

# ECONOMIC TRANSFORMATION AND JOB CREATION IN MOZAMBIQUE

Synthesis Paper

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#### **EXECUTIVE SUMMARY**

With its considerable mineral reserves, vast arable land, extensive coastline and harbours, transport corridors to inland countries, and the promise of future revenues from megaprojects in coal and gas, Mozambique has good prospects for diversifying production, advancing industrialisation and promoting economic transformation. However, while Mozambique's gross domestic product (GDP) has grown annually by 5-7% in real terms over the past decade, this has not been accompanied by structural change or sufficient job creation. Mozambique urgently requires a different focus towards economic transformation to address short-term macroeconomic challenges and create much-needed jobs in a sustainable way.

A number of major development challenges in Mozambique need to be addressed. While the near-term future looked bright only a few years ago, Mozambique has recently been affected by a series of major economic shocks. The short-term macroeconomic situation is particularly severe. The government and current account deficits are both high compared to those of similar countries. Debt to GDP ratios are also high, and Mozambique is in partial default.

Over the longer term, the development path since the 1990s has been of low quality. **Mozambique has not created sufficient jobs for inclusive growth**. GDP per capita is low, at around \$1,120 in 2015, and well below comparable natural resource-based economies as well as the average for sub-Saharan Africa. The informal economy absorbs between 68% and 95% of the total labour force; and many of those employed in the formal sector are in low-productivity or low-income-earning activities. Mozambique needs to create more jobs to address the high level of unemployment (currently at 27%) and absorb the many new labour market entrants (estimated at 420,000 each year).

Mozambique has not developed structurally, evident in the limited structural transformation of the economy from agriculture into industry. Around 75% of the labour force is employed in agriculture, mostly in low-productivity jobs with low earnings, compared to just 0.6% in manufacturing. This is a key aspect of the transformation challenge in Mozambique: the bulk of employment is in agriculture, which has low productivity, and the productivity differential with other sectors is very large. Mozambique has been largely unable to diversify into higher-productivity industrial activities or manufacturing, and there is a lack of linkages from industry to agriculture, fisheries and other natural resource-based sectors. As a result, Mozambique's level of economic complexity is low, even compared to other natural resource-based economies, and very little progress has been made in building new capabilities to shift production into more complex products with higher levels of sophistication.

**Further development is compromised by large institutional challenges in Mozambique**. These range from inefficient use of funds to a lack of coordination and integration of development planning. This makes policy-making and implementation very difficult, even in the presence of good strategies.

Mozambique is a natural resource-dependent country, but it must manage its resources better if it wants to transform and create jobs. It has not been able to move into manufacturing or high-productivity services, which it must do if it is to transform and create jobs over the medium to long term. The agriculture sector also misses growth opportunities because of low productivity, lack of well-applied standards, and insufficient processing capacity. Mozambique needs to think more carefully how to use its natural resources better *and* transform the economy. It also needs to do more to promote manufacturing linked to the country's comparative advantages, such as location, availability of agricultural products and presence of megaprojects around which linkages can be improved.

There is reasonable consensus about the sectors that can help this transformation and the constraints to growth in these sectors. Overall, the agro-processing, construction and forestry sectors are the most widely cited as providing promising avenues for future value addition and employment creation. Manufacturing is generally given less attention, outside of the agro-processing sub-sector and

some emphasis on the potential to develop the garment industry. The binding constraints to economic transformation and job creation are also well known. There are economic, governance and institutional constraints. General economic constraints include **skills shortages**, **inadequate infrastructure** (including poor transport infrastructure and unreliable energy supply, particularly in rural areas) and a range of **investment climate constraints** related to different issues around the regulation of labour, access to land and finance, taxation, investment and customs. The most prominent governance constraints affecting transformation are **corruption** and **limitations in government and institutional capacity**. There are also a range of binding constraints specifically affecting the agro-processing, construction and forestry sectors.

**Current policies**, including the recently announced industrial strategy, employment policy and five-year plan, **are insufficient on their own to kick-start manufacturing**, transform the economy and create jobs. Moreover, **implementation is crucial**. A survey of more than 30 studies indicates a range of proposed policies – both horizontal (cross-sectoral) policies to improve fundamentals and targeted (sector-specific) interventions – to create jobs and promote economic transformation in Mozambique.

Next steps for the Government of Mozambique (GoM) and its partners, such as the United Kingdom's Department for International Development, should revolve around development models (the what) and institutional capabilities (the how). In selecting the most appropriate development model for Mozambique, the government could follow a combination of an agro-processing-based transformation model, an Indonesia-style natural resources cum diversification transformation model and a Mauritius/Ethiopia model of diversification into manufacturing. At the heart of all of these development models lies a targeted push to industrialisation, involving an accelerated shift of labour and other resources out of low-productivity agricultural or extractive activities and into higher-productivity activities in agro-industry or manufacturing.

Choosing an appropriate model needs to be followed by a policy focus on general constraints across all models: 1) improvement of the regulatory framework, including more consistent investment policy, more streamlined trade facilitation, financial sector reform and better land policy; 2) support for transportation infrastructure and to improve the availability and quality of processing facilities; and 3) improvements in dialogue with business. Public–private dialogue around industrialisation is key. Effective mechanisms need to be in place to facilitate this dialogue and, at the same time, build trust between the public and private sectors and allow the GoM to learn with the private sector to address initial and emerging constraints.

But this general approach needs to be complemented by a range of sectoral policies. In agro-processing, the GoM could focus on improving the efficiency of downstream linkages to processing facilities, for instance by improving the fragmented system of collection, drying, storage and delivery of maize; in construction, the GoM could focus on building local capabilities, including through better and cheaper access to finance; and in forestry, the government could focus on investing in infrastructure and facilities to support further processing, and on further skills development. It is also important to promote innovation and move into modern sectors such as manufacturing. The GoM will need to determine what role it will play in addressing both the general and the sector-specific constraints to economic transformation. In some instances, it may opt to undertake horizontal or sector-specific interventions directly; in others, it may be more efficient for the government to facilitate the design and implementation of interventions by the private sector or through donor support programmes.

The GoM should work in close collaboration with the private sector to develop a shared vision for economic transformation. The development vision around Mozambique's transformation path still needs to be built up in a nation-building project (Ansu et al., 2016b). Effective collaboration between the public and private sectors is also necessary in the implementation of programmes and strategies to support this transformation. The GoM could look to examples in Vietnam (the Vietnam Business Forum), Malaysia (Pemandu and Permudah platforms) and Mauritius (Joint Economic Council), where successful institutional arrangements have been created to enable such collaboration and coordinate public and

private actors to facilitate key interventions for economic transformation (see McMillan et al. (2017) and Balchin and te Velde (2017) for further details of the role played by the Joint Economic Council in Mauritius).

