of the lower-technology imported inputs, usually under licence for

the local market, and increasing production engineering services;

**Phase 3:** Initial export of some goods and services established under import substitution in phase 2. The engineering services are increasingly based on local intellectual property and the resources processed into higher value-added products, such as fine and special papers, metal alloys, semi-manufactures, packaged agricultural products and textiles;

**Phase 4:** Exports of a wide range of resource goods and services of increasing complexity and technology, including design engineering services, resource plant and machinery, predominantly based on local intellectual property. Exports of resource-based products of greater variety and complexity and the migration of knowledge-intensive resource services industries, into new, resource-independent sectors.

## 5.2 Regional and national initiatives on diversification and industrialization

The SADC Industrial Development Policy Framework sets out areas of cooperation at regional level to build a diversified, innovative and globally competitive industrial base, which contributes to sustainable growth and employment creation for the mutual benefit of its people. The framework provides a reference point and is used to guide the coordination of complex complementary policies, activities and processes, which will form part of the regional industrial development framework. It also is intended to communicate the region's industrialization aspirations and provides direction to the private sector. The Framework outlines a regional vision and mission for the industrial economy in SADC, and key interventions for implementation in the short, medium and longer term to move towards this vision.

Under the Framework, the formulation and implementation of industrial policy is recognized as being a national prerogative and it is noted

that industrial policy is implemented through government action and appropriate policy instruments and interventions in support of dynamic manufacturing growth, which remains a legitimate instrument for development. Also, under the Framework, member States are encouraged to continue to formulate and implement national policies and strategies for stimulating and enhancing their productive capacities, as these policies are important in informing and supporting the regional framework. In addition, it contains no blueprint and "no-one-size-fits-all" approach for a region's industrialization process, thus directly and indirectly influencing industrial structure and performance within diverse contexts at national and regional levels.

The Framework, therefore, facilitates enhanced cooperation to take advantage of backward and forward linkages or synergies, gradually building a diversified, innovative and globally competitive industrial base across the region. The following broad cross-cutting and sector-specific interventions for implementation at regional level are contained in the Framework:

- a) Developing and exploiting SADC mutually beneficial opportunities;
- b) Improving standards, technical regulations and quality infrastructure;
- c) Promoting cooperation on innovation, technology transfer, and research and development activities;
- d) Developing mechanisms to improve access to finance for manufacturing and related sectors;
- e) Improving support for small and medium-sized enterprises;
- f) Integrating infrastructure and services into the regional industrialization strategy;
- g) Attracting local regional and FDI and promoting exports;



- h) Developing strategies to exploit opportunities emerging in the region's strategic cooperation with global partners;
- i) Promoting alignment of this policy with existing complementary policies.

The departure point for the SADC Industrial Policy Framework is the Industrial Upgrading and Modernization Programme, adopted by the SADC Committee of Ministers of Trade in June 2009. The objective of the Programme is to enhance the competitiveness of existing industrial capacity and promote the development of regional value chains in selected sectors across the region.

The development of regional resource inputs in industrial clusters is critically constrained by the small size of the national markets. This is certainly the case among the mineral-rich Southern African States. Even the Southern African Customs Union market, which is largest such market in Africa, generally lacks the requisite demand for many world-scale viable capital goods plants. The successful conclusion of the Tripartite Free Trade Area by SADC, the East African Community and COMESA and the establishment of regional common markets would greatly increase the possibility of a successful resource-based development strategy. Other resource-based industrialization success stories either had larger domestic markets (United States and Brazil) or had access to larger markets (the Nordic countries: access to former Soviet Union and the European Union).

