2018

ZAMBIA

Structural transformation, employment, production and society

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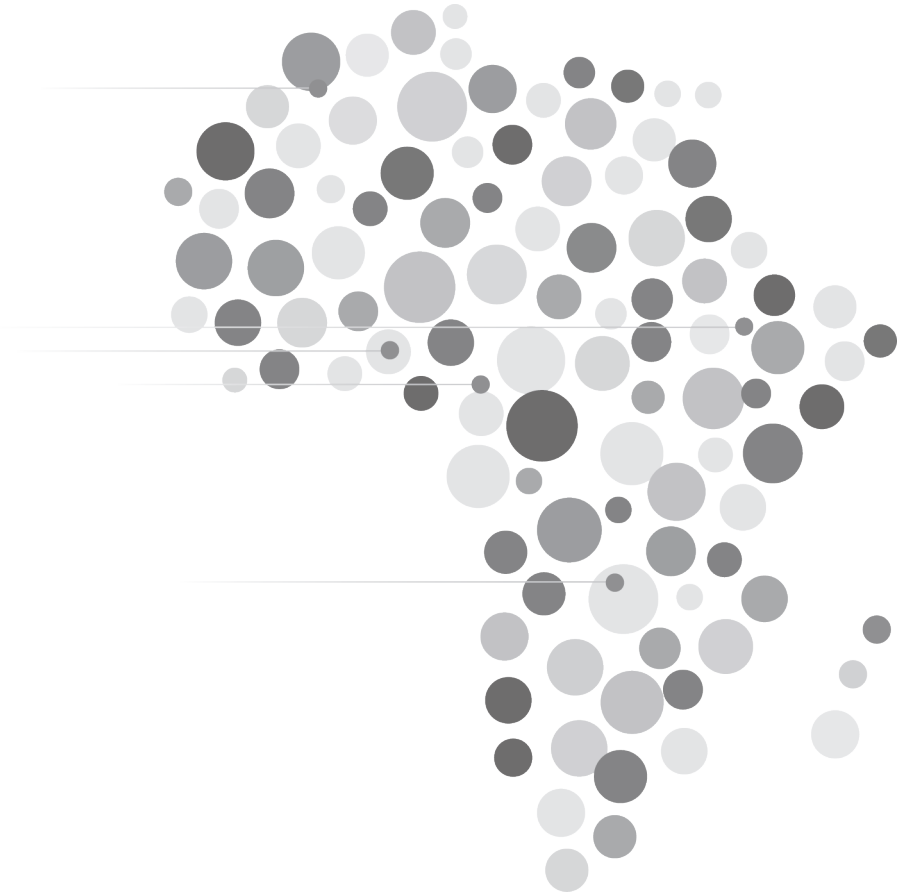

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Content

Definition of structural transformation

The Economic Commission for Africa defines structural transformation as the fundamental changes in economic and social structures that advance inclusive and sustainable development.* This definition addresses three key questions:

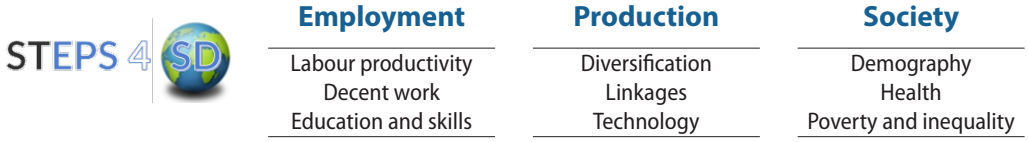
a) What is structural transformation? It is a fundamental and multidimensional process observed in all countries reaching high levels of development;

b) How is it achieved? It requires profound economic and social transformation, such as economic diversification and technological upgrading, the creation of decent and productive employment and equitable social welfare;

c) Why does it matter? It is crucial for implementing the 2030 Agenda for Sustainable Development and Agenda 2063: The Africa We Want.

Within the core objective of accelerating structural transformation (ST), there are three inherent dimensions to be assessed: employment (E), production (P), and society (S). This speaks directly to the need to fundamentally change economic and social structures, with employment playing a key role in linking economic growth (production) and social development (society), in both directions. It is useful to keep in mind the ultimate objective of the analytical framework, namely, to achieve inclusive and sustainable development through accelerated structural transformation. Hence, structural transformation, employment, production and society for sustainable development (STEPS 4 SD) is the framework that shapes the design and implementation of the profiles (see figures I and II).

Figure I: Structural transformation, employment, production and society for sustainable development (STEPS 4 SD)



Within each of the three dimensions considered, there are three outcome areas that are crucial to accelerate structural transformation. With regard to production, the attention is on (supporting) diversification, (strengthening) linkages and (upgrading) technology. For employment, the focus is on (increasing) labour productivity, (promoting) decent work and (enhancing) education and skills. With respect to society, the emphasis is on (managing) demography, (improving) health and (reducing) poverty and inequality. For each outcome area, there is a set of core outcome indicators. They illustrate the results (outputs) that are expected

* The terms "structural transformation" and "structural change" are often used interchangeably. Narrow definitions are centred on the measurement of the economic gains accrued by shifting labour from lower-productivity to higher-productivity sectors, while broader definitions go beyond shifts in economic structures, such as production and employment, by also encompassing within-sector productivity improvements and changes in other aspects of society. For the purposes of the present document, the use of structural change is avoided and a broad perspective, as described by the STEPS framework, is adopted.

to be observed in order to accelerate structural transformation. These are complemented by other metrics pertaining to the relevant outcome area. Given that structural transformation is a gradual process, indicators are tracked over a long period of time: from 20 to 25 years, whenever possible. Below is a brief rationale for each outcome area.

Diversification

Economic diversification is a key feature of countries that have achieved high levels of development. Concentrated economic structures undermine structural transformation by promoting rent-seeking (in mining) and commodity traps (in agriculture). They are also typically associated with high vulnerability to price and demand shocks. Expanding the range of goods and services that are produced and exported, especially towards higher value addition, is therefore an important factor behind structural transformation.

Linkages

Deeper integration into the global economy can contribute to increased value addition and productivity growth, especially through participation in global value chains. A more interconnected economy, with strong backward and forward linkages throughout sectors and firms, can also help to overcome critical structural constraints, sustain economic gains and encourage innovation.

Technology

Technological progress is a catalyst for structural transformation. The creation, improvement, and adoption of technologies contributes to accelerating productivity growth and adding value to production processes. Technological change can be supported through the development of domestic technological capabilities and/or through the importation of foreign technologies, such as those embedded in foreign investment.

Labour productivity

Labour productivity is at the heart of structural transformation. In fact, the academic literature often measures structural transformation as the economic gains accrued by shifting labour from lower-productivity to higher-productivity sectors, also known as between-sector effects, as opposed to within-sector productivity improvements. Positive employment dynamics are therefore necessary to generate these benefits. Labour productivity not only depends on skills and health, from the worker's perspective, but also relies on existing technology and other firm-related characteristics. It is therefore central to this framework. Crucially, labour productivity improvements are necessary to enable economic (and household income) growth and thus help to raise living standards.

Decent work

Decent work entails employment opportunities that provide reasonable levels of remuneration, security and safety. Precarious work conditions, such as low pay and job insecurity, are a key obstacle to raising living standards and often undermine labour productivity. Creating

decent work opportunities is critical to engender positive structural transformation, given that economic and social structures may change in ways that do not always promote sustainable development.

Education and skills

An educated and skilled workforce is critical to accelerate structural transformation. Formal and informal education systems provide a range of skills for work and life. In particular, improved skill levels facilitate the reallocation of labour towards higher-productivity sectors. Enhancing demand-driven and work-relevant skills is key to reducing existing skill gaps and mismatches.

Demography

Demographic change can boost structural transformation through the considerable impact that it has on the economy and society. For example, changes in the age composition of the population can yield a significant demographic dividend by easing the economic burden on the working-age population. Urbanization and migration can also produce large economic benefits, although they may also entail significant costs if not adequately managed.

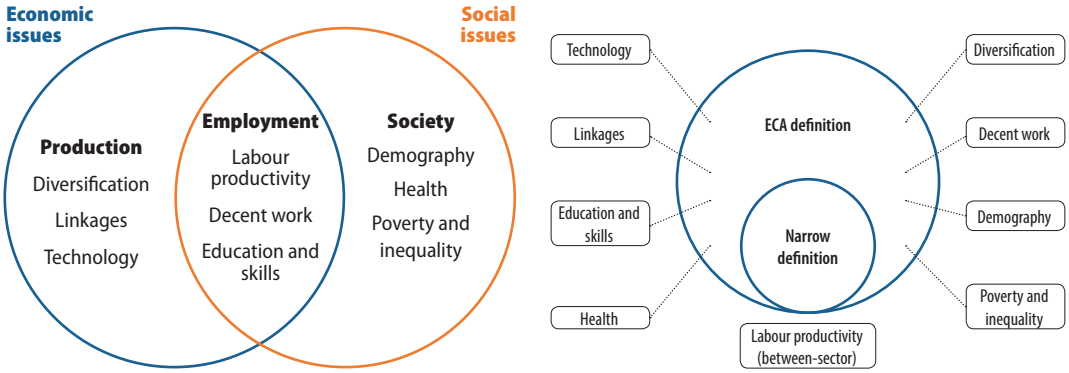
Health

A healthy workforce is central to expanding human capital and enhancing structural transformation. A high prevalence of diseases and other medical conditions undermines economic activity and labour productivity, especially through its impact on an individual's physical and emotional well-being.

Poverty and inequality

Poverty often undermines access to nutritious foods, health care, education and jobs, which, in turn, leads to malnutrition, a high disease burden, low skills and underemployment. Moreover, inequality contributes to economic, social and political instability, which curtails economic growth. Poverty and inequality can therefore prevent people from fully contributing to the transformation of economic and social structures.

Figure II: Economic and social issues relating to structural transformation



Data considerations/implications

When compiling data for the profiles, preference was given to official national sources, such as national statistics offices, central banks and government ministries. It should be noted, however, that data collected from national sources may not be comparable among countries owing to the use of different terminology, methods and classification systems. International sources were therefore used whenever national data either were not available or there was a need to contextualize the analysis with cross-country comparisons. The use of harmonized data from international sources, such as those produced by many United Nations agencies, is key to enabling consistent comparisons among countries. Whenever feasible and pertinent, data have been disaggregated by age, gender and location. Given that structural transformation is a gradual process, the analysis tracks changes over a relatively long period, usually by contrasting values or averages for the periods 1990-1999 and 2000-2009 with those for 2010 onwards.

Acknowledgements

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1

Overview

The development path of Zambia is guided by its "Vision 2030", launched by the Government in 2006, and the sixth and seventh national development plans, which are intended to make the nation a prosperous middle-income one by 2030. The efforts to achieve structural transformation are highlighted by the focus in these framework on sustainable development, enhanced infrastructure and human development, inclusive economic growth and diversification, rural development, job creation, poverty and vulnerability reduction, reduced developmental inequalities and an enhanced governance environment.

Production: in Zambia, in gross value-added terms, has undergone significant changes since the 1990s, notably in the manufacturing, agriculture, mining, construction, wholesale and retail trade sectors. The manufacturing sector's contribution to gross domestic product (GDP) declined sharply, from 32 per cent in 1990 to 10 per cent in 1999, before stabilizing at 8 per cent in 2009 and 2016, owing to various structural and policy factors, including the challenges associated with the introduction and implementation of structural adjustment programmes. Similarly, the agriculture sector's contribution to GDP declined during the period 1990-2016, owing to low yields on account of poor rainfall, pest infestations and the limited use of modern farming technologies. Growth in the construction sector was the result of public and private investment in infrastructure such as roads, hospitals, educational facilities and residential and commercial property, while growth in the retail sector resulted primarily from investment by South African supermarket chains in Zambia. Overall, the reliance on mining, agriculture and services continue to underpin economic growth. The heavy reliance on copper (both semi-finished and unprocessed) for export and revenue earnings, however, clearly indicates that there is little or no structural transformation of the economy. Consequently, the high fluctuations in international copper prices continue to exert considerable pressure on the exchange rate, domestic prices and fiscal position. For example, in 2015, the GDP growth rate declined to 3.2 per cent, from the 5 per cent recorded in 2014, and earnings from copper fell to $7.36 billion, from $7.61 billion in 2014, owing to low copper prices.

Employment: Although there has been a substantial decline in the share of employment in previously dominant sectors in Zambia, such as agriculture and mining, the emerging sectors of construction, and wholesale and services have not been large enough to absorb job losses, while new job seekers' skills do not match well with the emerging sectors. Labour productivity declined from 6.4 per cent in 2010 to 3.6 per cent in 2012 owing to inadequate skills and technology innovation and the reallocation of labour to low productivity sectors. High unemployment levels and the pervasiveness of informal employment are core obstacles to poverty alleviation and decent work for most people in Zambia. Economic output, employment and foreign trade are all concentrated in the mining and agriculture sectors and throughout a narrow range of products and firms. There is a need to accelerate the process of expanding other sectors to ensure that employment composition is largely from sectors such as construction and tourism, which are resilient to external shocks. Structural shifts have occurred in employment recently, given that the mining sector has recorded a decline in the share of employment, while the agriculture sector (with the largest share of employment) has posted gains. Wholesale and retail, and other services absorbed a larger proportion of this change in mining sector employment. The country's agriculture sector, however, remains dominated by low agricultural productivity smallholder farmers. With more investment and new technologies, there is the potential to increase production, given the large land resource base, labour and water resources. More than 80 per cent of employment is in the informal sector. The labour force participation rates for both women and men remained stable, at approximately 90 per cent, between 2010 and 2015, with the rate of women consistently lower than their counterparts'. Decent work is a vital component of economic diversification and job creation in Zambia's national development plans. Although the rate of unemployment of young people dropped from 14 per cent in 2005 to 10.5 per cent in 2014, it continues to be a difficult challenge to overcome.