Improved institutional capabilities are also required to make Mozambique's transformation vision a reality. There are a range of possibilities to support this process. One possible intervention could focus on enhancing capacities in the Ministry of Economy and Finance, especially within the National Directorate of Economic and Financial Studies, to analyse, assess, and guide transformation. A possible further step would be to align the objectives of the newly established Agency for Investment and Export Promotion – created by merging the Investment Promotion Centre, the Office of Economic Zones of Accelerated Development and the Export Promotion Institute – with this new development vision. Further discussion of the most effective and urgent interventions is needed to move the transformation process forward.

**Donors such as the Department for International Development** already have wide-ranging portfolios of projects, including those targeted at agri-business, small and medium enterprises (SMEs) and the oil and gas sectors, or at horizontal issues such as jobs, finance or infrastructure, with special attention to the position of rural, female and young groups. The discussion in this paper provides some pointers to possible gaps in the support to industrialisation and high-productivity services, for example in relation to infrastructure around SME development and the need for linkage policy. There may also be opportunities for Mozambique's development partners to engage in institutional support for key ministries and agencies tasked with designing and implementing a distinctly Mozambican transformation and job creation strategy.

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#### ACRONYMS AND ABBREVIATIONS

**AfDB** African Development Bank

African Growth and Opportunity Act **AGOA** 

**APIEX** Agency for Investment and Export Promotion

Banco de Moçambique **BDM** 

**BERF Business Environment Reform Facility** 

Bertelsmann Stiftung's Transformation Index BTI

CIP **Public Integrity Centre** 

CPI **Investment Promotion Centre** 

CTA Confederation of Business Associations of Mozambique

Danida Danish International Development Agency **DEEF** Directorate of Economic and Financial Studies Department for International Development **DFID DUAT** Direito do Uso e Aproveitamento da Terra

**ECI Economic Complexity Index** EIU **Economist Intelligence Unit** 

**ERD** European Report on Development

FDI foreign direct investment

**GAZEDA** Office of Economic Zones of Accelerated Development

**GDP** gross domestic product

**GDS** Global Development Solutions

German Agency for International Cooperation GIZ

Government of Mozambique GoM

**GVA** gross value added **GVC** global value chain

HDI Human Development Index

**ICT** information and communication technology

**IFC** International Finance Corporation

**IGC** International Growth Centre ILO International Labour Organization IMF International Monetary Fund

**Export Promotion Institute IPEX JOBA** Skills for Employment KfW German Development Bank

LNG liquefied natural gas

MAM Mozambique Asset Management MFF Ministry of Economy and Finance MIC Ministry of Industry and Commerce **MPD** Ministry of Planning and Development **MSMEs** micro, small and medium-sized enterprises

NEP National Employment Policy

Norad Norwegian Agency for Development Cooperation

**OECD** Organisation for Economic Co-operation and Development

public and publicly guaranteed **PPG** 

PPP purchasing power parity

Swiss Agency for Development and Cooperation SDC

#### **ECONOMIC TRANSFORMATION AND JOB CREATION IN MOZAMBIQUE**

SEZ special economic zone

SET Supporting Economic Transformation

Sida Swedish International Development Cooperation Agency

SMEs small and medium enterprises

SOE state-owned enterprise
SOGA Skills for Oil and Gas Africa

SSA sub-Saharan Africa SWF sovereign wealth fund

TVET technical vocational education and training

UK United Kingdom UN United Nations

UNCTAD UN Conference on Trade and Development

UNDP UN Development Programme

UNSD UN Statistics Division

US United States

USAID US Agency for International Development

VAT value added tax

WDI World Development Indicators

WESO World Employment and Social Outlook

#### 1. INTRODUCTION

Mozambique has potentially good prospects for diversifying production, advancing industrialisation, promoting economic transformation and creating jobs for the large number of young people entering the labour market – for example by using considerable mineral reserves, vast arable land, extensive coastline and harbours, and future revenues from recent megaprojects in coal and gas. Unfortunately, business as usual will not be enough to reach long-term development aims or indeed get Mozambique out of its current situation.

There is no shortage of advice on the diagnosis and proposed solutions in Mozambique. This paper synthesises 30 recent studies¹ to understand commonalities and differences on promising sectors and value chains in Mozambique, binding constraints to developing these activities, and policies that have been suggested to achieve these. Thus, rather than undertaking new analysis, this synthesis paper reflects on existing analyses broadly related to industrialisation and economic transformation in Mozambique in order to provide a base from which to move forward on the specifics of *how to* transform the economy. Using this information, together with insights from interviews with key stakeholders in Mozambique, the paper proposes next steps for the Government of Mozambique (GoM) and its development partners to facilitate economic transformation and job creation in Mozambique.

Transforming the economy is necessary to boost the quality of economic growth in Mozambique (to make it less skewed and more inclusive), generate sustained increases in productive employment and facilitate a long-term, sustainable and inclusive reduction in poverty. The economic transformation process in Mozambique will involve moving labour and other resources from lower- to higher-productivity activities, through both shifting resources between sectors to higher-value activities (e.g. from agriculture to manufacturing) and moving resources to higher value-activities within sectors (e.g. through moving resources out of low-value, low-productivity subsistence farming and into high-value crop farming feeding into sophisticated value chains) (McMillan et al., 2017). Economic transformation will result in a more diversified Mozambican economy, characterised by more subsectors and increasingly complex productive activities and greater levels of domestic value addition in trade. As the economy transforms, Mozambican firms will acquire new productive capabilities and become more competitive in overseas export markets. The economic transformation process will help generate income broadly across the income distribution, result in growth that is more robust against price shocks and price cycles and create more opportunities for future economic growth in Mozambique (ibid.).

The structure of this paper is as follows. Section 2 discusses the major development challenges facing Mozambique and how they affect the prospects for economic transformation and job creation. It discusses the challenging short-term macroeconomic situation as well as the lack of a high-quality development path since the 1990s, which has held back structural change and job creation. There also remain large institutional challenges, ranging from inefficient use of funds to lack of coordination among ministries.

Section 3 discusses the promising sectors from the perspective of transformation and job creation, based on the available evidence over the past five to 10 years. We look at commonalities and differences. We find there is reasonable consensus about the sectors that can help Mozambique's transformation. Overall, the agro-processing, construction and forestry sectors are the most widely cited as providing promising avenues for future value addition and employment creation. Manufacturing is generally given less attention, outside of the agro-processing sub-sector and some emphasis on the potential to develop

1

<sup>&</sup>lt;sup>1</sup> These studies are Baloyi and Zengeni (2015); BTI (2016); Castel-Branco (2002, 2014); Coughlin (2015); Cruz et al. (2014); Dutch Ministry of Economic Affairs (2014); Friedrich Ebert Stiftung (2013); GDS (2005); IGC (2012, 2015); ILO Lab (nd); IMF (2016); InfoDev (2013); Jones and Tarp (2016); Krause and Kaufmann (2011); Let's Work Partnership (2016, forthcoming); Nucifora and da Silva (2011); OECD (2013); Smart and Hanlon (2014); Technoserve (2016); UNCTAD (2012); USAID (2013b, 2015, 2016); Wagstaff and Maennling (2009); World Bank (2016c, 2016d, 2016e). The studies were selected following a literature survey and discussions with DFID, IFC, BERF, IGC and others.

the garment industry. Similarly, mechanical engineering is given relatively little attention in the literature, despite the likelihood that it will grow immensely with the forthcoming investments in steel, fertiliser, gas and energy generation. The importance of mechanical engineering is, however, recognised in Mozambique's recently approved *Industrial Policy and Strategy 2016-2025*.