Several similar diversification and linkages studies have been done for the minerals sector in South America and Southern Africa. A recent study of the South African platinum group metals sector (Lydall, 2009) notes that the engineering, procurement, construction management firms are critical to optimizing the initial linkages, which also affect the potential ongoing linkages in terms of the technologies and processes selected. Paul Jourdan notes that the Mozal (BHP Billiton) linkages programme in Mozambique has indicated that the configuration of local subcontracts is important to the success of developing local suppliers. The failure in to

develop downstream linkages at the Hillside aluminium smelter (Gencor, later BHP Billiton) in Richards Bay was predominantly the result of monopoly pricing of the product at an import parity price. The stipulation of competitive pricing of all resource products is seminal to any successful forward linkages (downstream) strategy.

The establishment of mineral diversification and linkages adds more value through beneficiation than actually mining, as shown by the following phases:

- a) Resource infrastructure is densified to serve other areas;
- b) Labour becomes increasingly skilled and mining becomes more capital intensive;
- c) Government revenue is diversified away from mining resources to other sectors;
- d) Imported mining inputs are increasingly locally sourced;
- e) Mineral technologies are locally developed or adapted rather than imported;
- f) Resource exploitation is governed by general laws and institutions rather than project specific contracts.

A regional and national resource-based development strategy of this nature would typically go through similar phases of industrialization, with decreasing importance of its resources' comparative advantage and an increasing relative importance of a skills-based competitive advantage. Almost all of Southern Africa can be positioned on this continuum, though most would still be in phases (a) or (b), while those at the leading edge of the region's extractive mining segment, namely South Africa, and probably Zambia and Zimbabwe would be positioned somewhere in phase (c) (though with some slipping back). In summary, the key elements of a mineral resources diversification and resource-based development strategy at the regional and national levels entail the following:



- a) The realization of a resource comparative advantage by overcoming infrastructure constraints through the establishment of infrastructure networks. Paul Jourdan contends that this has largely been achieved in Namibia, South Africa, Zambia and Zimbabwe (though in some cases this is in need of rehabilitation) and major new infrastructure is needed for bulk mineral exports, such as iron ore and coal, such as in the case of the Mwanesi Development Corridor in Zimbabwe as a Spatial Development Initiative);<sup>24</sup>
- b) The “densification” of the resource-based infrastructure through the establishment of ancillary and feeder infrastructure to enlarge the resources corridor catchments and beneficiary sectors (agriculture, forestry and tourism), a condition that applies to all countries in the region;
- c) The deepening of the mineral sector linkages into the domestic and regional economy through beneficiation of these resources and creating supplier and service industries around the minerals sector and developing them into complex resource linkages industrial clusters (up-, side- and downstream industries). However, this is critically dependent on the following:
- i. Dramatically increasing the national quality of human capital and technology development through concerted long-term investment in technical human resources development (engineers, scientists, technicians) and research and development (innovation);
  - ii. The capture of resource rents through resource rent taxes and the reinvestment of resource rents into human resource development, skills and research and development for technology development to capitalize on the resource linkages opportunities, as well as into long-term infrastructure for the development of mature resource industrial clusters

and, ultimately, result in a competitive advantage, independent of resource endowments.

The key challenge of structural change or transformation from commodity trade into engineering and agri-business lies in the fact that while population of Africa is estimated to reach 20 billion by 2050, these people will need food, energy and jobs and in addition will need to deal with the effects of climate change. Under commodity trade, there will be no prospects for domestic and regional value chains, as local producers remain locked up in the raw material production stage, in which the rest of the value chain – procurement, product design, transformation, marketing / sales, distribution and services – are in overseas foreign hands.

In this context, an ad hoc expert group meeting had stressed the urgency of industrialization of all African economies, including aligned services, ICT and technology products. The real challenges lie in the role of African leadership, steering the roles of regional economic communities and stakeholders, including the private sector and civil society organizations, to turn the region’s commodity trade into engineering and agri-business, such as cotton into garments, cocoa (in West Africa) into chocolate, and metals into intermediate products.

A comprehensive Southern African (both SADC and within COMESA) resource-based strategy should include the development of labour-intensive resources upstream sectors and also going further downstream, beyond capital-intensive intermediate goods into labour-intensive fabrication, which is often stunted by the widespread practice of monopoly pricing of intermediate industrial feedstocks.