While notable progress was recorded in the literacy rate of young people between 1999 and 2015, literacy rate for women continues to be lower than those for men. The mean number of years of schooling also increased by 2.2 years[1] from 4.7 to 6.9 during the period 1990-2015. Similarly, the gross enrolment ratio in secondary education increased from 20 to 32.3 per cent between 1990 and 2014.

Society: The population of Zambia, estimated at 15.9 million (2016), is very young, with those below 18 years of age constituting the highest proportion, at 57.5 per cent, representing the potential for a demographic dividend for socioeconomic transformation and the transition of the country to an industrialized nation. The country's total fertility rate declined from the beginning of 1990s, when it was 6.5 children per woman, to 5.25 in 2015, but is still on the higher end, compared with other Southern African Development Community (SADC)

1 That is, the average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating individual grades. Data from the United Nations Educational, Scientific and Cultural Organization, (UNESCO) Institute for Statistics and United Nations Development Programme data on mean years of schooling.

countries. A slow decline in the child dependency ratio was recorded, dropping from 91.1 in 1990 to 87.1 in 2015. The prevalence of stunting declined from 2006 to 2015, as did premature deaths due to non-communicable diseases. The number of years of healthy life expectancy at birth also increased during the same period.

Population growth and migration into Zambian cities has accelerated rapidly in the past decade, which poses both opportunities and challenges. The proportion of Zambians in urban areas was estimated at 40.6 per cent in 2011, a figure projected to rise to 46.1 per cent by 2035, with some 57 per cent of this population living in unplanned settlements. For Zambia to achieve and accelerate structural transformation, it needs to leverage this large urban transition as a source of labour for other economic sectors (Economic Commission for Africa, 2017). The persistent incidence of cholera outbreaks in the capital, Lusaka, is related to unplanned and overcrowded slums with poor sanitation and a lack of potable water. Nevertheless, well-managed urban growth has the potential to support a wider structural transformation if accompanied by productive employment and adequate infrastructure and services. On the other hand, continued unplanned urbanization has left a large portion of the workforce engaged in low-productivity informal services and living in growing urban slums. Effective job-rich urbanization policies that herald increased quality and well-paying jobs are required to take advantage of concentrated economic activity. This could entail the strengthening of the economic base of cities and creating an enabling environment for productive economic activities.

Although poverty has declined over the years, the decline has been slow, with overall rates dropping to 54.4 per cent in 2015 from 78 per cent in 1996, and even higher poverty rates for rural areas, notwithstanding impressive GDP growth rates during the period 2006-2015. Poverty in rural areas declined only from 80.3 per cent in 2006 to 76.6 per cent in 2015 (Zambia, Central Statistical Office, 2016a).

Southern Africa is the most unequal region in Africa in terms of income, with the continent's 10 most unequal countries, as measured using the Gini coefficient:[2] South Africa (0.63), Namibia (0.60), Botswana (0.57), Zambia (0.55), Lesotho (0.53), Swaziland (0.48), Malawi (0.44) and Angola (0.43) (Economic Commission for Africa, 2016). The largest factors in income inequality in Zambia are wages and non-agricultural self-employment. Income shares are skewed in favour of those in higher income brackets, in which 60 per cent of income was in the hands of the highest 20 per cent of the population during the period 2006-2015. Income inequality challenges could be addressed through polices directed at creating broader access to wage employment and encouraging agricultural productivity to have a significant impact on both inequality and poverty.

2 The Gini coefficient measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution.

Although Zambia has put in place lofty development objectives, programmes and plans and recorded major gains in the social sectors, including education, health and social safety to reduce poverty, the goal of the desired structural transformation of the economy remains largely unachieved. The economy continues to be undiversified, relying heavily on copper, with little beneficiation and value addition and creation of forward and backward linkages of the copper sector with the other areas of the economy. The agricultural sector also remains largely rain-fed, with minimal modernization and agro-allied industrial transformation. These are critical areas of policy interventions, and committed implementation of the priorities, as stipulated in the national development plans in terms of transforming the economy into an industrial one, will contribute to the drive towards structural transformation.

2

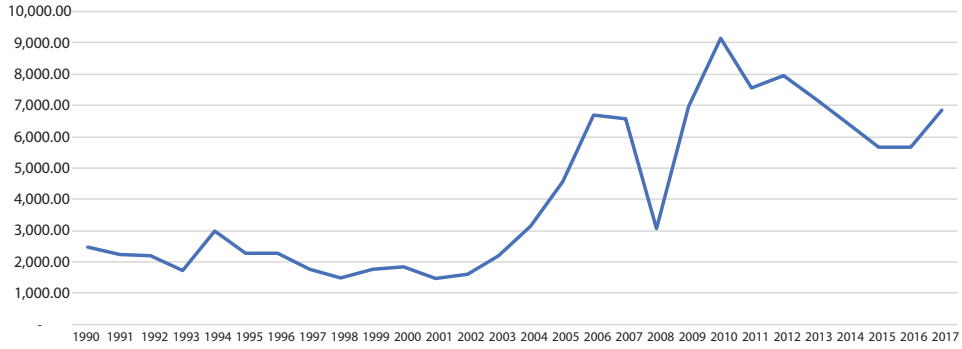
Context

Zambia is a landlocked country in Southern Africa bordered by Angola, Botswana, the Democratic Republic of the Congo, Malawi, Mozambique, Namibia, the United Republic of Tanzania and Zimbabwe. Its geographic position presents opportunities offered by the potential large regional markets that could contribute to the structural transformation of the country, if well exploited. Since independence, it has enjoyed relative peace and political stability, conditions that are essential for structural transformation to occur.

The structure of the economy shifted from agriculture and manufacturing to mining, construction and services between 1964 and 2016. Copper is the backbone of the economy, but notwithstanding having enjoyed booming commodity prices for more than one decade (from 2003 to 2013) (see figure 1), this has not translated into significant transformation of the economy.

Growth could be accompanied by deeper economic transformation if the proceeds from copper were invested in and allocated to skills enhancement, technological development, infrastructure for enhanced productivity and accelerated diversification. The dependence

Figure 1: Copper prices, 1990-2017 (dollars per metric ton)



Source: 2018 Indexmundi commodity prices indices.

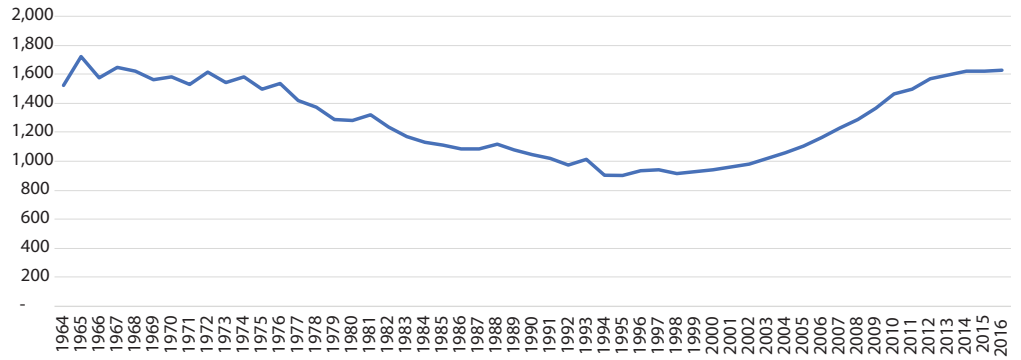
on copper as the sole major export has led to vulnerabilities owing to fluctuations in the world commodities prices, which accentuate the need for Zambia to broaden its economic base. In the light of the declining prices for copper, economic diversification, linked to the structural transformation of the economy, remains an essential objective to deliver more inclusive growth and achieve higher levels of productivity, thus creating employment for its rapidly growing, urban and youthful population. The best prospects for having economic diversification promote broad-based and inclusive economic growth are found in the agricultural sector, especially in the development of agricultural value chains.

On the income side, after an initial rise in GDP per capita, from $1,524 at independence in 1964 to $ 1,722 in 1965, there was a marked decline to a low of $ 904 in 1994, before rising to $1,627 in 2016 (see figure 2).

Zambia had one of the fastest-growing economies in Africa (except North Africa) for the 10 years up to 2014, with real GDP growth averaging roughly 6.7 per cent annually (see figure 3). This growth, spurred primarily by mining, construction and financial services, slowed during the period 2015-2017 owing to falling copper prices, high international oil prices on account of a weakened local currency, reduced power generation and the depreciation of the country's currency, the kwacha.

Notwithstanding sustained economic growth and continued political stability, that growth has not been inclusive and has not led to significant new employment opportunities beyond the relatively small labour force currently employed in the growth sectors of construction and mining. Copper mining accounts for more than 72 per cent of export earnings but employs only some 4 per cent of the total population, owing to high capital intensity.[3] Agriculture, a predominantly rural activity, constitutes the largest proportion of informal employment in all

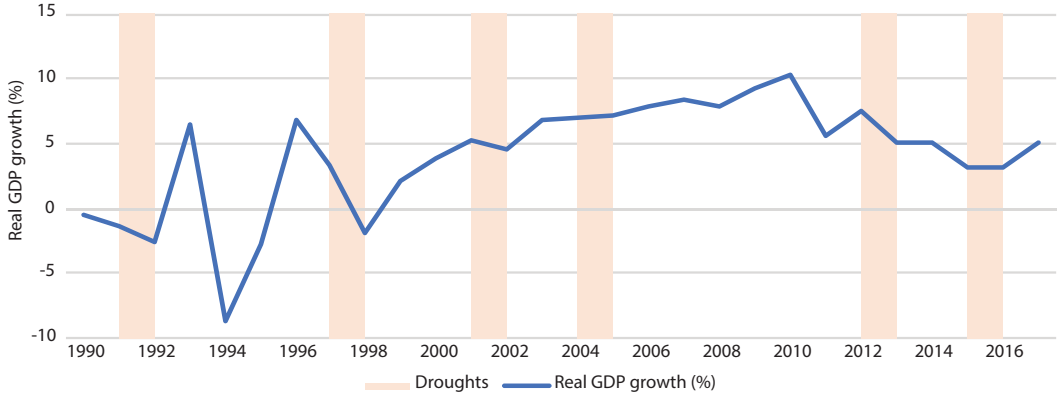
Figure 2: GDP per capita, 1964-2016 (Constant 2010 United States dollars)



Source: World Bank 2017 world development indicators.

3 See Zambia Chamber of Mines, "Employment figure: mining companies" (2012). Available from http://mines.org.zm/employment-figures/.

Figure 3: Economic growth and key events



Source: Zambia, Central Statistical Office (2014, 2015, 2016, 2017a).

sectors and is the largest employer, accounting for 54 per cent[4] of total employment. Scant capitalization and insufficient market linkages to commercial buyers often keeps smallholders operating under capacity.

High levels of unemployment and of poverty (the latter at 54.4 per cent as of 2015 (Zambia, Central Statistical Office, 2016a) and climate change continue to pose major challenges to the development trajectory of Zambia, although some positive strides have been made in social sectors such as education and health. Measures to manage these challenges are crucial for the country to continue to make positive strides in achieving structural transformation.

National development strategy

Zambia's economic development agenda has been guided by the 2006 national vision and national strategy on job creation and industrialization, in which the role of jobs is recognized in having the country enjoy a more equal middle-income economy by 2030 through the creation of one million new formal sector jobs between 2017 and 2022 in the four potential growth sectors of agriculture, tourism, construction and manufacturing.

The economic development agenda has been operationalized through five-year national development plans (see table). Prior to that, a major switch in the structure of the country's economy came with the Mulungushi reforms of April 1968 (Semonin, undated), in which the Government acquired a majority equity holding in key foreign-owned mining firms. This period was followed by crisis in oil prices in 1973 that greatly inflated the import bill and, in 1975, by a slump in copper prices that reduced export earnings. The country turned to the International Monetary Fund (IMF) for assistance in addressing a balance-of-payments crisis in 1976. This interrupted the implementation of programmes under the third national development plan

4 Figures taken from United Nations, Statistics Division national accounts data.

(1978-1983) and led to the adoption of the new economic recovery programme (1987-1989) implemented in subsequent plans. The country subsequently moved towards a new understanding with IMF in 1989. The most recent national development plan under the new economic recovery programme was the fourth one, abandoned in 1991 (see table).

Since independence, successive Governments have identified the diversification of the economy as a key strategic policy priority. The progress in the implementation of the national development plan in broadening production and export base entities has been slow and not yielded a positive transformation of the economic structure, evidence of a disjuncture between policy pronouncements and actual implementation. Progress was undermined by IMF structural adjustments that focused more on macroeconomic stability than on the development of structurally transforming sectors. More focus was placed on reducing investment in key sectors and the privatization of key government entities. Although, initial privatization of almost 80 per cent of State-owned enterprises and price liberalization revived the economy and culminated in good growth performance in the first half of the 1990s (Organization for Economic Cooperation and Development and African Development Bank,

Table : National development plans

Period	Strategy	Objective
1965-1966	Transitional development plan	Eradication of the negative aspects of the colonial legacy and the introduction of a welfare State
1966-1971	First national development plan	Economic diversification from copper dependence; productivity increases in traditional agriculture; building economic and social infrastructure; and increase the number of social services available
1972-1976	Second national development plan	Building economic and social infrastructure and laying the foundation for a more balanced economic development of the country
1979-1983	Third national development plan	Rural development and diversification programme and education expansion capacity building interrupted owing to adverse economic conditions
1983-1986	Fourth national development plan	Abandoned in 1991. Economy liberalized and the privatization of State-owned enterprises
2006-2010	Fifth national development plan	The first under Vision 2030; strengthening economic and social infrastructure such as roads, schools and hospitals and enhancing agriculture and rural development
2011-2015	Sixth national development plan	Accelerated infrastructure and human development, enhanced economic growth and diversification and promotion of rural development
2017-2021	Seventh national development plan ("Accelerating development efforts towards Vision 2030 without leaving anyone behind"	Economic diversification and job creation; poverty and vulnerability reduction; reduced developmental inequalities; enhanced human development; and an enhanced governance environment for a diversified and inclusive economy

2003), limited success was recorded in diversifying (from a heavy dependency on copper exports), managing expenditure more efficiently and reducing poverty.