Section 4 then discusses the binding constraints to development in these sectors. The binding economic, political and institutional constraints to economic transformation and job creation are also well known.

**Section 5 summarises the range of proposed policies** – both horizontal (cross-sectoral) policies to improve fundamentals and targeted (sector-specific) interventions – to create jobs and promote economic transformation in Mozambique.

**Section 6 concludes by proposing next steps for two types of stakeholders:** 1) the GoM; and 2) its partners and donors such as the UK Department for International Development (DFID).

#### 2. DEVELOPMENT CHALLENGES IN MOZAMBIQUE

This section reviews the major development challenges facing Mozambique and how they affect economic transformation and job creation. A succession of macroeconomic shocks is currently having a large impact on Mozambique (Section 2.1). We further find over the longer term that Mozambique has grown but not transformed fundamentally or created enough jobs for the 420,000 new labour market entrants each year (Section 2.2). So far, we have not yet seen the emergence of an integrated, long-term agenda for development and economic transformation in Mozambique or a shared vision of which development models to prioritise (Section 2.3); even if one or several models were favoured, each would face severe implementation and institutional gaps (Section 2.4).

### 2.1 MOZAMBIQUE HAS RECENTLY BEEN AFFECTED BY A SERIES OF MAJOR ECONOMIC SHOCKS

Mozambique's recent macroeconomic challenges could hamper its ability to engage in economic transformation. The GoM's near-term priority is to restore macroeconomic stability, given that it is in default on some of its debt obligations: it is now known to have an unsustainable debt burden, since previously undisclosed external debt guarantees of roughly \$1.4 bn² (11% of gross domestic product (GDP) recently came to light (World Bank, 2016b). Subsequent suspension of the International Monetary Fund's (IMF) programme in April 2016 led to deterioration in investor confidence and foreign investment. Sharp depreciation in the metical has also triggered an inflation shock.

Discussions with the IMF for a new programme are predicated, in part, on fiscal and monetary tightening to control inflation, which currently stands at roughly 20%, and on implementation of the recommendations of the ongoing audit of public borrowing. The extent to which an IMF programme will depend on the full implementation of the recommendations is not clear. Thus far, it has focused on satisfactory completion as an initial condition. Until this is complete, progress in finalising the IMF programme and access to international investment could remain limited. Weak export earnings and the inability of state-owned companies to service their liabilities could undermine the GoM's ability to finance growth. This could lead to further credit tightening that could hamper Mozambique's development goals.

<sup>&</sup>lt;sup>2</sup> http://www.imf.org/en/news/articles/2015/09/14/01/49/pr16184

#### DEBT SUSTAINABILITY IS A PRIMARY MACROECONOMIC RISK

The ongoing risk of debt default will hinder the GoM's ability to access international finance at affordable terms and obtain the foreign investment it needs to promote economic transformation and diversification into non-extractive sectors. Mozambique's fiscal challenges are significant in light of its previously undisclosed debt and the challenging negotiations ahead with its creditors and with the IMF. In light of this. therefore, the GoM has not only limited ability to raise finance but also restricted means to pay back existing commitments. The risk of further sovereign debt default on coupon payments will persist (Coppola, 2017). The fiscal deficit is projected to have accelerated from 5% of GDP in 2015 to 8.9% of GDP by the end of 2016 (EIU, 2016).3

#### MOZAMBIQUE'S TWIN DEFICITS

The persistence of Mozambique's twin deficits in its current and fiscal accounts could limit the resources available in aid of growth in new sectors. At roughly 39% of GDP, its current account deficit is one of Africa's largest (Figure 1). Its high dependence on external finance at a time of low international investor confidence is likely to limit the scope for new investments in the non-extractive sector. Although recently the current account has narrowed slightly, this has been driven largely by a collapse in imports, which are expected to have fallen by 33% between 2015 and 2016. This compares with an 8% drop in exports over the same period, signifying little evidence of an overall competitiveness boost to exports from the lower metical (World Bank, 2016b).

Looking ahead, further reductions in the current account are likely to be driven by a reduction in Mozambique's import bill, although the strengthening of the metical may limit this somewhat. Mozambique's external funding for investments, such as foreign direct investment (FDI), remains largely dependent on resource-intensive extractive sectors (coal and gas). And yet this investment has also been in decline, although an uptick is ultimately expected by international investors. Imported consumer goods have continued to decline, including basic imports such as cereals, sugar and cooking oil, along with items such as imported vehicles (World Bank, 2016a). However, an upturn is increasingly likely for imported capital inputs to investment following recent progress regarding the financial investment decision for gas production in the Rovuma basin.

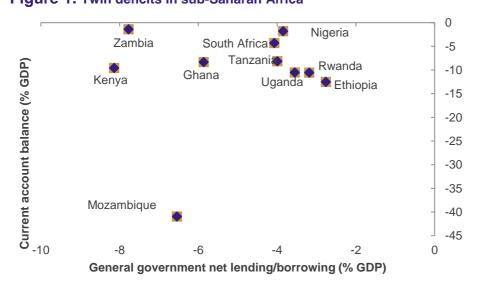


Figure 1. Twin deficits in sub-Saharan Africa

Source: WDI.

<sup>&</sup>lt;sup>3</sup> The fiscal deficit figures exclude grants.

#### BROADER MONETARY AND MACROECONOMIC RISKS

As inflation increases and economic activity decelerates in Mozambique, monetary policy tightening, largely in the form of higher interest rates, is likely to continue. The Banco de Moçambique (BDM) has already raised its policy rate eight times since October 2015: this could have knock-on effects on the availability of credit and the cost of borrowing. BDM policy has not significantly stemmed the fall in its reserves. Additionally, shortfalls in its balance of payments financing suggest continued downside risks to its reserve position. The metical's 40% depreciation in 2016 has triggered a significant inflation shock in light of Mozambique's high import dependence. The metical's weakness in 2016 has been at par with other African commodity exporters, including Nigeria and Zambia, which have also seen terms-of-trade shocks.