<sup>24</sup> For details, see Paul Jourdan (2012). Case study of the Putative Mwanesi Development Corridor as a Spatial Development Initiative (SDI).

### Box 3: South Africa iron and steel value chain

The South African steel industry contributes more than 1.1 per cent directly to the country's GDP, and a further 0.4 per cent indirectly. The steel industry plays a critical role in mineral beneficiation, given the abundant iron ore reserves in South Africa: steel quadruples the economic value of the country's iron ore, adding more than 26 billion (South African Rand) (R) (\$1.9 billion) in value (in 2015). Steel is also a key enabler of all parts of the economy, including the automotive, mining, construction, energy and infrastructure sectors. All these have been identified as leading factors supporting growth in the Government's national development plan. The top five steel-consuming industries together contribute some R600 billion to the country's GDP (15 per cent of the total) and employ more than 8 million people (O'Flaherty, 2015).

The iron and steel value chain consists of four distinctive stages, exploration and extraction, mining beneficiation, metallurgical beneficiation and shaping and conversion/fabrication and manufacturing/end user industries.

**Value chain in South Africa exploration and extraction:** The process of exploring for and then extracting iron ore (drilling, blasting, loading and hauling) is typically open pit mining performed by mining companies. The South African industry supplies the domestic market's full demand for iron ore, and the remaining volumes are beneficiated and exported. There are three established players in the market: Kumba, Assmang and Evraz Highveld Steel, and Vanadium, which mines a unique form of captive iron ore. The industry also contains some smaller players, which either have the potential to commence production or are still ramping up current levels of production.

**Mining beneficiation:** Although some iron ore miners sell their iron ore directly to steel producers, which is referred to as "directly shipped ore", most iron ore in South Africa is beneficiated through capital-intensive dense medium separation or jigging by miners at the mine site, in order to convert the mined ore into a saleable product and/or to increase its value in use to local and international steel producers.

**Metallurgical beneficiation and shaping:** This process is performed by the steel manufacturing industry and typically involves smelting to convert iron ore into pig-iron (in South Africa primarily through the blast furnace route) and then refining, such as using a basic oxygen furnace, and shaping it in rolling mills into steel products, such as hot rolled coil. Other input materials in steel manufacturing are scrap, manganese and coking coal. The most expensive component in this process is coking coal, which mainly imported into South Africa, which is used to produce coke, needed as the chemical reductant and as the source of energy in the process. An alternate steelmaking technology also used in South Africa is the electric arc furnace route. Although this process uses small quantities of iron ore, most of the iron is obtained from smelting scrap metal using significant quantities of electricity as the energy source. South Africa is the third largest exporter of steel relative to its production after Ukraine and the Russian Federation.

**Conversion and fabrication and manufacturing and end-user industries:** This final step in the value chain encompasses two groups of players: converters and fabricators that convert standard steel products into intermediate products, such as wire and tube; and manufacturers and end users that consume both standard steel products and intermediate products from converters. The three largest end-user industries in South Africa are building and construction (40 per cent), automotive (11 per cent), machinery (9 per cent) and mining (7 per cent).

**Source:** Anglo-American – Kumba Iron Ore (2011).

### 5.3 Options for regional and international cooperation on economic diversification

Options for regional and international cooperation related to economic diversification can easily be gleaned from best practices elsewhere around the world. The experience of Chile in narrowing the gap between large mining practices and the marginalized artisanal small miners can be emulated by countries in the Southern African region. To narrow this Gap, the Government of Chile created an agency comprising representative of the central Government and mining houses, including representatives of artisanal small miners.<sup>25</sup>

The agency initially focused on supporting 2,000 small private mining firms through purchases of unprocessed copper from them at a rate negotiated with an industry association comprising small, medium-sized and large copper producers. The objective of this was to provide technical, financial and metallurgical production and trading services that artisanal miners require in order to be competitive.<sup>26</sup> The agency provided financing and technical assistance to small mining firms; and offered some employment opportunities in some remote regions of Chile where few alternatives exist.