By 2000s, the increasing economic vulnerability of Zambia became more evident. Real GDP growth, which had risen from 3.9 per cent in 2000 to 7.6 per cent in 2012, fell to 2.9 per cent in 2015 and 4 per cent in 2017 as a result of poor rainfall, low copper prices, electricity shortages, government payment arrears and a strict monetary policy to stabilize a falling currency. Achieving sustained high and inclusive growth and accelerating structural transformation requires a stable macroeconomic environment and policies and reforms to increase productivity, enhance competitiveness and support financial inclusion for small and medium-sized enterprises. There is a need for structural reforms in the manufacturing sector to produce higher value-added diversified products that enhance export revenue.

Negative trends have been experienced in some of the key economic fundamentals, such as fiscal deficit, which had peaked at 6.7 per cent of GDP in 2013, followed by 5.2 per cent in 2014, 12 per cent in 2015 and 9 per cent in 2016. Strict fiscal and monetary policies relating to expenditure and revenue monitoring succeeded in stabilizing the exchange rate and slowing down inflation to 6.3 per cent in August 2017. Public debt, driven largely by external borrowing and the impact of exchange rate depreciation, tripled from 21 per cent of GDP in 2011 to 60.5 per cent of GDP in 2016. The public debt in 2016 included external debt, which is a component of GDP, and quadrupled to $8 billion, or 36.5 per cent of GDP, including $3 billion in Eurobonds, compared with $1.9 billion, in 2011. On the other hand, the current account balance was under pressure from lower copper export earnings: a 2.1 per cent of GDP surplus in 2014, a 3.9 per cent deficit in 2015 and a deficit of 4.4 per cent in 2016. The international reserves buffer has fallen in recent years owing to a decrease in export earnings and declining global commodity prices: from $2.98 billion (equivalent to a 4-month import cover) in 2015 to $2.4 billion (3.3-month import cover) in 2016. Domestic revenue mobilization remains low owing to widespread tax incentives, a multitude of income tax rates and the extension of zero rating to non-exportable goods.

Through various policies and pronouncements, the Government has continued to explore programmes geared towards the productive sectors of the economy. In 2006, six multi-facility economic zones (three developed and located in the Copperbelt, North-Western and Lusaka regions) were established as a mix of free trade zones, export processing zones and industrial parks, while creating the administrative infrastructure, rules and regulations to support both export-oriented and domestic-oriented industries. The zones are expected to spur growth in industry and manufacturing and expand non-mining industrial growth.

To ensure sustained and inclusive growth, the Government designed an economic stabilization and growth programme for the period 2017-2019, “Zambia Plus”, for restoring fiscal fitness for sustained inclusive growth and development. The programme is anchored to key pillars of economic recovery, including enhancing domestic resource mobilization

(through the modernization and automation of revenue-collection processes, taxing the informal sector, property taxes, road tolling and stemming illicit financial outflows) and refocusing public spending on core public sector mandates; improving economic and fiscal governance by raising the levels of accountability and transparency in the allocation and use of public finances; and ensuring greater economic stability, growth and job creation through policy consistency to raise confidence for sustained private sector investment. In the 2017 budget, the Government committed itself to supporting the creation of at least 1 million jobs as planned in the national strategy on job creation and industrialization, thereby improving productive capacity and social welfare. The 2018 budget charts a course for accelerating fiscal fitness and putting the country back on the path of robust sustained and inclusive growth and development, in line with the seventh national development plan. Budget expenditure has been allocated on the basis of the plan's five strategic areas. The Government intends to promote diversification and job creation through three key sectors: agriculture, livestock and fisheries; industrialization; and tourism.

A favourable investment climate, stronger rule of law and good institutions also play an important role in facilitating structural transformation. As a facilitator of the investment climate, the Zambia Development Agency (2015) was established "to foster economic growth and development by promoting investment and trade in Zambia through an efficient, effective and coordinated private sector led economic strategy". The country is ranked 85th (2018) of 190 countries in the World Bank's "Doing business" survey and performs well on gaining access to credit and paying taxes. On the other hand, it does not perform so well on electricity, trading across borders and registering property (World Bank, 2018). Firms surveyed indicated that the largest business environment constraint that they faced was access to finance (28 per cent), followed by practices of the informal sector (23 per cent) and electricity (14 per cent) (World Bank, 2014). Policy inconsistency and an unpredictable economic framework create an unstable investment environment. Consistency and predictability in the policy, tax and economic framework are key to safeguarding investment and stabilizing the investment environment (Policy Monitoring and Research Centre, 2016) and could potentially contribute to sustained economic growth and transformation.

Environmental sustainability is critical to guarantee that economic and social transformation are sustained. Zambia has not been spared the effects of climate change, which have resulted in inadequate rainfall/persistent droughts (see figure 3). Adverse weather conditions caused by the effects of El Niño have affected production in the agriculture sector, while power rationing caused by low water levels has affected hydropower generation, which, in turn, has an impact on production in key industries. Zambia has developed a national policy on climate change to provide a framework for coordinating climate change programmes in order to ensure climate-resilient and low carbon development pathways for sustainable development towards the attainment of Zambia's Vision 2030 (Zambia, Ministry of National Development Planning, 2016). Investment being undertaken in the country in renewable energy, such as the

200 MW renewable energy feed-in tariff project and the scaling solar 100 MW project will further contribute to promoting green technologies and structural transformation.

Within SADC and the Common Market for Eastern and Southern Africa, Zambia appears to be well integrated into the regional economy. Although the country performs well in several dimensions of the African Regional Integration Index, such as the free movement of persons, trade integration and productive integration, the performance in other key areas such as infrastructural integration, financial integration and macroeconomic policy convergence is still lagging, compared with other countries in the region. Efforts to address the limited performance in the regional integration space include the transboundary projects in energy and roads such as the Zambia-Zimbabwe Chirundu one-stop border post, the Zambia-United Republic of Tanzania-Kenya electricity interconnector and the Zambia-Botswana Kazungula bridge and border project. Zambia could also leverage the further window of opportunity presented in the SADC regional indicative strategic development plan (2015-2020) and the SADC industrialization strategy and road map, which prioritizes the technological and economic transformation of Southern Africa through industrialization, modernization, skills development, science and technology, financial strengthening and deeper regional integration. Plans to develop the joint regional Zambia-Zimbabwe 2,400 MW Batoka hydropower project and the Zambia-United Republic of Tanzania-Kenya interconnector project, which are in advanced stages of development, are expected to enhance the trade in electricity, improve the security and reliability of the electrical energy supply and foster regional integration by connecting power from Cape Town, South Africa, to Cairo (Zambia, Ministry of Finance, 2016).

The structural transformation trajectory in Zambia since 1964 indicates that, although there have been shifts in the composition of output and labour in the economy, these shifts have not contributed to structural transformation. The economy, as with that of many other emerging countries that depend on commodities for their economic growth, has not been spared the negative impacts of declining commodity prices on the international market. The need for diversification of the economy and an export base remains a challenge. The best prospects for diversification are to be found in the agricultural sector, which is dominated by low-productivity, low-skill maize cultivation for domestic consumption. Economic diversification remains key to addressing the high levels of poverty and inequality, given that sector cross-sectionally generated growth could potentially contribute to distributing incomes evenly among the population.

3

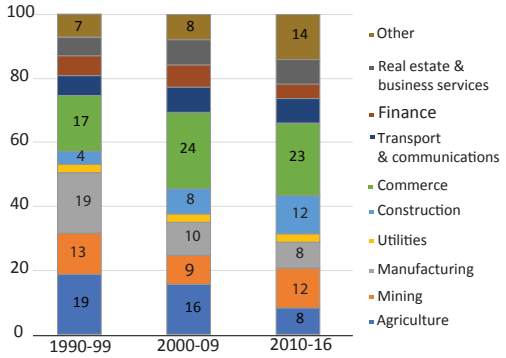
Production

3.1 Diversification

Large-scale structural transformation remains elusive, notwithstanding the changes in the structure of production that have occurred since the 1990s. It has been observed that countries with a high dependency on commodities often experience huge fluctuations in export revenue owing to high export concentration, as was case in the 1990s and, most recently, in 2015 when the decline in the international price of copper destabilized the economy and exerted considerable pressure on the exchange rate and domestic prices and worsened the fiscal position (United Nations Industrial Development Organization, 2013; Zambia, National Commission for Development Planning, 2017). The inability of Zambia to withstand the detrimental effects of external shocks reveals the inadequacy of the economic transformation that has occurred since independence, notwithstanding all efforts on the part of the Government. Insufficient policy buffers to mitigate the boom and bust cycles in commodity prices remains the country's major development challenge.

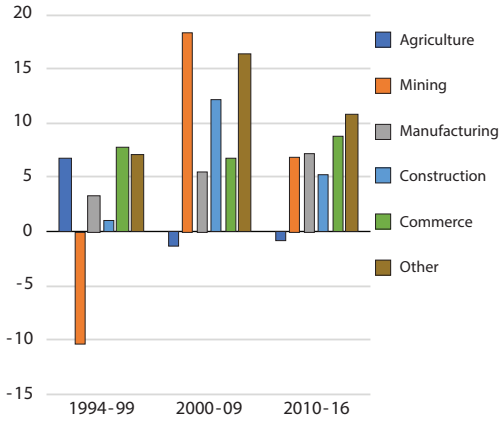
Production, in gross value-added terms, has undergone changes since the 1990s, notably in the manufacturing, agriculture, mining construction and wholesale and retail trade sectors (see figure 4). Manufacturing recorded a shrinking trend from 19 per cent (1990-99), to 10 per cent (2000-2009) and down to 8 per cent (2010-16). The decline during that period was attributable primarily to the privatization of State-owned enterprises in the manufacturing sector and the introduction of World Bank-supported structural adjustment policies (United Nations Industrial Development Organization, 2013). The manufacturing sector comprises food, beverages and tobacco, textiles and leather products, chemicals, rubber, plastics, wood and wood products. Overall, the within-sector composition of manufacturing has not changed much since the 1990s, with the major subsectors being food, beverages and tobacco; textiles and leather products; chemical, rubber and plastics; and basic and fabricated metal products. These subsectors constituted 84 per cent of manufacturing in 1990, 87 per cent in 1995, 88 per cent in 2000, 87 per cent in 2005, 85 per cent in 2010 and 85 per cent in 2015. Only the paper and paper products subsector has posted a consistent and strong year-on-year growth in the industrial production index. The textiles, clothing and leather subsectors have performed the poorest since the 1990s and were constrained in large

Figure 4: Composition of gross valued added, 1990-2016 (Per cent)



Source: Zambia, Central Statistical Office (2014, 2016, 2017); Zambia, Ministry of Finance (2017a).

Figure 4a: Sectoral growth, 1994-2016



Source: Zambia, Central Statistical Office (2014, 2016, 2017); Zambia, Ministry of Finance (2017a).

part by a lack of investment and undermined by competition from the flood of cheap imports from China and second-hand clothing from Europe (Ndulo, and Mudenda, 2006).

The agriculture sector also recorded reductions in contributions to GDP during the period 1990-2015 owing to low yields on account of poor rainfall, infestations by pests and the inadequate use of new technologies and machinery by most farmers in the sector (Mulungu and Ng'ombe, 2017). The share of agriculture value added declined from a high of 33 per cent in 1993 to 8 per cent in 2016. This invariably means that achieving the objectives of reducing poverty, creating jobs and structural transformation using the agriculture sector will remain more difficult, given that the sector offers the most opportunities in this regard.

In the mining sector, which was also affected by the change in ownership through privatization, there was, in general, low reinvestment by the new owners on account of generous dividend remittance regulations after privatization and the low copper prices at that time. In addition, the development agreements signed by the new mining companies enabled them to negotiate tax exemptions, which reduced their contribution to government tax revenue (Southern African Regional Poverty Network, 2017). In addition, the sector also faced serious power challenges, which resulted in reduced mineral output, especially in 2015. Nevertheless, improved commodity prices resulted in increasing value added from the sector during the period 2010-2016, compared with 2000-2009. Although revenue from copper exports had grown from $888 million in 1992 to $1.5 billion in 2005 and $7.6 billion in 2014, it fell by 11.6 per cent in 2016, to $6.5 billion, from $7.36 billion in 2015, owing to international copper price movements. (Zambia, National Commission for Development Planning, 2017; Zambia, Ministry of Finance, 2016a, 2017a).

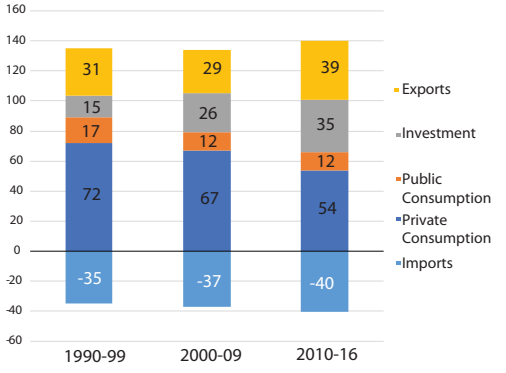
The growth in the construction sector was driven by public and private investment in infrastructure such as roads, hospitals, educational facilities and residential and commercial property (figure 4a). For example, the road construction and rehabilitation project, Link Zambia 8000, launched by the Government in 2012, has continued to anchor investment in road infrastructure development during a period of eight years. An estimated 8,201 km of roads is expected to have been constructed and/or rehabilitated, at a cost of $5.46 billion, by 2020.