#### THE DEBT SPIRAL COULD EXACERBATE SYSTEMIC FINANCIAL RISKS

Even in the absence of its debt problems, access to credit has been a constraint to Mozambique's prospects for economic transformation. Access to finance is a significant constraint for certain sectors and for micro, small and medium-sized enterprises (MSMEs). Agriculture contributes over 25% of GDP. And yet the sector has access to only approximately 5% of total lending. Moreover, 75% of Mozambique's MSME owners indicate that they do not use any formal or informal financial services (Finmark Trust, 2012). With an external debt burden at high levels, limited and costly access to credit is likely to continue to hinder prospects for broader-based economic growth.

Any transmission of shocks from international banks that have a presence in Mozambique could also lead to domestic financial instability and credit tightening for firms. Instability is also likely to originate from within the domestic economy. Of the country's 19 banks, the largest five account for 95% of the country's banking assets and dominate overall lending. Moreover, the divergence between deposits and the low level of credit indicates that the financial sector has not yet effectively channelled resources to the private sector; this, in turn, is likely to slow the growth of domestic industry and inhibit economic diversification. The risk of domestic bank failures, such as that of Nosso Banco, signifies possible contagion from the country's sovereign credit pressures and could further hinder the prospects of restoring international funding for the foreseeable future.

#### MOZAMBIQUE'S EXPOSURE TO THE COMMODITY PRICE SHOCK

Mozambique's exposure to the global commodity price slowdown underscores the importance of economic transformation. The broader growth slowdown in Mozambique's economy has also owed, in part, to the downturn in global commodity prices: Mozambique's terms of trade have continued to deteriorate to multidecade lows, with weaker revenues linked to falling aluminium and coal prices. Mozambique's extractive and manufacturing sectors showed a 60% decrease in their contribution to growth in the first three quarters of 2016 (World Bank, 2016a). Equally, Mozambique is likely to be exposed to such shocks in the future. And yet its growth prospects continue to be linked to its extractive industry: longer-term economic growth prospects are disproportionately tied to its liquid natural gas sector, with little indication of diversification into non-extractives.

#### MOZAMBIQUE'S POLICY AGENDA AND MACROECONOMIC OUTLOOK

The overwhelming policy focus on debt restructuring and the likelihood of little fiscal leeway for spending will mean that other policy priorities, such as those pertaining to economic transformation, may not realistically garner enough attention. The GoM's fiscal policy response in the second half of 2016 was marked by the revised budget for 2016 taking into account previously undisclosed debt, and by the initiation of debt restructuring talks with creditors. Both signify some willingness to tackle the debt burden. However, given the depth of Mozambique's financial crisis and its dependence on external capital for growth, the need to restore and maintain economic stability could continue beyond 2017 at the expense of longer-term development policy.

Mozambique's medium-term prospects are more positive and are linked to its gas sector. The country's recent article IV consultation highlights that spillover from its gas sector is likely to be game-changing for growth, with GDP growth estimates projected as high as 25% a year for 3-4 years in the early 2020s (IMF, 2015). This growth boost could be catalytic for Mozambique's economic transformation. This depends both on how policy-makers employ the rents and on the degree to which the real exchange rate is protected from undue appreciation. Windfall-related exchange rate appreciation would influence relative prices in the economy, potentially causing contractionary effects in different sectors, with Mozambique's agriculture sector typically vulnerable to 'Dutch disease' effects (Biggs, 2012). In employing resource rents, a well-managed sovereign wealth fund (SWF) would both build an asset base and invest back into the domestic economy, to fix infrastructure deficits and increase the productive potential of the rural poor, through transformative linkages and capitalisation programs. This would, in turn, mitigate any 'Dutch disease' effects stemming from Mozambique's gas sector.

### 2.2 MOZAMBIQUE HAS NOT DEVELOPED STRUCTURALLY OR CREATED SUFFICIENT JOBS FOR INCLUSIVE GROWTH

The Mozambican economy has grown substantially since 1990, with real GDP doubling since 2005 (to \$14.3 billion in 2015) (World Development Indicators (WDI) data). Annual GDP growth rates have generally remained in the range of 6-7% over the past decade and averaged 7.4% between 2005 and 2015. Mozambique has had reasonably strong growth in recent years and over the long term; and possesses a range of comparative advantages – such as access to vast arable land, considerable and diverse mineral reserves, an extensive coastline and proximity to a sizable regional market – that can support different productive activities and provide opportunities for diverse and interlinked investments that support industrialisation (discussed further in the context of promising sectors (including manufacturing) for Mozambique in section 3). Yet despite this, Mozambique has changed little structurally and has not created sufficient jobs for inclusive growth.

GDP per capita levels in Mozambique are low, at around \$1,120 in 2015 (purchasing power parity (PPP), constant 2011 US\$) (WDI data), and well below both the equivalent levels in comparable natural resource-based economies (e.g. Botswana, Indonesia, Nigeria and Tanzania) and the average across sub-Saharan Africa (SSA) (Figure 2). Moreover, Mozambique has made little progress in bridging the gap in GDP per capita with these countries over the past 25 years.

Mozambique also faces a major employment challenge. The unemployment rate currently stands at 27% (USAID, 2015), and of those employed, only 6% are employed in the formal sector and only 3% are active in the private sector (Let's Work Partnership, forthcoming). As a consequence, the informal economy is estimated to absorb 68% to 95% of the total labour force (ibid). Moreover, many of the existing jobs are in low-productivity or low-income-earning activities. According to the Let's Work Partnership (forthcoming), as much as 80% of the working population earns less than \$2 a day.

At the same time, the economically active population in Mozambique is expanding at around 3% annually, and as many as 420,000 young people enter the labour market each year (Walker, 2016). Yet the number of jobs the private sector creates – around 18,000 new jobs each year – is limited (BTI, 2016). There is thus an urgent need to create sufficient jobs for inclusive growth.

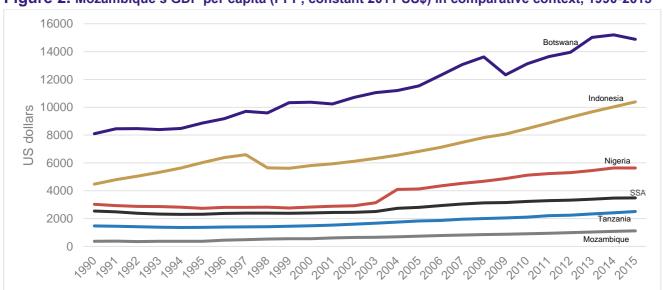


Figure 2. Mozambique's GDP per capita (PPP, constant 2011 US\$) in comparative context, 1990-2015

Note: SSA is the average across all SSA countries.

Source: WDI.