To enhance developmental impacts of the mining sector, the Government developed related clusters to develop mining-related activities and services. Subsequently, firms have become more focused on their core business; while outsourcing their remaining activities. The trend towards outsourcing in Chilean mining, and the role of service providers is more pronounced than in other countries. In Chile, the proportion of contracted workers with respect to the total mining labour force is more than 60 per cent, compared with Australia and Canada, where it is 24 per cent, and in the United States, 8 per cent. This evolution in mining companies' organization has allowed a number of Chilean companies specializing in the provision of services to

develop competitively. Indeed, several of them have started to export their services.

After identifying needs for specific innovative solutions and selecting participants from among the potential providers, the programme provides a framework to test out ideas within real-time operations. It also provides external consulting to give suppliers advice and training on competencies required to achieve world-class business performance. It also promotes links with local research centres and universities in search of a win-win result for the mining firm itself and for the development of the domestic economy. It tries to not merely draw on the existing competences of suppliers but also to strengthen both their innovative and wider business capacities. This process enables these firms to capture a larger share of the rising demand for knowledge-intensive goods and services both in Chile and internationally. At the beginning of 2012, more than 60 suppliers were participating in the programme.

In addition, multinational companies and other mining companies having contributed significantly to regional or national infrastructure, the Government began an ambitious plan of public-private partnerships in infrastructure, starting with roads but soon expanded it to cover ports, irrigation and social services. In this way, mining companies became important beneficiaries of the approximately \$50 billion invested between 1993 and 2010, while at the same time they were important customers for the concession owners. In addition to acting as a base customer for infrastructure projects, the mining industry carried out a series of investments in water supply projects valued at \$7.7 billion in the desert mining regions. Employment generated by mining in the northern regions of the country as a percentage of total employment exceeds the national average of mining, with 2.3 per cent in the region of Tarapacá, 13 per cent in Antofagasta and 10.1 per cent in Atacama (UNCTAD, 2012).

<sup>25</sup> The Government of Chile set up the Empresa Nacional de Minería, (the sixth largest copper exporter in Chile), whose Board of Directors is made up of the Minister of Mining, a representative of the Minister of Finance, a representative of the President, a representative of the Chilean Copper commission (COCHILCO), the copper advisory agency and Sociedad Nacional de Minería, an industry association comprising small, medium-sized and large copper producers.

<sup>26</sup>

To avoid competitive disadvantages stemming from domestic mining firms employing less stringent practices, and to clarify their own obligations, foreign mining multinational companies have pushed for the Government to upgrade their environmental legislation.

The success of the Chile in diversifying its mining industry and linkages at the national and sound economic management. Though there is no one-size-fits-all approach to turn an economy's resource rents into development outcomes, the Chilean experience does generally represent an empirically proven successful model. In terms of mining institutions and legal settings, the Chilean licensing process stems from a clearly defined mining code in which the Mining Ministry regulates the sector, while the Finance Ministry collects payments from companies and deposits all revenue into the national treasury.

In addition, Chile has adopted the Transparency and Access to Public Information Law for all public agencies. In terms of reporting, the Finance Ministry regularly publishes information on production volumes, prices, mineral export values, royalties and special taxes, while the Ministry of Mining publishes information on mineral reserves, production volumes, prices and mineral export values. Audited financial statements and annual reports are regularly published with information on reserves, production volumes, prices, value of exports, investments in exploration, production costs, operating companies' names, production data by company, quasi-fiscal activities, production stream values, special taxes, dividends, bonuses, acreage fees and its board of directors. Because of this level of transparency, there is strong economic management, corruption control, budget transparency, government effectiveness, voice and democratic accountability, the rule of law and local impacts (Zhang, 2017).