The growth in the wholesale and retail sector has come largely from the operations of large South African supermarket chains that entered the Zambian market following the liberalization of the economy in the 1990s, alongside an equally large number of small and medium-sized retail enterprises, both local and international (Ndulo, and Chanda, 2016).

Private consumption continues to comprise the largest component of GDP by expenditure. It is the principal factor behind the growth of GDP by demand composition, followed by gross fixed capital formation (investment) and exports. The dominance of private consumption in aggregate demand and not gross fixed capital formation continues to constrain structural transformation, which depends on productive investment (see figure 5).

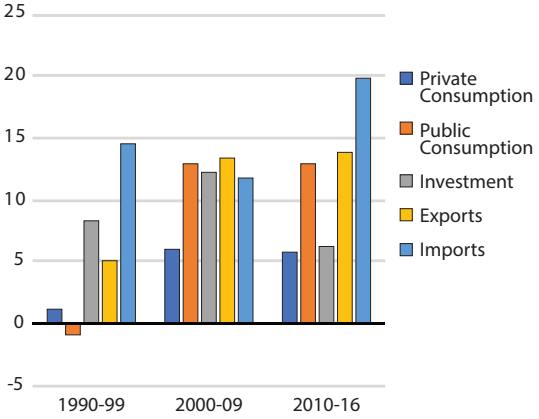
Since 1990, the share of gross fixed capital formation has consistently remained lower than private consumption. The low investment has also been accompanied by a declining growth trend in investment in recent years (figure 5a). Low investment implies lower prospects for structural transformation of the Zambian economy, given that increased investment is a necessary condition to engender transformation in the economy, especially when the investment is directed at leading sectors for transformation.

Figure 5: Composition of GDP, 1990-2016 (Per cent)



Source: Zambia, Central Statistical Office (2014, 2016, 2017); Zambia, Ministry of Finance (2017a).

Figure 5a: Expenditure growth, 1990-2016

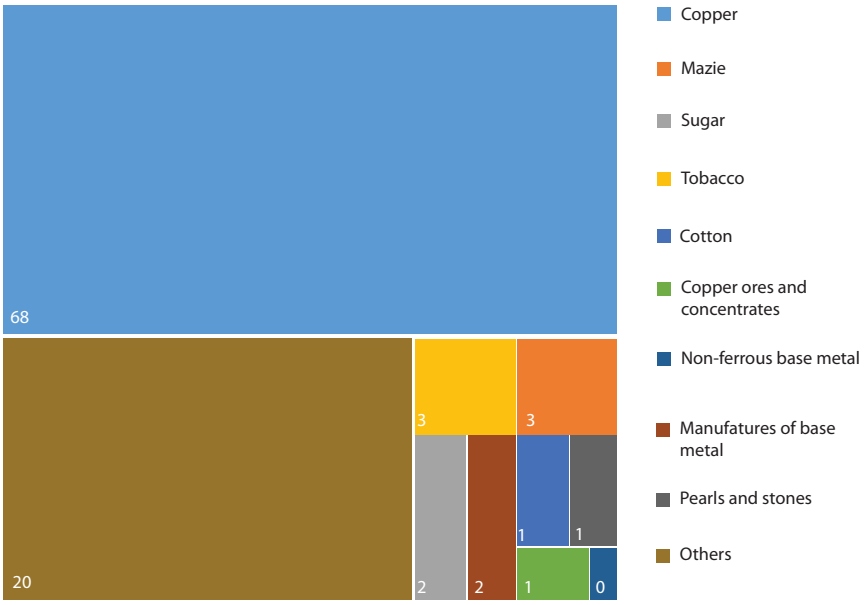


Source: Zambia, Central Statistical Office (2014, 2016, 2017); Zambia, Ministry of Finance (2017a).

The amounts allocated to personal emoluments increased from K50.2 million in 1993 to K20.4 billion in 2016, which explains the larger share of private consumption in GDP by demand, compared with the share of investment. The exports component of the GDP, composed of intermediate products, continues to decline, hence the trade deficits recorded during recent years. Imports have increased in recent years owing to large road and other infrastructure projects and equipment for the mining sector, in which there has been increased foreign direct investment (FDI). The level of FDI in Zambia averaged $221.74 million from 1998 until 2017, reaching an all-time high of $1,335.70 billion in the third quarter of 2012. The power deficits experienced from 2014 to 2017 resulted in increased power imports through the Southern African Power Pool. For example, the power deficit in Zambia increased from 560 MW in June 2015 to 1000MW in February 2016, thereby necessitating increased imports from the Power Pool and load shedding (Zambia, Ministry of Finance, 2011- 2016).

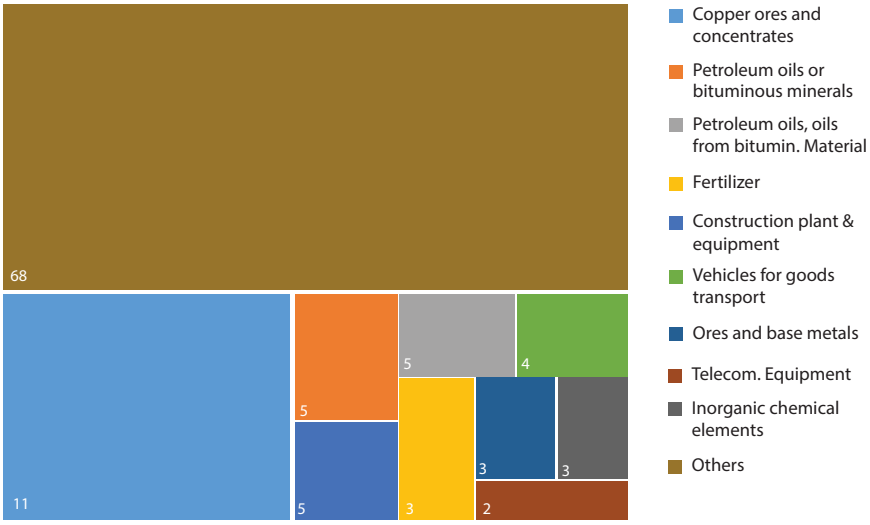
Minerals and metal products dominate merchandise exports, notwithstanding concerted efforts by the Government to stimulate non-traditional exports, including horticultural and floricultural products. The bulk of exports comprise copper, maize, tobacco, sugar and base metals, accounting for 78 per cent of merchandise exports (see figure 6). The major imports include copper ores and concentrates, cement, crude and petroleum oils, bituminous minerals and oils, fertilizers, civil engineering plant and equipment, motor vehicles, telecommunications equipment and inorganic chemical elements that, together, constitute 40 per cent of merchandise imports (see figure 7).

Figure 6: Merchandise exports, 1990-2016 (Per cent)



Source: UNCTADstat.

Figure 7: Merchandise imports, 1990-2016 (Per cent)



Source: UNCTADstat.

Overall, the trade structure remains largely undiversified and dominated by the export of primary products and the importation of capital equipment, petroleum products and chemicals. Furthermore, since 1994, there has been low and weak uptake of benefits offered under the preferential access initiatives such as the Act for Growth and Opportunity in Africa of the United States, the European Union Everything but Arms initiative, the Chinese and Canadian market access initiatives (Zambia, Ministry of Commerce, Trade and Industry, 2018), owing to a combination of limited domestic supply capacities and challenges in meeting international quality and standards requirements.

Intermediate goods such as copper anodes, cathodes, base metals (e.g., cobalt) and sulphuric acid account for the largest proportion of merchandise exports, followed by raw materials, consumer goods and capital goods (see figure 9). The share of intermediate goods in merchandise exports was 77 per cent during the period 1995-1999, 69 per cent in 2000-2009 and 83 per cent in 2010-2015. The trade structure continued to be skewed towards more imports than exports during the period 1990-2016 (Zambia, Central Statistical Office, 2014, 2017a). The major export destinations in 2017 were Switzerland, which accounted for 41.2 per cent of exports, China (16.5 per cent), South Africa (10.8 per cent), the Democratic Republic of the Congo (6.9 per cent) and Singapore (4.3 per cent), while, during the same period, the major import sources were South Africa (27.4 per cent), the Democratic Republic of Congo (24.6 per cent), China (12.5 per cent), Kuwait (5 per cent) and the United Arab Emirates (3.9 per cent) (Zambia, Central Statistical Office, 2017b). The composition of trade since the 1990s reflects little major structural transformation in terms of exportable commodities, given that primary goods still dominate (see figures 10 and 11). The transformation of the abundant natural resources (minerals and agriculture products)

through beneficiation and value addition will enable Zambia to participate at higher and more lucrative levels of the commodity value chains both regionally and internationally and thus earn more revenue and generate more local linkages.

3.2 Linkages

The trade in intermediate goods is a barometer of the participation of an economy in global value chains and is important for forging backward and forward linkages that generate economic multipliers in the domestic economy. (Organization for Economic Cooperation and Development and World Trade Organization, 2017). As noted earlier, since the 1990s, the import share of intermediate goods of Zambia has been consistently lower than capital and consumer goods combined as a proportion of total merchandise imports, as shown in figure 8, and remains largely within the 23-25 per cent range of merchandise imports. Capital goods imports display a similar trend, having remained the smaller component (33 per cent during the period 1990-1995 and 29 per cent in 2000-2015) of total merchandise imports. The export of intermediate goods has been consistently high, averaging from 77 per cent of merchandise exports in 1990-1995 to 83 per cent in 2000-2015 (see figure 9). The country's backward integration did not record significant change between 1995 and 2011 (see figure 10) and is much lower than other countries in the region, for example, Zimbabwe, where there is significant backward integration into the inputs sector. The share of foreign value added imbedded in exports remained unchanged between 1995 and 2011 and was the smaller proportion of traded value added (see figure 11). During the same period, the domestic component of the traded value added, which measures traded in value added comprised a much larger share than the foreign component, which implies more utilization of local inputs generating more domestic multipliers (see figure 11).

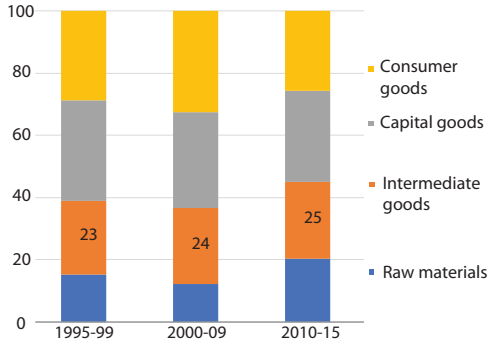
The high values of forward linkages are indicative of the continued heavy reliance by Zambia on the export of mainly copper anodes, cathodes and concentrates and other semi-processed raw materials. Notwithstanding efforts by local companies such as ZAMEFA to produce electrical and energy cables, wires, electric motors, copper rods and copper and aluminium electrical conductors for both exports and the domestic market, the export of large volumes of semi-finished products shows the inadequate integration of Zambia into the global value chains, in which copper is mainly an input into foreign manufacturing, the local value added of which is insignificant. This is typical of an insufficiently diversified economy with limited domestic value addition and in which structural transformation has yet to be fully attained. The efforts towards diversification of the economy through facilitating value addition, beneficiation and linkages in agriculture, mining and forestry sectors, as well as the development of multi-facility economic zones, present opportunities to increase the export of finished products and develop domestic backward, forward, knowledge and side stream linkages, thus enabling the country to participate in regional and international value chains at higher levels. The Government introduced those zones under the ZDA Act No. 11 of 2006. The zones are intended to be a combination of free trade and export processing zones and

industrial parks, with the overall objective of attracting investment for manufacturing and export diversification.

The share of imports of capital goods in total merchandise imports should be exploited to ensure that the imported capital contributes to structural transformation through technology transfer and forward and backward linkages. Local content regulations could be employed to enhance the participation of local entrepreneurs and business entities through partnerships with foreign capital.

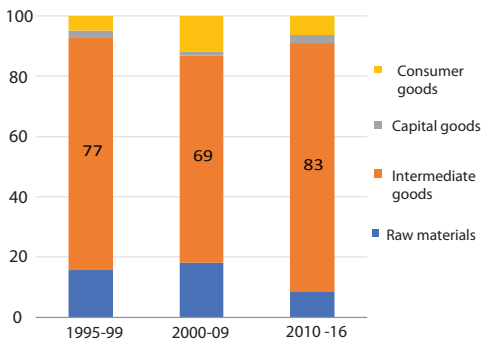
The major export products, namely, copper, copper alloy and, precious and semi-precious stones, are located far from the denser parts of the "product space" (see figure 12). This poses a challenge to diversify exports in the short term. In addition, products such as maize,

Figure 8: Merchandise imports by end use, 1995-2015 (Per cent)



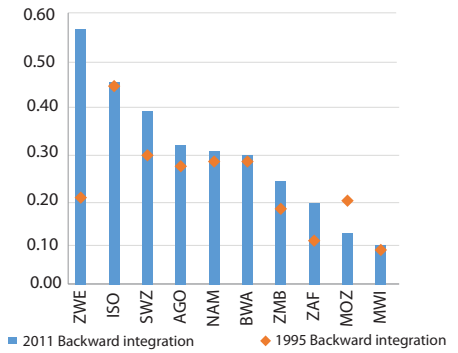
Source: World Bank World Integrated Trade Solution trade summary data.

Figure 9: Merchandise exports by end use, 1995-2015 (Per cent)



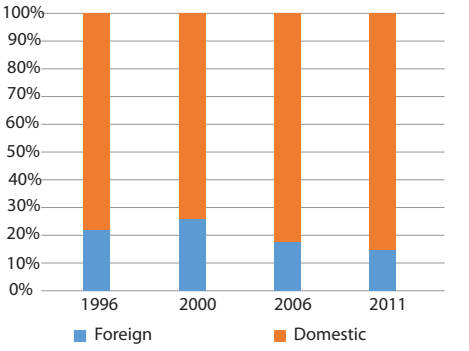
Source: World Bank World Integrated Trade Solution trade summary data.