There has generally been little structural transformation of the economy from agriculture into industry. Mozambique is still a predominantly agricultural country. The agriculture sector accounts for around 24.6% of total gross value added (GVA), although this relative share has declined since 1991. The sector also contributes 75% of total employment (Table 1), but most of the employment in agriculture is in low-productivity jobs with low earnings (Walker, 2016).

Table 1. Employment by sector (% of total employment) in Mozambique, 1991-2015

Economic activity	Employment by sector (%)				
	1991	2000	2005	2010	2015 <sup>p</sup>
Agriculture	81.3	79.3	78.3	77.3	75.3
Mining and utilities	0.6	0.6	0.6	0.6	0.5
Manufacturing	0.7	0.7	0.7	0.6	0.6
Construction	1.6	2.8	2.0	2.1	3.1
Wholesale, retail, hotels	1.9	2.1	2.0	2.1	2.2
Transport, storage, communications	0.8	0.9	1.0	1.1	1.2
Other	13.1	13.7	15.3	16.2	17.1
Total	100	100	100	100	100

Note: The sectoral employment figures for 2015 are International Labour Organization (ILO) projections.

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using ILO WESO – Trends 2015 supporting dataset 'employment by sector and sex' (<a href="http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm">http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm</a>).

The share of manufacturing value added in GDP has declined steadily since 1975, and particularly after 2005 (Table 10 in Appendix II). In 2015, manufacturing accounted for less than 10% of total GVA in the economy. This share is lower than the SSA average and at a similar level to Nigeria's (another natural

resource-based economy), but higher than that of other natural resources-dependent economies such as Tanzania and Botswana (Figure 24 in Appendix II).

The manufacturing sector is a comparatively minor employer in Mozambique. In 2015, just 0.6% of the labour force was employed in manufacturing. This share has remained stagnant for more than two decades. Moreover, the share of manufacturing in employment is notably lower compared with that of other natural-resourced-based economies such as Tanzania (3%), Botswana, Nigeria (both 7%) and Indonesia (13%) as well as the average across SSA (5%) (Table 15 in Appendix II).

Over the past 25 years, the largest gains in terms of labour productivity growth have been recorded in the mining and utilities (at an annualised rate of 12.8%), construction (5.8%) and manufacturing (4.5%) sectors (Table 13 in Appendix II). Megaprojects have been an important driver of growth in labour productivity in these sectors, with labour productivity in megaprojects more than doubling since 1997 (World Bank, 2016d). Growth in labour productivity in the agriculture sector has been much more modest relative to the 1991 level. In 2015, labour productivity in the manufacturing sector was around 48 times higher than that in agriculture, and mining and utilities was 44 times more productive than agriculture (Table 14 in Appendix II). This is a key aspect of the transformation challenge in Mozambique: the bulk of employment is in agriculture, which has low productivity, and the productivity differential with other sectors is very large (Figure 3).

Recent (2005-2010) growth in manufacturing labour productivity in Mozambique has been slow. Moreover, the gap between relative productivity levels in the manufacturing and mining and utilities sectors has closed substantially since 1991, with the result that by 2015, manufacturing was only marginally more productive than mining and utilities.

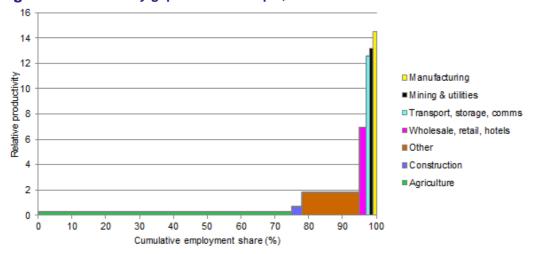


Figure 3. Productivity gaps in Mozambique, 2015

Notes: The relative productivity level is derived by calculating labour productivity levels (GVA at constant prices divided by number of persons employed per sector) and expressing the result as a ratio of total economy labour productivity.

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using UNSD National Accounts Main Aggregates data on 'gross value added by kind of economic activity'

(http://data.un.org/Data.aspx?d=SNAAMA&f=grID%3A201%3BcurrID%3ANCU%3BpcFlag%3A0) and ILO WESO – Trends 2015 supporting dataset 'employment by sector and sex' (http://www.ilo.org/global/research/global-reports/weso/2015/lang-en/index.htm).

Mozambique has made only limited progress in diversifying production and trade. Over the past few decades, the country's exports have become more concentrated, with fewer sectors driving export revenues (Figure 17 in Appendix II), leading to lower diversification (although Mozambique's number of export partners has increased). The bulk of exports are concentrated in natural resource-based products,

and most raw materials or products undergo relatively little value added processing. Moreover, exports of services are not very dynamic, and account for only 17% of total goods and services exports (Figure 16 in Appendix II).

Very little progress has been made in building new capabilities to shift production into more complex products with higher levels of sophistication. In fact, Mozambique's level of economic complexity, as measured by the value of the Economic Complexity Index (ECI), has declined since 1991, suggesting a relative decline in product diversity and production capabilities (Figure 25 in Appendix II). Mozambique's ECI value is below the SSA average as well as below those of some comparable natural resource-based economies (e.g. Botswana, Tanzania and Indonesia). Given Mozambique's high level of natural resource dependence (even in comparison with other resource-based economies such as Indonesia or Tanzania, Figure 4) and low economic complexity, much needs to be done to diversify into higher value added, more complex and specialised production.

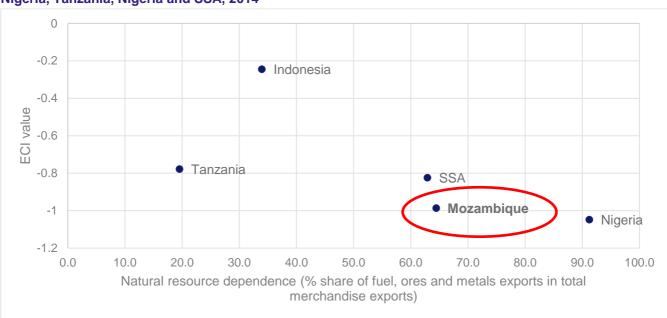


Figure 4. Economic complexity and level of natural resource dependence in Mozambique, Indonesia, Nigeria, Tanzania, Nigeria and SSA, 2014

Note: The SSA average is calculated over all countries for which data are available across the whole 1991-2014 period (it excludes Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Lesotho, Namibia, Niger, Réunion, Rwanda, São Tome and Príncipe, Seychelles, Sierra Leone, Somalia, South Sudan, Swaziland, The Gambia, Togo and Western Sahara). Ores and metals comprise the commodities in SITC sections 27 (crude fertiliser, minerals not elsewhere specified); 28 (metalliferous ores, scrap); and 68 (non-ferrous metals).

Source: WDI and Atlas of Economic Complexity (http://atlas.media.mit.edu/en/rankings/country/).