Though economic reform and liberalization in the mining sector of Latin America is easily associated with the Chilean experience, the wide transformation of the structure and geography of mining investment covers other Latin American

States, namely Ecuador and Mexico, where the overall features of their mining legislation were commended as "best international practice" in the general regime and in the regulation of minerals exploration and exploitation in the context of global competition to attract private investment<sup>27</sup>

### 5.3.1 National and regional diversification in agricultural products

As in the case of the mineral resource sector, the Southern African region's agricultural sector – especially its commercial segment – has historically been geared towards the production of commodities for external markets. Notably, there is a limited number of agro-industry value chains, which ideally should form the basis for transformative industrialization for the typically Southern African economies. This is partly because the quality of land, inputs and production techniques are high in the commercial sector and low in the small-scale sector. Moreover, the commercial sector's production is geared predominantly towards export, while it is also largely dependent on imports for its inputs. There is little or no integration between these two sectors, which reflects the dualism in these economies.

Only a few economies of the region have diversified from production and exports of agricultural commodities into strong value chains feeding into processing and manufacturing bases. Very few regional firms have developed industrial exports through strategic geographical location of their firms or industries in neighbouring States, a condition which takes advantage of the establishment of free zones and incentives related to these zones.

African States are still lagging other regions of the world in the upgrading of products through diversification of manufacturing activities. This is in spite of the rationale behind the introduction of trade liberalization, which was to enable domestic companies to streamline and focus their production, concentrating on high value products and higher margin activities.

<sup>27</sup> United Nations Economic Commission for Africa (2011: 42).

Based on this rationale, changes in the international market for sugar, Mauritian companies were encouraged to adopt strategies to meet their export quotas. This was achieved by using less land and grouping small planters to raise productivity by increasing productivity and effectiveness and the introduction of high-yielding cane varieties. Innovative firms operating in the textile and garment industry sought to adopt diversification strategies so that they could produce a wider range of products and services, which are of higher quality.

Only in a few countries has there been some form of transformation from a single product approach, such as in the case of Madagascar and Swaziland, to the diversified approach of firm strategies that were intended to spread the country's market wings beyond the traditional European and North American markets and consequently assuming greater aggressive marketing into the regional markets.

What is fundamentally lacking in most of these attempts is an integrated development approach. This would require clusters to be viewed not merely as a concentration of isolated individual farming communities or small firms, but as interdependent networks comprising firms, raw material providers, machinery suppliers, transporters, buyers, sellers and support institutions that face common challenges and opportunities.

With active channels of business transactions, communications and dialogue, all these entities share common and specialized infrastructure and labour markets. Most of the African cluster development, however, not only lacks this ingredient but it is hardly noticed and recognized by institutions at all levels, including their own national governments, reflecting the inability of African firms to trigger linkages and connectivity of value chains at the national and regional levels.

There is also an absence of dynamics to enhance regional integration. It is glaringly apparent that the regional economic integration process of African countries in whatever form is too slow to cope with similar developments in other parts of the world. While the Southern African

region is currently enjoined in the Tripartite Free Trade Agreement project, its member States are struggling to evolve into specific development strategies that are congruent with the dictates of the need to speed up the pace, sequencing and diversification of products in line with their national and regional development market plans. Exploitation of the proximity of regional markets where producers should naturally dominate the different parts of the region is hardly pursued on a systematic basis by regional firms, in spite the rhetoric at national and regional levels.

As if time does not move, African countries have since the colonial period continued to face a monotonous and timeless segmentation in the geographical destination of their traded products.

A typical Southern African country's exports continue to be dominated by a narrow band of commodities, mainly agricultural commodities and semi-processed agricultural products primarily directed towards European markets. The exception to this, though not profound enough, may be found in the case of South Africa, which has traditionally exported industrial products to the regional markets – agricultural machinery and equipment, railway rolling stock, mining machinery and equipment, and motor vehicles.