Figure 10: Foreign value added in exports, 1995-2011 (Per cent)



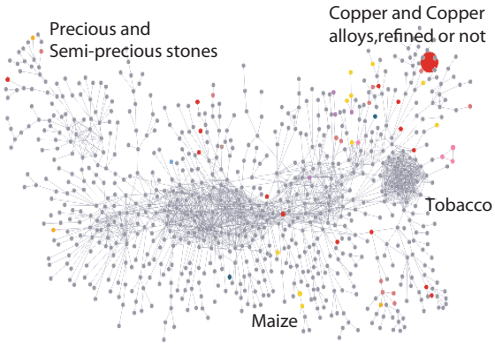
Source: Organization for Economic Cooperation and Development and African Development Bank (2014).

Figure 11: Domestic Value Added in partners' exports (per cent), 1996-2011



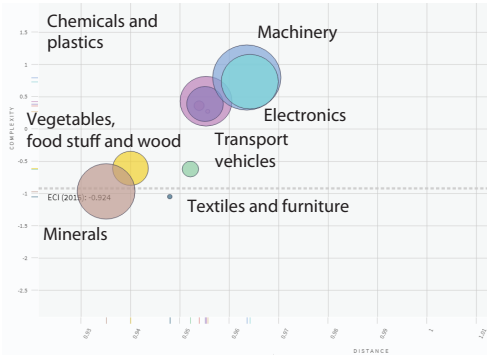
Source: Harvard University, 2018 Atlas of Economic Complexity

Figure 12: Product space (exports, 2015)



Note: Node size represent export values.
Source: Harvard University, 2018 Atlas of Economic Complexity.

Figure 13: Product feasibility, 2015



Source: Harvard University, 2018 Atlas of Economic Complexity.

although close to the denser parts, have few linkages to the major exports and thus are unlikely to yield any significant gains in the productive space.

Some products such as sugar, processed foods, tobacco and leather have revealed comparative advantage,[5] which present opportunities for exports beyond the predominant copper-based ones. Some, however, lack linkages to major exports. The effort to increase non-traditional exports to reduce the dependence on copper exports appears to have had some limited success, given that there was an increase in the earnings, from $1,381.8 billion in 2010 to $3,550.3 billion in 2013, before declining to $1,846.5 billion in 2016 (Zambia Development Agency, 2014, 2018). The decline in earnings from non-traditional exports was attributable to a combination of the fall in the prices of cereals, vegetable oils, cotton, tobacco and sugar and the overall rise in the cost of production. While some products such as machinery, chemicals and plastics have higher complexity levels located closer to what is possible to produce with existing capabilities (see figure 13), Zambia needs to increase linkages among these products with the rest of the economy in order for positive spillover effects and multipliers in the productive space to be realized and to meaningfully contribute to economic transformation.

3.3 Technology

FDI in Zambia remained low, at $469 million (2016), and averaged $1.4 billion annually during the period 2010-2016, compared with $5.04 billion in 1990-2010 (United Nations Conference on Trade and Development, 2017). Most of that FDI was directed at the mining, manufacturing,

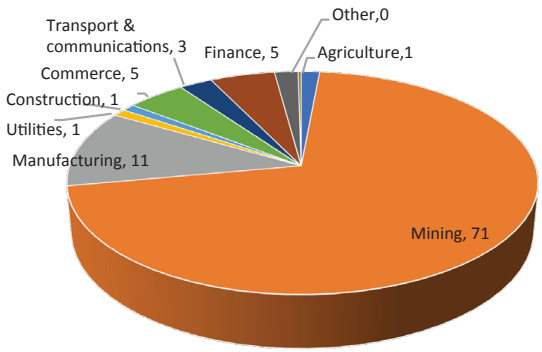
5 Revealed comparative advantage (RCA) is a measure of whether a country is an exporter of a product on the basis of the relative advantage or disadvantage that it has in the export of a specific good. A country is an effective exporter of a product if it exports more than its "fair share" or a share that is at least equal to the share of total world trade that the product represents (RCA > 1).

energy and construction sectors. The major sources of the FDI during the period 2010-2016 were Australia, China, Singapore, South Africa, Switzerland and the United Kingdom of Great Britain and Northern Ireland (Zambia Development Agency, 2015). The mining sector accounted for the largest share of FDI during the period 2010-2016, at 71 per cent (see figure 14), while manufacturing was second and accounted for 11 per cent of total FDI.

The growing focus of the Government on economic diversification described in the various national development plans and the push for the growth of non-traditional exports will particularly benefit from increased investment in both mining and manufacturing sectors, given that this will underpin value-addition and beneficiation initiatives. Foreign capital through FDI can catalyse diversification with good policy incentives and guidance. The multi-facility economic zones promoted by the Government provide an opportunity to attract more domestic investment and FDI through a conducive policy and legislative environment. If supported by well-articulated policies and strategies, foreign investment in the mining, manufacturing and energy sectors could facilitate knowledge and technology transfers through spillovers and the creation of sustainable employment. There is also a need to attract FDI into other sectors to facilitate economic diversification. Furthermore, the focus should be for FDI to facilitate the diversification of exports through value addition and beneficiation to mineral and agricultural commodities along the relevant value chains. This will deepen linkages of the natural resources sector with other sectors of the economy, resulting in economic multipliers.

The enhancement of linkages between technology research institutes to encourage demand-driven research and development, develop and sustain a national scientific and technological capacity and provide highly skilled human resource for increased productivity in the economy, foster national and international linkages for enhanced technology transfer and facilitate the acquisition, adaptation and utilization of foreign technology are the main objectives set out

Figure 14: Foreign direct investment by sector (2010-2016), (Per cent)



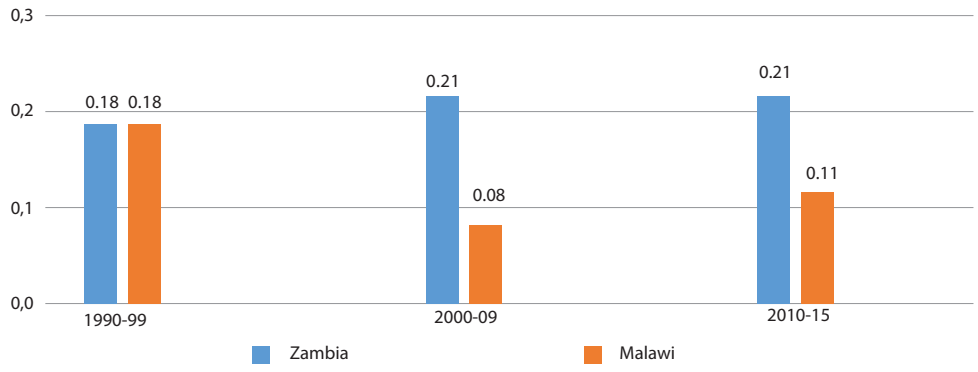
Source: Calculated from Bank of Zambia data.

in the science and technology policy of 1996. Notwithstanding the increase in research and development expenditure as a proportion of the national budget since 1996, it remains a small share in per capita terms. It was 0.0074 per cent per capita in 1997, 0.005 per cent in 2002 and 0.28 per cent in 2008.[6]

Although the overall technological content of manufacturing products and exports in Zambia remains low, compared with other countries in the region, the content is higher than, for example, Malawi (see figure 15). The largest share of the country's manufacturing sector GDP is generated from resource-based [manufactured goods (47 per cent), followed by the low technology manufactures at 40 per cent. Medium-tech to high-tech manufactured goods contribute 13 per cent of the total sector GDP. The food and beverages subsectors dominate the resource-based GDP, fabricated metal products dominate the low-technology manufactured goods category and chemicals and electrical machinery dominate the medium-tech to high-tech category. Although the share of resource-based manufacturing in Zambia is almost that of the average in Africa, it is less diversified than most countries and is dominated by food and beverages, the primary output of the agricultural sector Measures are being undertaken through the seventh national development plan relating to building a strong manufacturing and industrial base and developing productivity-enhancing technology that provide opportunities to address some of the challenges of manufacturing and exports, which may accelerate structural transformation.

Energy intensity, which is a measure of the energy efficiency of a nation's economy, is moderate and slightly above the continental average. It is calculated as units of energy per unit of GDP. High energy intensity indicates a high price or cost of converting energy into

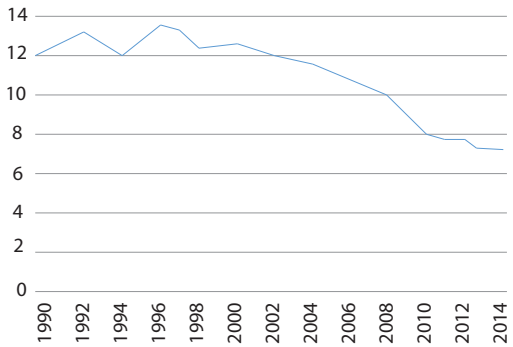
Figure 15: Medium and high tech in manufacturing value added, Malawi and Zambia,1990-2015 (Per cent)



Source: United Nations Industrial Development Organization Competitive Industrial Performance Index for 2017.

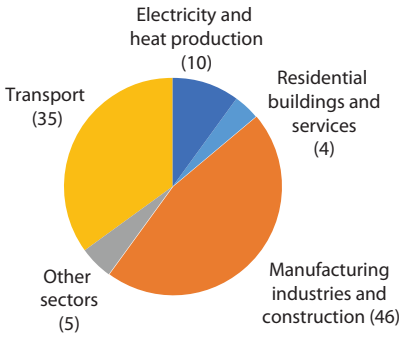
6 See United Nations Educational, Scientific and Cultural Organization, (UNESCO) Institute for Statistics, "Research and development". Available from http://uis.unesco.org/en/topic/research-and-development.

Figure 16: Energy intensity, 1990-2014 (MJ/Unit of GDP)



Source: World Bank 2017 world development indicators; International Energy Agency (2017).

Figure 17: Carbon dioxide emissions, 2014 (Per cent)



Source: International Energy Agency (2014).

GDP and low energy intensity indicates a lower price or cost of converting energy into GDP. In 2014, energy intensity for Zambia was 7 mj per dollar of gdp. Energy intensity of Zambia fell gradually from 13 MJ per dollar of GDP in 1995 to 7 MJ per dollar of GDP in 2014. Energy intensity level for primary energy in Zambia (MJ/$2011 purchasing power parity GDP) was reported at 7.4 MJ in 2014, slightly above the Africa and world average of 6 and 5.5 MJ, respectively (see figure 16). The energy intensity of the industrial sector (MJ/$2005) was reported at 4.5 MJ in 2012 and at 0.2 MJ for the industrial sector (International Energy Agency, 2017; World Bank 2017 world development indicators). The high energy intensity is explained mainly by the predominance of energy-intensive industries, especially a commodity exporting-based economy, and low energy prices (e.g., in 2015-2016, the average tariff in Zambia was 6.0 USc/kwH, while the Namibian one was 13.0 USc/kwH and the Malawian one was 8.0 USc/KwH), which do not encourage energy efficiency.

Carbon dioxide emissions are those stemming from fuel combustion from residential buildings, commercial and public services, manufacturing industries and construction, electricity and heat production and from other sectors such as commercial/institutional activities, agriculture/forestry and fishing. The emissions from manufacturing industries and construction constituted the highest percentage of total fuel combustion, at 46 per cent in 2014, from the emission sources reviewed (see figure 17). The highest value carbon dioxide emissions from manufacturing industries and construction was 64.81 per cent in 1972. Emissions from transport (i.e., aviation, navigation, road and rail) were the second largest, at 35 per cent, followed by electricity and heat production (electricity and power generation for public utilities), at 10 per cent, and residential buildings, commercial and public services, at 5 per cent, as of 2014.

Efforts to utilize green technologies and renewable energy sources are paying dividends, as evidenced by the reduction in carbon dioxide emissions during the period 1990-2014. Promoting renewable and alternative energy is one of the strategies contained in the seventh national development plan to ensure improved energy production and distribution for sustainable development. This will be achieved through the development and use of renewable and alternative energy sources, such as solar, wind, biomass, geothermal and nuclear, as a way of diversifying the energy mix and improving supply. There are plans, set out in the national development plan, for renewable energy resource mapping and the implementation of a tariff to attract private investment in renewable energy generation and the development of a comprehensive national energy strategy for sustainable alternatives to charcoal.

3.4 Summary

Large-scale structural transformation remains elusive in Zambia, notwithstanding the changes in the structure of production since the 1990s. Minerals and metal products continue to dominate merchandise exports, whose share of foreign value added remains largely unchanged and constitutes a smaller proportion of traded value added, compared with the domestic component. Exporting copper anodes, cathodes and concentrates and other semi-processed raw materials implies limited domestic value addition and forward linkages of the extractive sector to the domestic economy. The export of large volumes of semi-finished copper products as inputs into foreign manufacturing is characteristic of inadequate integration into the global value chains, which undermines the collection of optimal export revenue. Overall, the technological content of manufactured products and exports in Zambia remains low, compared with other countries in the region.