In summary, although Mozambique has made some attempts to boost industrialisation – for instance through the development of industrial clusters and attempts to build light manufacturing capacity around agro-processing – the contribution of manufacturing, and industry in general, to structural transformation has been limited (Castel-Branco, 2003; Jones and Tarp, 2012; Rand and Tarp, 2013; Cruz et al., 2014). The result has been little diversification into higher-productivity industrial activities or manufacturing, and a lack of linkages from industry to agriculture, fisheries and other natural resource-based sectors.

### 2.3 MOZAMBIQUE IS STRUGGLING TO FIND THE RIGHT LONG-TERM APPROACH TO DEVELOPMENT

Our discussions with key stakeholders in the public and private sectors in Mozambique highlighted the reality that there is currently no integrated agenda for development and economic transformation in Mozambique. A multitude of different sectoral strategies have been developed, many of which are not sufficiently informed by a deep knowledge of conditions on the ground. Instead, many strategies are written without a real financial and technical understanding of private business and, therefore, lack practical relevance. There is also a feeling that planning and discussions concerning Mozambique's development over the next 20-25 years are too closely linked to budgets (and are, hence, influenced by concerns about budget constraints), which does not allow for visionary thinking around Mozambique's future development. There appears to be an urgent need to develop a shared vision for Mozambique's economic transformation and to put in place an effective, more cohesive and capable function within government to ensure coordination, discipline and close collaboration with the private sector in the identification, planning and execution of this shared vision.

A key question for Mozambique is how to proceed. Answering this entails a discussion of what development model Mozambique can follow. A range of transformation models could be used as examples. We sketch four main models of economic transformation below, discuss country examples and consider the possible implications for Mozambique.

#### AGRICULTURE- AND AGRO-PROCESSING-BASED ECONOMIC TRANSFORMATION

Even though agriculture plays a small role in aggregate data in fully transformed countries, and is of low productivity in African countries (Gollin et al., 2013), it is probably necessary to continue down the agricultural route in order to graduate to other sectors. Growth in agricultural productivity can, itself, be a major short- to medium-term driver of poverty reduction in low-income countries. Empirical evidence shows that where there has been rapid expansion in agricultural productivity there have also been 'growth miracles,' where per capita incomes doubled in less than a decade (Gollin et al., 2007). Even though the barriers are high (high costs to increase productivity and international trade barriers), the long-term benefits, such as reduced poverty and increased safety nets for the poor (urban and rural), can outweigh costs but require strong connections to be made between rural and urban economies (Timmer and Akkus, 2008). Further, agro-processing has strong backward linkages and multiplier effects to agriculture, thereby heightening the importance of value chain development that involves good quality agriculture, processing and marketing.

Agriculture plays an important role in Mozambique, being responsible for 75% of employment and 25% of value added. The potential for agriculture to help create employment and generate income in Mozambique, coupled with the fact that the majority of Mozambicans work in rural areas and in agriculture, motivated several interviewees to advocate that economic transformation should start with agriculture. This is in keeping with wider projections by Fox et al. (2013) suggesting agriculture will continue to play a key role in African employment in the coming decades, so the question becomes how agriculture can best be transformed to support other transformations (e.g. how quickly will the agricultural employment share be reduced, and how can the spillovers of such transition be maximised?). In Africa, countries such as Tanzania, Uganda and Zambia can use their comparative advantage in land and depend in part on raising agricultural productivity and agro-processing for the promotion of economic transformation. Even some developed countries such as Denmark and New Zealand are still heavily dependent on agriculture.

But other models are needed too. The existence of large productivity gaps between sectors at low levels of income (the current situation in Mozambique) suggests there are significant opportunities for structural change (movements across sectors) to raise productivity. This means that at lower levels of income, countries can increase productivity by moving across sectors and away from agriculture; whereas at higher levels of income, the increase in productivity may be associated more with improvements within sectors.

This might include functional and process upgrading in value chains. The productivity differentials between sectors decrease as levels of income increase (see Figure 5).

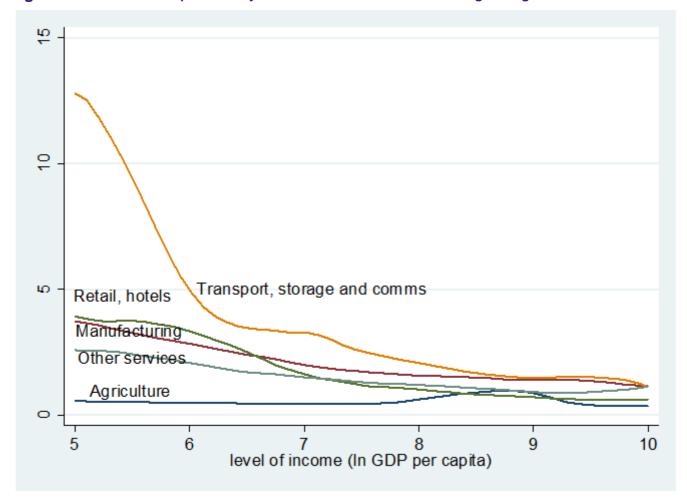


Figure 5. Relative labour productivity levels for different sectors converge at higher levels of income

Source: UN and ILO database, data available from http://set.odi.org/

#### NATURAL RESOURCE-DEPENDENT COUNTRIES

The bulk of Mozambique's exports are still concentrated in natural resource-based products, and mostly raw materials or products that have undergone little value added processing prior to export (see Appendix II). Natural resources can be a blessing or a curse. We find there are three differing types of natural resource-dependent countries, with different degrees of success:

- 1. Some countries are not using the revenues from natural resources well and fail to invest in productive capacities, while GDP per capita fails to grow significantly, resulting in a lack of diversification, lack of structural change, low employment creation and very weak quality of growth (Nigeria is one example; see te Velde et al., 2016). Figure 4 above shows how natural resource-dependent countries are associated with low levels of economic complexity, and Mozambique has one of the lowest ECI scores.
- 2. Some countries use natural resources well and invest revenues in infrastructure and grow, yet fail to transform significantly. For example, Botswana is well governed and has been able to grow fast for decades despite its dependence on natural resources. But while growth has been high, its quality is insufficient given the lack of diversification and job creation.

3. A final set of natural resource-dependent countries use the revenues to transform their economies. Indonesia, for example, was dependent on oil but diversified its economy in the 1980s and 1990s by attracting manufacturing investment and employment, and more recently diversified into services (see McMillan et al., 2017 for a detailed analysis). The complexity of such activities has increased markedly over time. Malaysia and Chile are other examples of developing countries with rich initial endowments of natural resources that have successfully diversified. Through substantial investment in technology and infrastructure, and by implementing targeted policies to reduce labour costs, upgrade skills and boost competitiveness, Malaysia managed to shift towards manufacturing and exporting higher-technology products (Gelb, 2010). Chile took a different route, placing emphasis on higher value primary-based products in order to develop into a dynamic exporter of diversified commodities (ibid).