Zimbabwe, which was previously in this category, has since receded since experiencing serious structural deindustrialization from the end of the 1990s. In the East African region, Kenyan agro-processed products, dominated by tea, are destined for adjacent East African markets and the Egypt, taking advantage of the zero tariff under COMESA. In the rest of the continent, little expansion and diversification of agro-foods, textile and clothing that normally go to the regional markets has occurred.

Even with the strong growth of commodities in the post-2000 era among countries in the region, there is still very little to show in terms of practical policy measures and institution-building mechanisms geared to facilitate and promote the region's manufacturing firms in their quest for sustainable development, diversification and competitiveness. Instead of pursuing domestic

policies that foster economic growth and address supply-side constraints, similar to the rest of the sub-Saharan African countries, the Southern African region has often embraced lock, stock and barrel the free-market prescriptions offered by trade liberalization that are arbitrarily dictated by external agencies.

This does not mean that governments should not, for example, privatize non-core activities or liberalize markets, prices or interest rates, to enable the private sector to procure inputs, including raw materials at competitive world market prices. Governments, should, should do it with the intention to foster growth in domestic and regional markets. As Ha-Joon Chang has observed, the ability of the Republic of Korea to set its own domestic policy on investment – insisting on upstream and downstream benefits, or spill overs – that enable the country to develop into a world-class economy. Subsequently, Singapore and Taiwan Province of China benefited from similar policies (Stuart, 2005).

Accordingly, the best form of regional integration is “integrative regionalism”, that is one in which the integrating partners (member States) are perceived to have compatible interests. Even if conflicts are perceived or may be anticipated, these are “sublimated” or subservient to the higher consideration of the common objective and common good that will come out of integrating into a single economic or political union. Steps being taken to enhance the Tripartite Free Trade Area and customs regional integration arrangements are welcome. Though, this may seem difficult and agonizing to some, the region should be persistently moving in the direction of this kind of regionalism.

Africa appears to have all along pursued a kind of “distributive regionalism” in which each member State appears not to surrender anything unless it gets something in return, as if on a sort of closely calculated basis of the gains and losses from the integration arrangement. Under distributive regionalism, countries continue to pursue their individualistic interests. There is no

overriding common interest except those that are negotiated based on the relative strength of the negotiating partners.

The East African Community that existed prior to the independence of Kenya, Uganda and the United Republic of Tanzania represented a kind of integrative regionalism (possibly because of the common imperial interests of the British colonial power). However, when the three countries became independent, they resorted to calculating the distributive gains and losses, and in the absence of an overriding integrative mechanism, some would say that the old EAC model collapsed, giving way to the new EAC.

Though not among the organs of the African Union, the African regional economic communities have been designated as the building blocks of the African Union, as they were for the African Economic Community under the Abuja Treaty.<sup>28</sup> At least on paper, most regional economic communities have, at varying degrees, depended on their specific circumstances, formulated cooperation and integration programmes in the areas of : (a) human development and labour market; (b) trade and market integration; (c) agriculture and food security; (d) industrial development; (e) monetary, fiscal and financial cooperation; (f) integration of transport and communication networks; (g) energy and natural resources; and (h) peace and security.

In theory, the regional economic communities, including those in Southern Africa, are implementing the projects and activities that are fundamental pillars for building strong African economic integration. They include the socioeconomic programmes, matters related to peace and security, and the African Peer Review Mechanism, Advocacy and Resource Mobilisation and the New Partnership for Africa’s Development (NEPAD).<sup>29</sup>

For example, the NEPAD socioeconomic programmes consist of specific actions to be carried out at regional or country levels in various fields, including : (a) agriculture and

<sup>28</sup> It should be recalled that the African Union was established to accelerate the implementation of the Abuja Treaty.