The current efforts to diversify the economy from the export of semi-finished products through the promotion of value addition, beneficiation and linkages are steps in the right direction. Such efforts under way in the agriculture, mining and forestry sectors and the development of multi-facility economic zones present opportunities to increase the export of finished products and develop domestic backward, forward, knowledge and side stream linkages. This will ultimately enable Zambia to participate in regional and international value chains at higher levels. Local content regulations could enhance the participation of local entrepreneurs and business entities through partnerships with foreign investors and further deepen local linkages. Addressing the energy constraints due to power deficits to production and productivity through the promotion of renewable energy technologies is one of the key transformation strategies in the seventh national development plan. This needs to be further strengthened, given that energy is a key enabler of industrialization, beneficiation and value addition

4

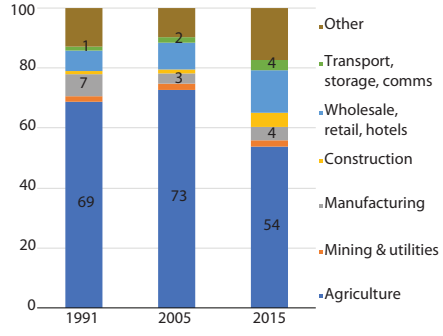
Employment

4.1 Labour productivity

The structure of employment in Zambia shows that there was a substantial decline in the share of employment in agriculture, from 73 per cent in 2005 to 54 per cent in 2015 (see figure 18). Wholesale, retail and other services absorbed the largest proportion of this change, becoming the biggest employers in the country. Positive shifts in the composition of employment towards higher-productivity sectors are essential to accelerate structural transformation. Between 2005 and 2015, total employment increased by approximately 1.5 million, with wholesale, retail, construction and other services contributing 70 per cent to this change. The manufacturing share of employment declined from 7 per cent in 1991 to 4 per cent in 2015, a situation that could have been attributable to the privatization of State-owned enterprises, which had a large presence in the sector.

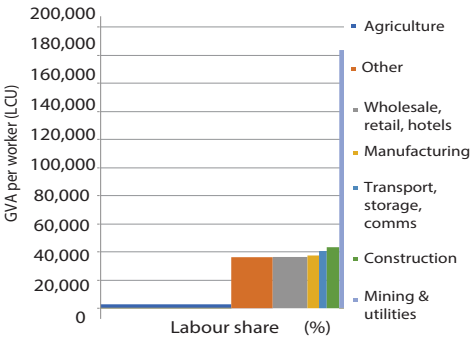
The agriculture sector is characterized by low productivity, with labour productivity in the sector, as measured by gross value added per worker, significantly lower than the other sectors (see figure 19). Although both manufacturing and transport, storage and

Figure 18: Sector of employment, 1991-2015 (Per cent)



Source: United Nations, Statistics Division.

Figure 19: Labour share and productivity, 2015



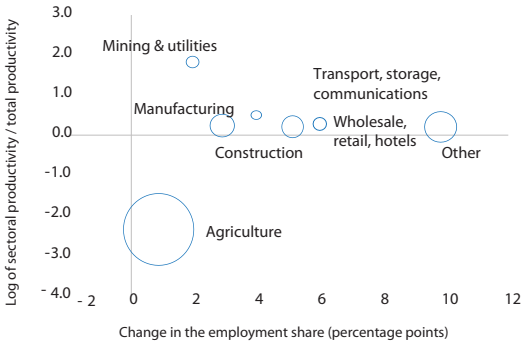
Source: United Nations, Statistics Division.

communications recorded positive labour productivity improvements between 1991 and 2015, the rates were recorded at 2.5 and 1.3, respectively. Construction, agriculture and wholesale and retail recorded negative labour productivity growth rates of -4.1, -2.3 and -0.3, respectively, during the same period. Labour productivity in all sectors therefore remains small, leaving very little scope for the labour reallocations necessary for boosting aggregate productivity and sustaining economic growth. Given the modest labour productivity of the sector (see figure 20), manufacturing in its current state may be of little help in advancing structural transformation. Nevertheless, there is scope for increasing productivity through skills development and technology uptake.

Some programmes that Zambia plans to implement, such as technology development, research and development promotion, the scientific management of work system adaptation and adoption, skills development and promotion, the use of productivity rules and regulations and the adoption of public and private sector Kaizen mainstreaming programme, will contribute to addressing the low labour productivity and foster structural transformation in all sectors (Zambia, Ministry of Finance, 2016).

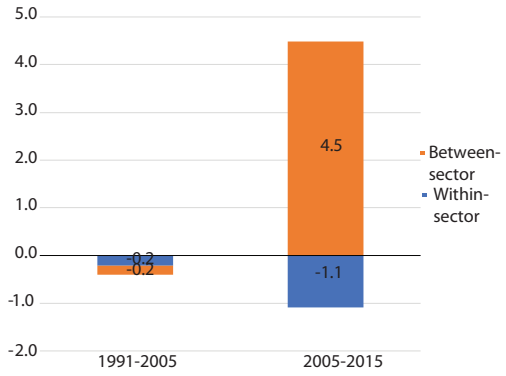
Average gross value added per worker growth accelerated by 4.5 per cent between 2005 and 2015, mainly as a result of improvements in between-sector productivity. On the other hand, within-sector productivity effects remained negative (see figure 21). Between-sector labour productivity gains were attained owing to enhanced skills, better management practices and/or the adoption of new technologies. The between-sector productivity relates to the gains accrued by shifting labour from lower-productivity to higher-productive sectors.

Figure 20: Employment shifts, 1991-2015 (Per cent)



Source: calculated from data from United Nations, Statistical Division.

Figure 21: Growth in gross value added per worker, 1991-2015 (Per cent)



Source: calculated from data from United Nations, Statistical Division.

Efforts by Zambia to increase labour productivity in agriculture, such as increasing production with minimum inputs and enhancing investment in education to increase human capital, promote research and development and access to technology, will, in the medium to long term, yield gains in structural transformation.

4.2 Decent work

There has been little improvement in the quality of jobs over time. The majority of workers (77 per cent) are employed in the "vulnerable employment" category, which comprises own-account and contributing family employment categories as of 2015 (see figure 22). These two employment categories are often associated with lower and less secure incomes and limited employment benefits, including pensions. The characteristics of the high levels of casualization in the labour market in Zambia in all economic sectors, such as employment insecurity, wage flexibility, working time and numerical flexibility, health and safety challenges, and job insecurity and economic insecurity, undermine the decent work agenda (National Labour and Economic Development Institute, 2006). Nevertheless, the enactment of the Employment (Amendment) No. 15 of 2015 provides the legal foundation for the elimination of casualization.

Paid employees account for only 22 per cent of workers. The inclusion of job creation and decent work[7] in Zambia's Vision 2030 and the recent national development plans and national budgets could help to tackle underemployment and unemployment. In addition to the laws to protect workers, practical measures are needed to ensure stability, security and decent employment for all workers (International Labour Organization, 2012).

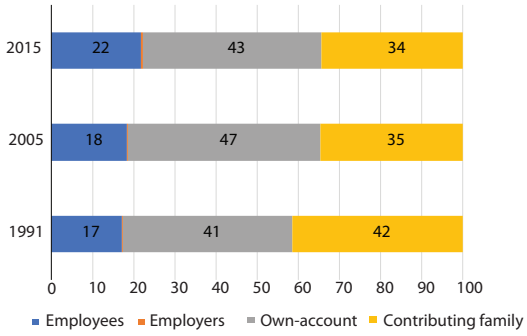
Time-related and income-related underemployment remain high. The former indicates that workers are willing and are available to increase their working time. The total time-related underemployment rate in 2014 stood at 8.3 per cent, with rural and urban rates of 10.9 per cent and 4.8 per cent, respectively. Some of the causes of underemployment include inadequate formal employment opportunities and the low absorptive capacity of the labour market for new entrants and the concentration of growth in highly capital-intensive and urban-based sectors such as mining (Shula, 2018).[8] Low and irregularly reviewed wages characterize regular employment for most workers in Zambia (International Labour Organization, 2012).

Although the unemployment rate of young people declined between 2000 and 2010 (figure 23), it still exceeded that of Malawi and Zimbabwe during the same period. Unemployment among young people therefore continues to be a challenge. The rate is higher in urban areas compared with rural ones, at 15 per cent and 6.4 per cent, respectively. Young men have a higher unemployment rate, at 12.2 per cent, compared with 9.1 per cent for young women. The national rate is higher for young people with secondary school education, at 14.9 per

7 Vision 2030, the fifth and seventh national development plans and the 2017 and 2018 national budgets incorporate programmes on job creation and decent work.

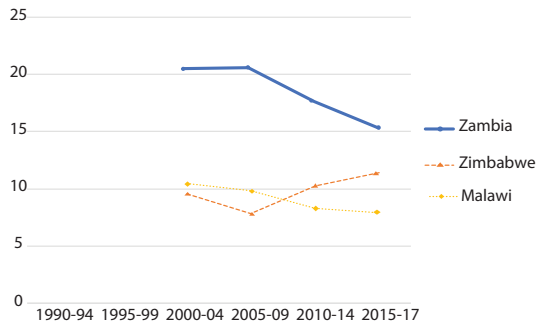
8 See also International Labour Organization, "Zambia national event on youth employment promotion", 2012. Available from www.ilo.org/addisababa/countries-covered/zambia/WCMS_312824/lang--en/index.htm.

Figure 22: Status of employment, 1991-2015 (Per cent)



Source: International Labour Organization Key Indicators of the Labour Market database.

Figure 23: Unemployment rate of young people in Malawi, Zambia and Zimbabwe, 1990-2014 (Per cent)



Source: Zambia, Central Statistical Office (2015); International Labour Organization Key Indicators of the Labour Market database.

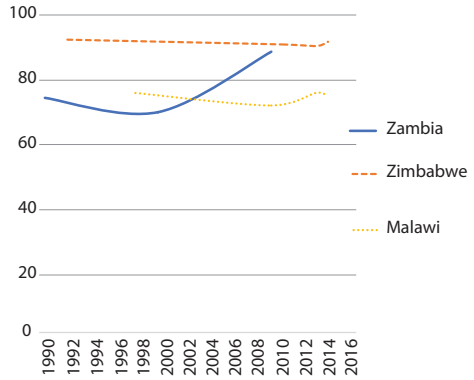
cent, with urban young people at 17.5 per cent, given the same level of education. Action taken by the Government to reduce unemployment among young people includes the 2016 national budgetary provision of K150 million to the action plan on the employment of young people, K49.5 million for their skills training and development and the 2017 allocation of $55.4 million to the cashew nut infrastructure support programme to benefit, among others, 100,000 young people (Zambia, Ministry of Finance, 2015b, 2016).

4.3 Education and skills

The literacy rate of young people improved significantly, from 74.5 per cent in 1990 to 88.7 per cent in 2010, almost converging with that of Zimbabwe, while exceeding that of Malawi during the same period (see figure 24). The improvement is attributed to the reintroduction of the free primary education policy of 2002 and the growth in the number of community schools and upgrading of some primary schools to secondary schools. The provision of more resources to basic education through the integrated basic education subsector investment programme also contributed to the improvement in the literacy rates (Zambia, Ministry of Education, 2017). The basic literacy and numeracy skills provided at the foundational level are preconditions for acquiring higher levels of education.

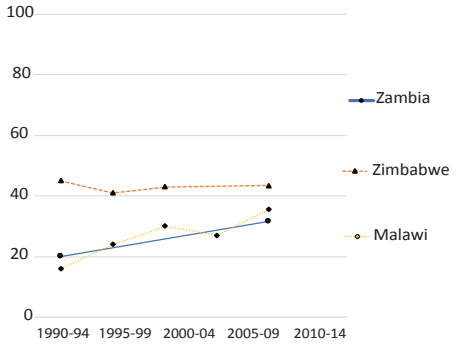
While secondary education enrolment, as a measure of more advanced skills, showed slow improvement between 1990 and 2014, it remained below the enrolment rates for Malawi and Zimbabwe (see figure 25). Some of the challenges in improving education attainment and skills development include limited access to secondary and higher education due to lack of facilities and other resources; the poor quality of education due to inadequate school facilities, learning materials and teachers; a mismatch between skills imparted by the education system and the labour market needs; the huge inequality in school enrolment, especially at post-primary levels, which marginalizes girls, children in rural areas and those from poor families;

Figure 24: Literacy rate of young people, Malawi, Zambia and Zimbabwe, 1990-2015 (Per cent)



Source: Zambia, Central Statistical Office (2012); Knoema, World Data Atlas; United Nations Educational, Scientific and Cultural Organization, UNESCO Institute for Statistics; United Nations Children's Fund statistics on Zambia. Available from www.unicef.org/infobycountry/zambia_statistics.html.

Figure 25: Gross secondary school enrolment rate, Malawi, Zambia and Zimbabwe, 1990-2014 (Gross value added per worker)

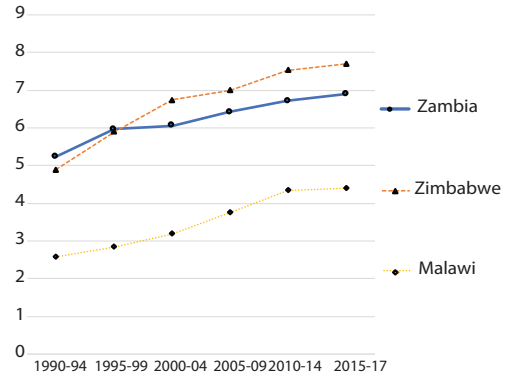


Source: Zambia, Central Statistical Office (2012); Knoema, World Data Atlas; United Nations Educational, Scientific and Cultural Organization, UNESCO Institute for Statistics; United Nations Children's Fund statistics on Zambia. Available from www.unicef.org/infobycountry/zambia_statistics.html.

low levels of early childhood education; and inadequate technical and vocational education and training institutions to meet demand, especially of young people who leave the school system between grades 9 and 12 (Zambia, Ministry of Finance, 2015a). There is an ongoing programme for the construction of universities and colleges that will specialize in science, technology, mathematics and performing arts and for developing infrastructure and the provision of equipped technical and vocational education and training institutions. Increased budgetary allocations continue to be made to education and skills development (K9.4 billion in 2015 to K10.6 billion in 2017) (Zambia, Ministry of Finance, 2014, 2015, 2016). Zambia has continued to promote training programmes and investment in technical and vocational skills aimed at empowering young people to effectively participate in employment opportunities to meet the skills demand of the new sectors (Zambia, National Commission for Development Planning, 2017). The national policy on young people provides for interventions that target the needs of young people in entrepreneurship training, adequate numeracy and literacy to promote access to economic opportunities.