The main difference between a natural resource curse and a natural resource blessing is the ability of policies and institutions to use revenues well and upgrade economic activities around the investment. This includes using rents for productive investments and to build competitiveness, capacity and technological capabilities in industrial sectors, as well as using the potential of local content and linkages to stimulate manufacturing activities. These sorts of measures can play an important role in mitigating the possibility of any adverse 'Dutch disease' effects from expanding natural resource-based exports on the competitiveness of non-natural resource sectors.<sup>4</sup>

#### MANUFACTURING-LED TRANSFORMATION

Very little attention is given to manufacturing in Mozambique. The sector is responsible for less than 1% of jobs; and manufacturing value added accounted for just 10% of GDP in 2015 (WDI data). That does not mean the situation cannot change over time. There are two ways in which countries have prioritised manufacturing. The first involves focusing on export-oriented manufacturing by harnessing trade and openness to capitalise on opportunities to supply international markets for manufactures. An alternative approach centres on attempting to build a manufacturing base by protecting domestic manufacturing industries and firms, but this generally leads to higher prices for consumers and results in inefficiencies that ultimately undermine the competitiveness of domestic industries. Korea and Singapore are good examples of the traditional Asian style of transformation from agriculture to manufacturing and services. Vietnam is a more recent example of increased manufacturing. Mauritius is the only African country that has been successful in this type of transformation (Ansu et al., 2016b). Recently, the manufacturing sector in Rwanda and especially that in Ethiopia have also grown fast.

So far, export-led manufacturing is the only proven model of transformation and employment. However, recently the manufacturing-led transformation model has also been under pressure (Rodrik, 2016), as the sector is becoming increasingly capital- and technology-intensive and less employment-intensive, and developed countries are beginning to insource. This may narrow the window of opportunity for countries such as Mozambique to follow a transformation model based on the development of capacity in labourintensive manufacturing. At the same time, however, while China has created large numbers of manufacturing jobs through special economic zones (SEZs), many of these jobs are expected to leave China over time as it transforms, offering opportunities for African countries too (Lin, 2012). Indeed, the 'rebalancing' underway in China towards domestic consumption and services, together with rising Chinese labour costs, may provide new opportunities for countries such as Mozambique to attract FDI into labourintensive manufacturing activities (but they will face strong competition from Asian countries such as Bangladesh, Cambodia and Vietnam). Attracting FDI can, in turn, help to kick-start export-oriented manufacturing (as evident from the recent growth in manufacturing in Ethiopia), by creating jobs, providing access to capital, improving competitiveness, supporting innovation and enhancing access to foreign technology and skills. The experience of countries such as Korea, Singapore, Mauritius, and more recently Rwanda and Ethiopia, suggest harnessing trade and openness will be key to capitalising on these opportunities for industrialisation. But governments need to be willing to solve problems facing investors

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<sup>&</sup>lt;sup>4</sup> The 'Dutch disease' phenomenon occurs when large inflows of foreign currency revenues (or expectations of future inflows of such revenues) from natural resources cause the domestic currency to appreciate, thereby adversely affecting the price competitiveness of exported products from other non-natural resource-based sectors.

through active engagement instead of being passive bystanders. Attracting Chinese investors can be followed by other investors over time, as is occurring in Ethiopia.

An important development associated with advancing globalisation over the past two decades has been the emergence of regional and global value chains (GVCs), which has resulted in an increasing share of trade in goods (including manufactures) occurring through international supply chains. This has been accompanied by fragmentation of international production processes and networks; and an expanding share of global trade now comprises trade in tasks rather than finished products. Countries in the East Asian region have benefited significantly from the development of regional supply chains and production networks, whereas African countries (including Mozambique) generally have a long way to go to better integrate into GVCs outside of the supply of primary inputs. Indeed, countries in Africa remain isolated from value chain activity in manufacturing sectors such as clothing and textiles (although Ethiopia, Kenya, the Seychelles, South Africa and Tanzania have made significant strides in integrating into GVCs). From a manufacturing perspective, the prospect of integrating into GVCs and specialising in specific stages of production can potentially provide a more rapid route to industrialisation for countries such as Mozambique, given that it implies joining rather than building manufacturing supply chains (Baldwin, 2013). This may embody lower capital and market entry requirements, and also makes it possible to target specific areas for skills upgrading. Moreover, specialising within manufacturing value chains can help countries to gradually acquire new capabilities and benefit from knowledge spillovers and access to more advanced technology.

A more protectionist model for manufacturing is also in operation on the African continent. For various reasons, some countries desire to protect their economies and aim to build up a manufacturing base behind protected walls. Indeed, Mozambique's new *Industrial Policy and Strategy 2016-2025* suggests increasing protectionism. This is unlikely to work in any sustained way. Exporting and openness confers major benefits (see e.g. Leipziger, 2015; te Velde et al., 2016). Exporting frequently needs imports – for instance to access high-quality and cheaper intermediate inputs. Consumers face higher prices with protectionism. It is, however, possible to think about a least damaging protectionist model where time-bound, targeted protectionist measures support those industries that already have some productive capacities (the infant-industry argument). Such measures only really work when they are used selectively in a well-governed environment.

#### SERVICES-LED ECONOMIC TRANSFORMATION

There are three different concepts of a services-led economic transformation strategy. First, a strategy for services at *the service* of the economy as a whole, including manufacturing and agriculture, means tackling many problems in low-income countries. Access to services is low in Africa generally (e.g. electrification rates), and where there is access the costs of services are high. For example, road freight, water and electricity services in African countries are twice as expensive as in other developing countries. High trade costs will hamper the development of (manufacturing and agriculture) value chains and economic transformation. Moreover, the interest rate spread (between deposit and lending rates) is currently 2 percentage points higher in SSA than in other developing countries (both low- and middle-income countries) (ERD, 2015) — an inefficient intermediation function will hinder transformation and diversification. Growth diagnostics and value chain analyses often find that specific service sectors are binding constraints to growth and development. Several studies find a positive link between the productivity of services and that of manufacturing (Hoekman and Shepherd, 2015) and between the productivity of services and that of agriculture (Doresh et al., 2010). The sections below also have examples of this in Mozambique.