<sup>29</sup> See the NEPAD framework document - Initial Action Plan.

market access (land management and water control, rural infrastructure, food supply, food emergencies, agricultural productivity and sustainability); (b) energy (implementation of existing power system and gas or oil projects); (c) water and sanitation (integrated water resources management, urgent water needs, water wisdom); (d) transport (cost reduction, public and private investment, maintenance of transport infrastructures, facilitation and removal of formal and informal barriers, regional cooperation in the integration of markets of transport services); and (e) public and private partnership in infrastructure development (business environment and climate, investment code, legal and regulatory framework).

For these projects and activities to contribute towards promoting regional cooperation and integration, their synchronization and harmonization process should start at the level of the regional economic community, involving the member States of a particular regional economic community or region. Then, the pan-African bodies, such as the African

Union, NEPAD and AfDB should take these in developing their respective programmes. In this way, these activities that originated at the national and regional levels would be based on the actual programme areas devised at national, regional and continental levels, and not the other way round.

In 2015, intra-African trade comprised approximately 14 per cent of the continent's total trade, implying that 86 per cent was trade with the rest of world. It can also be observed that the average level of intra-African trade, though fluctuating, has consistently remained at approximately 15 per cent of the continent's total trade over the past decade.<sup>30</sup> When compared with intraregional trade of 70 per cent for the European Union and 50 per cent among Asian countries. The prospects for deepening regional integration in Africa become even more dismal when the continent's lack of setting its priorities and living up to its set targets are taken into account.

<sup>30</sup> See E/ECA/CRCI/9/3.



## 6. Recommendations

The key recommendations are aimed at addressing the consequences of the high dependence on primary commodities and declining prices facing the economies of Southern Africa in the short, medium and long-term. They are as follows:

### 6.1 Short-term policy options

- a) Increased exchange rate flexibility, especially for countries that are not part of a currency union, should be complemented by sound monetary and fiscal policies that involve monitoring closely the effects of exchange rate depreciations on private and public-sector balance sheets, and on inflation.
- b) Commodity exporters in the region need to create more fiscal space, through fiscal adjustment and exercise of fiscal discipline. This should be complemented by improved domestic resource mobilization and sustainable debt management practices, namely maintaining of low levels of debt to GDP ratio.
- c) Strengthening of institutional governance, coupled with sound macroeconomic management, is needed for successful diversification and improved linkages at national and international levels.
- d) The Southern African countries will need to have clearly defined mining codes for their licensing processes, in which the ministry of mines is charged with regulating the sector, while the ministry of finance is responsible for collecting payments from companies and deposits all revenue into the national treasury.
- e) To effectively handle long-term contract renegotiations, the Governments of Southern Africa need to do the following:
  - i. Invest in sound knowledge of the global economic and sector specific nuances to ensure effective engagement of third party;
  - ii. Be capacitated in the using effective negotiations skills and techniques to enable them to find the right balance between contract stability and durability, and give them the flexibility to maintain the economic balance of the contract despite unforeseen changes of circumstances;
  - iii. Deal firmly with corruption and political instability, as these often result in the need for a host country to request renegotiation.
- f) Create robust mineral diversification and linkages to add more value through beneficiation through the following phases:
  - i. Resource infrastructure is densified to serve other areas;
  - ii. Labour becomes increasingly skilled and mining more capital intensive;
  - iii. Government revenue is diversified from mining resources to other sectors;
  - iv. Imported mining inputs are increasingly locally sourced;
  - v. Mineral technologies are locally developed or adapted rather than imported;
  - vi. Resource exploitation is governed by general laws and institutions rather than project-specific contracts.

Almost all countries in Southern Africa can be positioned on this continuum, though most would still be in phases (a) or (b), while those at the leading edge of the region's extractive mining segment, namely South Africa, and probably Zambia and Zimbabwe would be positioned somewhere in Phase (c) (though with some slipping back).