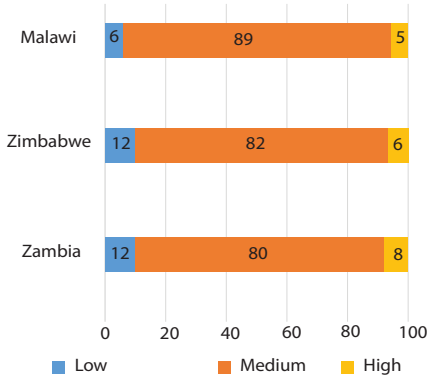
Educational attainment and skill levels have risen to levels matching the upper end of regional standards. Mean years of schooling have continued to improve and remain on the higher side, far ahead of Malawi and comparable to Zimbabwe (see figure 26). The bulk (80 per cent) of Zambia's skills, as with Zimbabwe (82 per cent), is concentrated in the medium skills level, while the high skill levels in Zambia constitute only 8 per cent (see figure 27).

Figure 26: Mean years of schooling (25+), Malawi, Zambia and Zimbabwe, 1990-2017



Source: International Labour Organization Key Indicators of the Labour Market database.

Figure 27: Skill levels, Malawi, Zambia and Zimbabwe, 2015 (Per cent)



Source: International Labour Organization Key Indicators of the Labour Market database.

Notwithstanding fluctuations in budgetary allocations to the education sector,[9] one notable development regarding budgetary allocations was the establishment of a skills development fund in 2017 (Zambia, Ministry of Finance, 2016), which could enhance skills and contribute to labour productivity growth.

4.4 Summary

The growth in the average gross value added per worker has risen by 4.5 per cent since 2005, mainly as a result of improvements in between-sector productivity. Within-sector productivity effects, however, remained negative. A highly skilled youthful population will provide the platform for accelerating structural transformation. Low labour productivity and high unemployment, especially unemployment among young people, requires productivity enhancement and skills upgrade strategies that target higher-productivity sectors. Fast-tracking skills upgrade through the programmes currently under way, such as technology development and access, research and development promotion and the scientific management of work system adaptation and adoption, will enhance labour productivity and accelerate structural transformation. Furthermore, the establishment of the skills development fund, the construction of universities and colleges specializing in science, technology, engineering and mathematics and the provision of learning infrastructure and well-equipped technical and vocational education and training institutions will further improve the national technical skills base. Investment in vocational and technical skills and entrepreneurship training targeting young people will contribute to reducing unemployment and have a positive impact on structural transformation, given that young people would possess the transformative skills required for high-end jobs.

9 Budgetary allocations to the education sector were 19.9 percent in 2010, to 20.2 per cent in 2015 to 16.5 per cent in 2017 and 16.1 per cent in 2018.

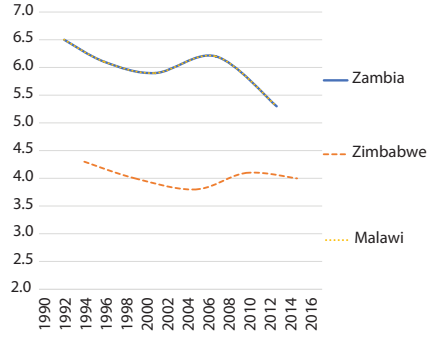
5

Society

5.1 Demography

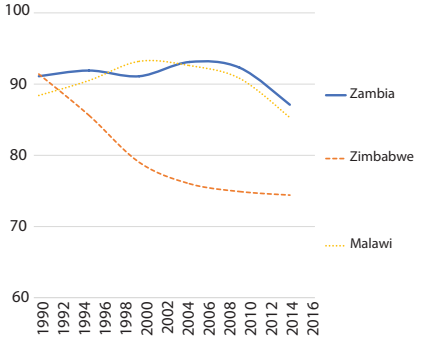
Although the total fertility rate per woman declined from 6.5 children per woman in 1990 to 5.25 by 2015, it remains high, compared with Zimbabwe, thereby explaining the high child dependency rate for Zambia (see figures 28 and 29). This situation has contributed to heightened pressure on the provision of social services and infrastructure relating to education, health, housing, water and sanitation and employment (Zambia, National Commission for Development Planning, 2017). According to the Planned Parenthood Association of Zambia, the high unmet need for sexual and reproductive health services is a major reason for the high fertility rate in Zambia. To address it, measures such as enhancing women's education and the country-wide expansion of quality family planning services in the health service delivery system are being implemented (Zambia, Central Statistical Office, 2015b). Zambia has also prioritized investment in health, including sexual and reproductive health, that is needed to advance a demographic transition through declining fertility rates and ensuring that young people make a healthy transition from adolescence to adulthood.

Figure 28: Total fertility rate, Malawi, Zambia and Zimbabwe,1990-2015 (Children per woman)



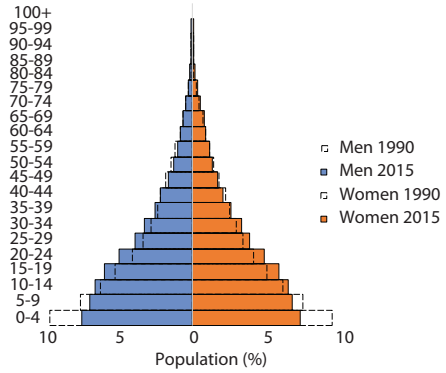
Source: Demographic and Health Survey Program STAT Compiler.

Figure 29: Child dependency ratio, Malawi, Zambia and Zimbabwe, 1990-2014 (Per cent)



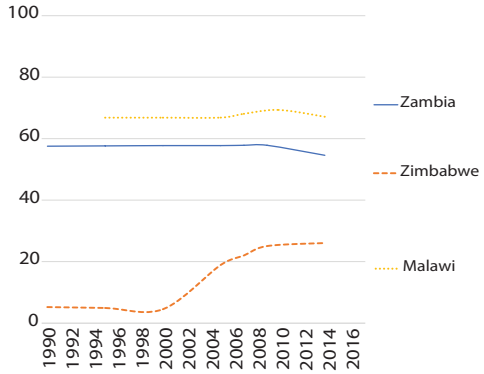
Source: United Nations, Department of Economic and Social Affairs World Population Prospects.

Figure 30: Population pyramid, 1990 and 2015



Source: United Nations, Department of Economic and Social Affairs World Population Prospects.

Figure 31: Urban population living in slums, Malawi, Zambia and Zimbabwe, 1990-2014 (Per cent)



Source: United Nations Human Settlements Programme. Data available from https://unhabitat.org/wp-content/uploads/2014/03/Table-2.3-Proportion-of-urban-population-living-in-slums-and-urban-slum-population-by-country-1990-2014.pdf.

At 87 per cent, the child dependency rate (see figure 29) remains high on account of the high total fertility rate. that the high fertility rate, combined with decreasing mortality, is not only causing high population growth, but also creating a large share of youth dependency, resulting in higher dependency rate that, in turn, result in low investment in human capital and productivity. The high dependency rate has the potential to exert pressure on the working population and does not help to achieve a meaningful demographic dividend (see figure 30). In fact, it has been observed that the high child dependency burden in Zambia is one of the main impediments to the attainment of sustainable socioeconomic development (Zambia, Ministry of Finance, 2015a).

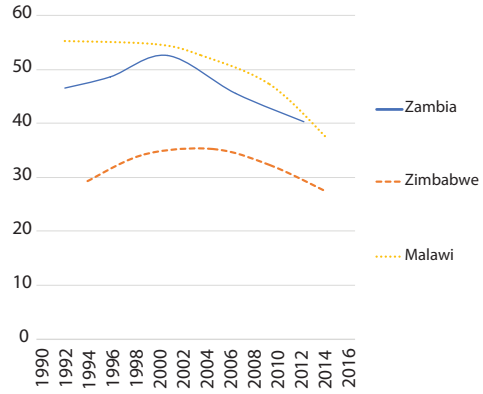
Zambia is one of the most urbanized countries in Africa, with 40 per cent of the population living in urban areas and the rate of urbanization projected to increase to 46 per cent by 2035 (Zambia, Ministry of Finance, 2015a). It is estimated (United Nations Human Settlements Programme, 2012) that 57 per cent (see figure 31) of this urban population lives in slums and squatter and unplanned settlements characterized by abject poverty, inadequate access to rights-based social services and unstable livelihoods (Ibid.). Notwithstanding the surge in the population living in slums in Zimbabwe after 2002, this rate remains low, compared with that of Malawi and Zambia. Formulating policies to address transport, housing, energy, clean and safe drinking water and sanitation for the growing population in urban areas is essential. The urbanization strategy of Zambia for the period 2017-2021 involves leveraging the socioeconomic opportunities of urbanization. The socioeconomic opportunities include agglomeration advantages of concentrated economic activity, which have the potential to

facilitate an increase in productivity and innovation through large product and labour markets and an ease in the exchange of knowledge and ideas and the cost-effective provision of public services (Zambia, National Commission for Development Planning, 2017).

5.2 Health

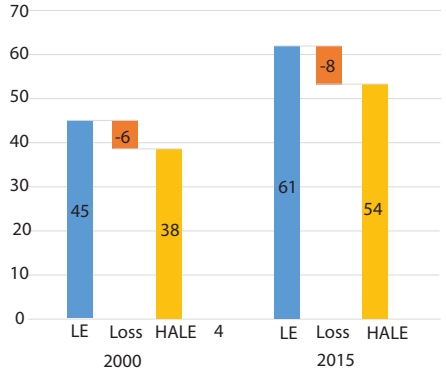
There has been a noticeable decline in the prevalence of stunting in children (under 5 years of age) in Zambia, as in comparator countries such as Malawi, since the beginning of the 1990s (see figure 32), although Malawi experienced a faster decline during the same period. Among factors cited for this improvement are the mothers' nutritional status and level of education (Zambia, Central Statistical Office, 2015b). Stunting is responsible for, among other things, slow progression in school, increased repetition rates in school and reduced job prospects and productivity of individuals (Economic Commission for Africa and others, 2014). The incidence of stunting in children stood at 40 per cent in 2014, having improved from 47 per cent in 2010 and 50 per cent in 1994, while the incidence of underweight children was 13.3 per cent (2010 and 2015) and 25 per cent (1994). Stunting has been attributed in large part to inadequate nutrition and recurrent and chronic illnesses. Mothers with poor nutritional status, as indicated by a low body mass index, diminutive stature, anaemia or other micronutrient deficiencies, are more likely to have children with low birth weight who would later be stunted (Zambia, Central Statistical Office, 2012, 2015b, 2016). Scaling up health and child nutrition programmes is likely to improve health outcomes relating to the prevalence of stunting, underweight and low birth weight affecting children and mothers, which could

Figure 32: Prevalence of stunting in Malawi, Zambia and Zimbabwe, 1990-2015 (Per cent)



Source: Demographic and Health Survey Programme STAT Compiler.

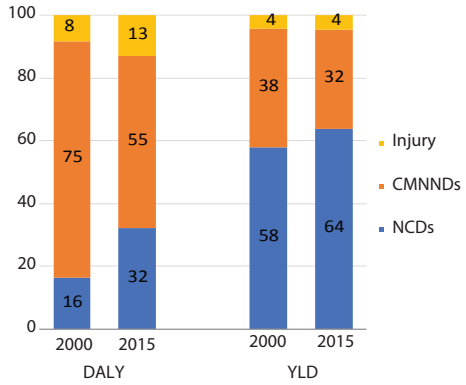
Figure 33: Life expectancy and healthy life expectancy, 2000-2015 (Years)



Abbreviations: HALE, healthy life expectancy; LE, life expectancy.

Source: World Health Organization Global Health Observatory data repository.

Figure 34: Disease burden by cause (15-49 years of age), 2000-2015 (Per cent)



Abbreviations: CMNND, communicable, maternal, neonatal and nutritional disease; NCD, non-communicable disease.

Source: Computed from World Health Organization health statistics and information systems.

have adverse implications for the future health and education outcomes of children and for national development outcomes.

In recent years, life expectancy and healthy life expectancy at birth increased significantly (see figure 33). The increase in overall life expectancy is attributable to a decline in childhood and adult mortality resulting from the impact of health interventions aimed at reducing morbidity and the disease burden from some lethal diseases such as malaria, HIV/AIDS, diarrhoea and malnutrition (Zambia, Central Statistical Office, 2013a). The country-wide construction and upgrading of health facilities and equipment is ongoing, which has improved the provision of health services. Notwithstanding increases in life expectancy, the gap between life expectancy and healthy life expectancy has widened owing to the implied loss in health due to an increase in disease and injury/disability, as shown in figure 34. Zambia has recorded improvements in the number of physicians and nurses to levels almost matching those of Zimbabwe.[10] Ensuring that the working-age population is in full health is key to supporting labour productivity growth and facilitating job transitions, underscoring the need to improve the health delivery system.

The share of disability-adjusted life years attributable to communicable, maternal, neonatal and nutritional diseases declined (see figure 34), owing in part to: (a) measures put in place to prevent unnecessary disabilities or deaths; (b) a strengthened surveillance system; and (c) the promotion of health intervention programmes to increase control over factors predisposing people contracting communicable diseases (Zambia, Ministry of Health, 2017). On the other hand, the proportion of non-communicable diseases increased, accounting for 64 per cent of

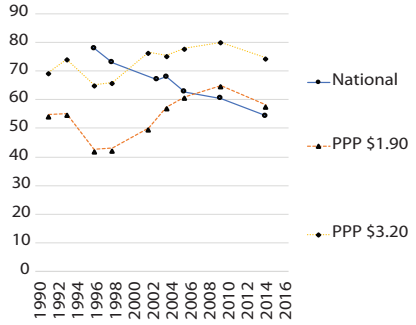
10 See World Bank 2017 world development indicators.

total years lived with disability in 2015. The main non-communicable diseases include chronic respiratory diseases, cardiovascular diseases, diabetes, cancer, epilepsy, mental illness, oral disease, eye disease, trauma and sickle cell anaemia. There is a need to consolidate measures to combat both communicable and non-communicable diseases in order to reduce the disease burden and the effect of the same on the population and the working population, who are key to productivity in the country. The allocation of budgetary resources to health have risen over the years and stands at 9.5 per cent of the total budget, up from 8.9 per cent in 2017 and 8.3 per cent in 2016.

5.3 Poverty and inequality

The proportion of the population living under the national poverty line has declined since the 1990s (se figure 35). Zambia's incidence of extreme poverty is lower than that for Malawi, although it remains higher than that for Zimbabwe (see figure 36). Poverty reduction has been slow in part because economic growth, a necessity for poverty reduction, has depended in large part on copper production and not from progress in industrialization or structural change (United Nations Development Programme, 2016b; Zambia, National Commission for Development Planning, 2014). Apart from income, poverty has a multidimensional angle measured by the Multidimensional Poverty Index,[11] which, for Zambia, suggests that the proportion of people affected by multidimensional poverty increased from 57.5 per cent in 2006 to 65.1 per cent in 2010. The majority of people affected by it are resident in rural areas,

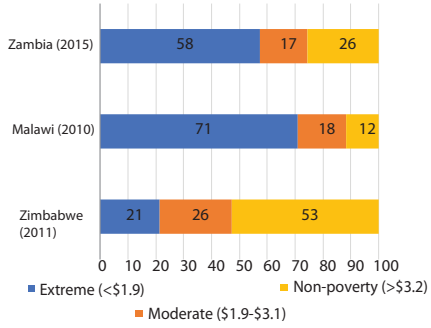
Figure 35: Poverty headcount rate, 1990-2015 (Per cent)



Abbreviation: PPP, purchasing power parity.

Source: Zambia, Central Statistical Office (2016a); World Bank 2017 world development indicators.

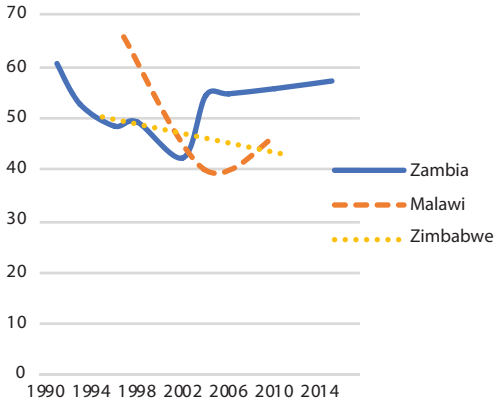
Figure 36: Income poor and non-poor, Malawi, Zambia and Zimbabwe (Per cent)



Source: World Bank (2014).

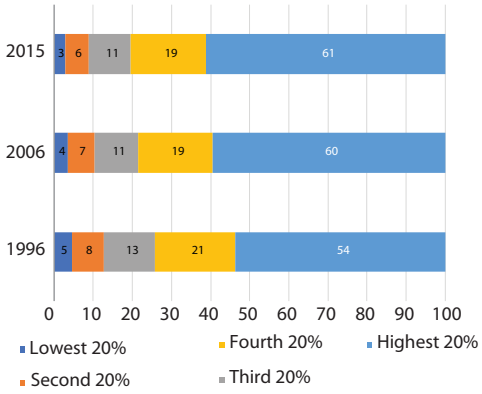
11 The Multidimensional Poverty Index is used to identify multiple household deprivations in education, health and living standards.

Figure 37: Gini coefficient, Malawi, Zambia and Zimbabwe,1990-2015



Source: World Bank 2017 world development indicators.

Figure 38: Share of income (Per cent)



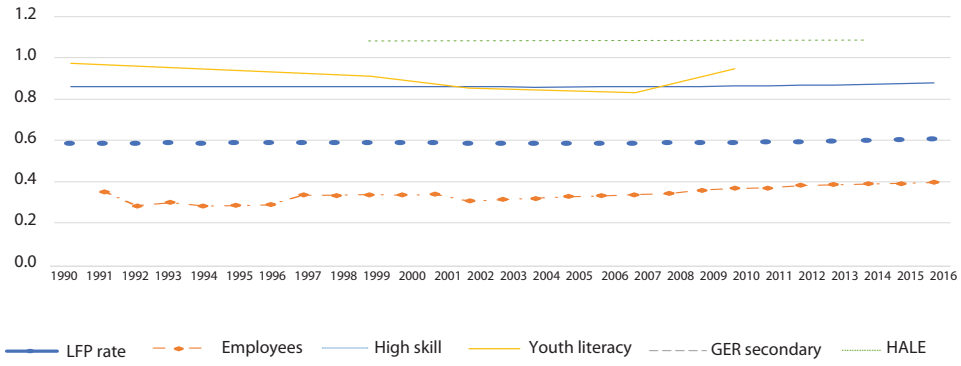
Source: World Bank 2017 world development indicators.

where infrastructure is poor, as with social services (United Nations Development Programme, 2016b). Efforts to meet needs of the vulnerable, such as through the social cash transfer programme, which benefited 500,000 households in 2017, up from 242,000 in 2016, and the farmer input support programme for poor rural farmers, need to be enhanced (Zambia, Ministry of Finance, 2015a).

Zambia's income inequality as indicated by the Gini coefficient fell prior 2000 and has been on an upward trend since then (see figure 37). Income shares are skewed in favour of those in higher income brackets, in which 61 per cent of income is in the hands of the highest paid 20 per cent of the population (see figure 38). For urban areas, the Gini coefficient went from 0.66 in 2006 to 0.61 in 2015, while, in rural areas, it rose from 0.54 in 2006 to 0.60 in 2015. These inequalities in income make Zambia one of the most unequal countries in Africa, a situation that compromises long-term social and economic development (Zambia, National Commission for Development Planning, 2017) and, potentially, social and political stability. Designing poverty and inequality reduction programmes targeting the poor will enhance their income and standard of living.

Gender inequalities continue to exhibit gaps in the labour market, in education and in health (see figure 39). Although women and men participate almost equally in the labour force, the participation rate of women has been slightly below that of men. In 2016, the total labour force participation rate was 88 per cent, with the rates of men and women at 79.7 per cent and 70.1 per cent, respectively. Nevertheless, men are more likely to be employed than women. The gender parity situation for women in high-skilled occupational groups is extremely low,

Figure 39: Gender parity indices, 1990-2016



Abbreviations: GER, gross enrolment rate; HALE, healthy life expectancy; LFP, labour force participation.

Source: World Bank 2017 world development indicators; World Health Organization Global Health Observatory data repository.

at only 4 per cent.[12] In the areas of the literacy of young people and gross enrolment in secondary education and healthy life expectancy at birth, gender parity has almost been achieved. Measures aimed at reducing gender inequalities would facilitate the enhanced contribution of citizens to structural transformation and potentially reduce instability in the economic, social and political spheres.

5.4 Summary

Zambia's prospects for structural transformation continue to be undermined by a slow demographic transition, high child dependency rates and high urbanization that places pressure on urban infrastructure and services, resulting in income poverty and inequality and disease. Given that income poverty and inequality are a potential source of social instability and slow down socioeconomic development, they therefore need to be tackled. Programmes aimed at addressing poverty and inequality, such as the ongoing social cash transfer and farmer input support, need to be scaled up. Notwithstanding some positive trends recorded over the years in fertility, life expectancy and stunting levels, communicable diseases such as malaria, HIV/AIDS and tuberculosis and non-communicable ones, including cancer, diabetes and heart disease (Zambia, Ministry of Health, 2017), continue to hamper people's full participation in the economy. Programmes targeting these diseases need to be expanded.

12 International Labour Organization 2017 Key Indicators of the Labour Market database.

6

Key messages

Diversification from the high dependence on copper is imperative

The correlation between economic growth trends and the performance of the copper sector in Zambia requires targeted strategies to minimize the adverse effects of volatile copper prices on the economy. For example, the high dependency on commodities led to huge fluctuations in export revenue in 2015, when adverse movements in the international price of copper exerted considerable pressure on the exchange rate, domestic prices and fiscal position. In 2015, the GDP growth rate declined to 3.2 per cent from 5 per cent in 2014 and earnings from copper which had grown from $888 million in 1992 to $1.5 billion in 2005 and $7.6 billion in 2014, fell to $6.5 billion in 2016, from $7.36 billion in 2015. Consequently, until economic diversification is achieved, the country's dependence on copper for foreign exchange and economic activity heightens the need for policy buffers to neutralize the potentially adverse effects of commodity price volatility on the economic cycle.

Beneficiation and value addition in the copper sector is necessary for accelerated economic transformation

The overdependence of the country on raw copper and semi-finished copper exports remains an economic risk. The risk can be minimized through the introduction of incentives to promote further mineral value addition within the sector. Local mineral beneficiation will also lead to the development of further linkages between the copper sector and other economic sectors in Zambia.

Transforming the agriculture sector through modernization can provide the impetus for structural transformation

The expansion of irrigation infrastructure, the coverage of area under crop, mechanization, skills upgrade among farmers and increasing access to modern faming technologies is key to increasing agricultural productivity and growth and contributing to poverty reduction, providing employment and accelerating structural transformation. Given that agriculture is the largest employer, a productive agricultural sector will reduce poverty and human exclusion, both of which are related to levels of income. With only an estimated 14 per cent of arable land under cultivation, the agricultural potential remains grossly underexploited,

and efforts should be deployed to open up more land for crop production. The processing of agricultural products will be key to stemming the importation of agricultural goods from South Africa and other regions of the world.

There is a need to harness the strong private consumption as an enabler of growth to promote structural transformation

Strong private consumption fuels large imports of consumer goods using up scarce foreign exchange. It is imperative to step up the local production of most consumer goods in which comparative advantage exists to minimize imports and reduce pressure on the value of the currency. This calls for accelerated diversification and industrialization to produce consumer goods.

The structure of trade and investment needs to be addressed for accelerated structural transformation

Intermediate goods continue to account for the largest proportion of merchandise exports. The trade structure continued to be skewed primarily towards a bigger proportion of imports than exports between 1990 and 2016. Low levels of investment undermine the capacity for structural transformation, and efforts should be deployed to address impediments to investment in productive sectors by both local and international investors, including the business climate, perceived policy inconsistencies, regulatory challenges and finance.

Foreign direct investment is critical to the growth of the manufacturing sector and needs to facilitate active participation of local enterprises throughout the various commodity value chains

FDI remains a critical requirement for the growth of manufacturing structural change owing to the low local capital and technological base. The high levels of FDI in the mining and energy sectors have the potential to bring in the capital and technology required through diffusion and transfer but need to be linked to the broader national economy to provide linkage opportunities for local entrepreneurs through participation in the value chains. Policies that promote backward linkages into the inputs sector and forward linkages into value addition and beneficiation need to be introduced and enforced. Furthermore, impediments to investment such as power shortages and the uncertainties around the mining fiscal regime need to be ironed out to create the stability required by the long-term investors in the minerals sector.

High unemployment among young people is a social time bomb

The high levels of unemployment among young people is a social and political challenge that needs to be addressed, given that it can be a source of instability. The Zambian population is relatively young (57.5 per cent of the population under 18 years of age) and presents the potential for a demographic dividend, if accompanied by programmes that impart skills to young people, for socioeconomic transformation and the transition to an industrialised nation through the implementation of policies to improve human capital and create decent jobs. Collaboration between the Government, industry and other stakeholders is important

to ensure that curriculums, including technical and vocational education and training, are tailored to empower young people with relevant skills. There should be a deliberate focus on strengthening skills in science, technology, engineering and mathematics, given that such skills are transformative and critical to structural transformation.

Poverty and inequality remain high and attendant policies need to be strengthened

The decline in poverty has been very slow, notwithstanding the high levels of economic growth in recent years. Although Zambia posted impressive economic growth rates during the period 2006-2015, overall poverty has remained high and declined only from 78 per cent in 1996 to 54.4 per cent in 2015 (Zambia, Central Statistical Office, 2016a). In rural areas, the proportion of people living in poverty reduced slightly, from 80.3 per cent in 2006 to 76.6 per cent in 2015, while for urban areas the percentage of people living in poverty fell from 53 per cent in 2006 to 23.4 per cent in 2015. Growth has been driven by the extractive sector, which has a low job-multiplier effect owing to the capital-intensive nature of the sector. Policies that create opportunities in labour-absorbing sectors such as agriculture are required. Inequality as indicated by the Gini coefficient stands stood at a high of 0.67 in 2015, with income shares skewed in favour of those in higher income brackets, with 61 per cent of income in the hands of the highest 20 per cent of the population. Policies that address inequality, including the cash transfer system, need to be expanded and further strengthened and extended to include empowerment for the vulnerable to engage in productive activities.

The critical shortage of transformative skills needs to be addressed for structural transformation

To accelerate structural transformation, Zambia needs to address the critical shortage of the transformative skills needed for the value addition and beneficiation in the resources sector (e.g., mining, agriculture, energy). Given that value addition and beneficiation are both skills-intensive and energy-intensive, these challenges need to be addressed urgently. Addressing the challenges highlighted above will potentially put Zambia on an accelerated path to bring about structural transformation and thereby contribute to the country's economic development and improve the lives of the citizens.

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