## 6.2 Medium to long-term policy options

A broad-based and inclusive growth strategy and learning from the experience of Chile in narrowing the gap between large mining practices and the marginalized artisanal small miners the Southern African region could lead to the development of clusters to boost mining-related activities and services, allowing firms to become more focused on their core business while outsourcing their remaining activities to smaller firms and thereby developing roles for service providers. This evolution in mining companies' organization allows companies specializing in the provision of services to develop competitively and export their services. The process also enables firms to capture a larger share of the rising demand for knowledge-intensive goods and services both in each country and other countries in the region and internationally.

To avoid competitive disadvantages stemming from both domestic and international mining firms employing less stringent practices, Governments of Southern Africa can work with foreign mining multinational companies to push for the upgrading of their environmental legislation.

Southern African economies should embrace backward and forward linkages strategies, improve domestic procurement policies and local-content policies and extend them across the borders, for competitive procurement. Minerals and mineral products constitute critical feedstocks into a wide range of downstream sectors, such as manufacturing, agriculture and infrastructure. To achieve the aforementioned milestones the region should consider implementing the following interventions:

- a) Upgrade mines and minerals acts to include upstream value addition (backward linkages or local content) as specific conditions to make mining concessions and leases more transparent;
- b) Task the ministries of industry and commerce, economic planning and investment promotion, mines and mining development,

science and technology with developing and implementing comprehensive industrial sectoral strategies to expand mineral upstream sectors, capital goods, services, consumables and downstream sectors, such as processing raw mineral resources, into intermediate or finished goods; thereby promoting downstream sectors, such as manufacturing, agriculture and infrastructure;

- c) Introduce beneficiation milestones in all mining leases at 5, 10, 15 and 20 years and make downstream value addition a bid variable to all new competitively tendered mineral concessions;
- d) Impose a small export tariff ( $\leq 5$  per cent) on select raw mineral exports to encourage beneficiation, when independently shown to be viable;
- e) Establish national mineral sector knowledge funds in partnership with the mining industry, through, for example an obligatory spending floor of  $\geq 5$  per cent of payroll on local human resource development and research and development to enhance and rebuild backward linkages in skills and technology development capacity;
- f) Set up centres of excellence in mining hot spots territories to serve as catalysts for the technical, financial, environmental and social transformation of the artisanal small-scale mining and as regional training hubs for helping miners work independently in value added activities and become investors in this sector;
- g) Through regional value chains in minerals and metals along the planned development corridors, create demand for services and goods that feed into these value chains;
- h) Make the Tripartite Free Trade Area the fulcrum for propelling cross-border investments, goods, services and people to move seamlessly across borders thereby, reducing costs and helping firms become competitive enough to link to these value chains.

## 7. Conclusions

Primary commodities contribute significantly to the export earnings, employment and fiscal revenue of regional economies. The high level of dependence of resource-rich Southern African economies on commodities makes them vulnerable to commodity price fluctuations, which results in an unexpected contraction of public resources and in certain instances, has negative spill over effects on the rest of the economy. Accordingly, macroeconomic management is required to enable the region's resource-rich countries to effectively deal with challenges resulting from declining commodity prices. Sound policies are instrumental in attracting investment in primary and secondary sectors and diversification of the economy and broad-based economic development is essential for the Southern Africa region to achieve long-term sustainable development.

To better prepare for future commodity super-cycles regional Governments must implement the following well-structured measures:

- a) Establish sovereign wealth funds as special purpose investment funds or arrangements that are controlled by Governments. Because revenue from mineral resources tend to originate from abroad, they often give rise to sizable rents that have the potential to encourage rent-seeking and corruption by public officials and business leaders. This also increases the risk of civil unrest as rival groups squabble over mineral or oil deposits.
  - Deepening the industrial base through value chains is one sure route to sustained regional industrial diversification. This will help transform the current regional economic communities' free trade areas to better implement the Tripartite Free Trade Area agreement across borders and subsequently reduce costs and help value chains emanating from mining firms to be competitive in the larger economic space.

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