The second services strategy is to maximise service export revenues and capital inflows, and see specific service sectors as contributing to growth in the scale of the economy (or as growth 'escalators') (Ghani and O'Connell, 2014) – but sometimes this is done without sufficiently considering the links to the rest of the economy. In this situation, the links to the wider economy and transformation are more complex. On the positive side, increased export revenues from, for example, information and communication technology

(ICT) or financial services are welcome. However, this will also attract more short-term capital, which could be risky and inflationary. Indeed, it would increase the real effective exchange rate and draw in resources such as skills, which would hamper the competitiveness of manufacturing and agriculture. Manufacturing is traditionally the main sector responsible for the diffusion of innovation and productivity change, but it has lost competitiveness and performed poorly in much of Africa. Kenya is often suggested as a country where services have grown much faster than manufacturing (Khanna et al., 2016). Mozambique's exports of services are not very dynamic, and constitute only 17% of total goods and services (Appendix II). Tourism is sometimes considered as an enclave industry with few linkages, but it can also be a major source of GDP, employment and foreign exchange as in Tanzania. Indeed, while the sector is currently relatively small in Mozambique – and estimated in earlier work by Jones (2010) to make only a moderate overall economic contribution (around 3-4% of GDP based on calculations from an adapted Social Accounting Matrix) - tourism could make a more significant contribution to economic development in Mozambique in the future. There is also potential to develop backward linkages from tourism to the rest of the economy, particularly to the food and beverages processing industry, agriculture and fisheries, and other services sectors (Jones, 2010). However, value chain and backward linkages from tourism to other sectors remain underdeveloped (Spenceley and Batey, 2011).

Some authors have pointed to a third services-led transformation concept, the agglomeration of low-skill informal services around urban areas. As people move out of agriculture, and migrate from rural to urban areas, the current type of industrialisation, especially in many African countries, creates insufficient numbers of jobs to absorb new labour market entrants (Rodrik's 'premature deindustrialisation'). These people end up in low-productivity services or are engaged in services activities with few productivity increases. We see that Africa has urbanised without urban jobs, whereas Asia urbanised with jobs. This also appears to be happening in Mozambique: a move away from agriculture into services that have low productivity and slow growth (see Appendix II).

A key discussion is how to move into high-productivity services or how to improve the productivity of services. Diao et al. (2017) discuss their new research on economic transformation, which has two implications for the role of the services sector in economic growth in developing economies. Focusing on recent growth accelerations, they argue that the services sector has contributed to labour productivity growth in developing economies through structural change (primarily in Africa) and through productivity improvements within the services sector (primarily in Latin America) and sometimes through both channels (primarily in East Asia). They also show that in many African countries, within-sector productivity growth in the services sector (and in most other sectors, with the exception of agriculture) has been weak and sometimes negative. Without more focus on within-sector productivity improvements in services (and manufacturing), it is suggested that the structural change-led growth path will peter out in Africa.

Table 2 summarises the discussion of development models. Mozambique is a natural resource-dependent country that has not used its resources well, and it must do better if it wants to transform and create jobs. It has not been able to move into manufacturing or high-productivity services, which it will have to do if it is to transform and create jobs (McMillan et al., 2017). We need to think more carefully about how Mozambique can use its natural resources better *and* transform the economy.

Table 2. Transformation role models for Mozambique

Major transformation models, based on	Specific details	Country examples	Mozambique
Agriculture			
	Agricultural productivity growth as a driver of productivity reduction	Several African countries	Weak agricultural growth and low agricultural productivity
	Agro-processing, with backward linkages and multiplier effects to agriculture		
	Agricultural value chains		
Natural resources			
	Resource curse	Nigeria	Present situation
	Blessing	Botswana	Not yet evidenced
	Diversifying and upgrading	Indonesia	Not yet evidenced
Manufacturing			
	Asia style	Korea, Singapore, Mauritius	Not yet evidenced
	Made-in/with protectionist tendencies	Nigeria	Not yet evidenced
Services			
	Services conducive to other sector (value chains)		Not yet evidenced
	Services as growth 'escalators'	Kenya	Not yet evidenced
	Premature deindustrialisation	Many African countries	Present situation

### 2.4 MOZAMBIQUE FACES SEVERE CHALLENGES IN COORDINATING AND IMPLEMENTING GOOD STRATEGIES

There is a lack of coordination and integration of development planning in Mozambique, which makes policy-making and implementation very difficult, even when development policies and strategies are known. Government ministries often introduce contradictory policies that undermine the work or strategies of other ministries. For instance, in late 2013 the Ministries of Health and Industry and Trade announced plans to introduce legislation banning the use of plastic packaging for alcoholic beverages – despite there being more than 20 alcoholic beverage companies using polyethylene terephthalate bottles in Mozambique, together with significant investments in plastic bottling factories and more than 10 local companies manufacturing these bottles for the industry (and the fact that there is no national glass industry in Mozambique) – in a decision seemingly at odds with the country's industrial policy strategy (CTA, 2014). This lack of coordination affects the work of many different agencies and is manifest in a variety of ways, for instance through a lack of engagement in the value chains of certain products; a lack of coordination around investment; and difficulties faced by the Office of Economic Zones of Accelerated Development (GAZEDA) in coordinating with other institutions to develop SEZs and industrial free zones.

Mozambique has a hierarchy of national and numerous sectoral and sub-sectoral strategies for economic development and spatial usage. Typically, these identify a set of developmental pillars and objectives and identify hundreds of 'priority' interventions and concomitant investments and policy or legal changes. For example, the *National Development Strategy* identifies four pillars for industrialisation: 1) development of human capital; 2) development of infrastructure to support industries; 3) research, innovation and technical

development; and 4) institutional articulation and coordination (Mozambique, 2014: 22-30). The recently approved *Industrial Policy and Strategy 2016-2025* identifies nine pillars (MIC, 2016: 28):

- infrastructure for economic development
- development of human resources
- entrepreneurial capacitation and protection of national industry
- access to adequate finance
- promotion of inter-industry linkages
- investment incentives for the industry sector
- innovation and access to technology, research and development
- definition of an adequate institutional model for promotion of industrial development.

Based on an analysis of various potential indicators of impact (e.g. jobs, exports, import substitution, ease of implementation, ability to stimulate linkages), the strategy also proposes a focus on seven priority industries, which, in truth, cover more than half of all manufacturing. In other words, nearly everything is a priority! Preferring hypothetical impact indicators to detailed industrial studies to spot opportunities and obstacles, the strategy is unable to provide any detailed guidance about how and when to implement its priorities. Moreover, similar to the national and other sectoral strategies, it provides no information about how and in what sequence these priorities would be implemented, nor any short-, medium- and long-term budgetary details – though an *Integrated Plan for Investments 2014-2017* lists the confirmed availability of finance for specific infrastructural projects (MPD, 2014). By default, many of the real priorities are determined year-to-year during the rush to finalise the ministerial budgetary negotiations with the Ministry of Economy and Finance (MEF).

Weaknesses in short-, medium- and long-term financial planning to coordinate and prioritise the sequential allocation of resources across multiple ministries to execute interrelated projects create inefficiencies and raise costs, while also hampering investment in industrial clusters and value chains. Development strategy without a clear commitment over time of the resources for its execution – and without strong central coordination and prioritisation of sectoral policies, interventions and investments – provides, at best, weak and sometimes contradictory guidance that guarantees conflicts, inefficiencies and failures. In Mozambique, poor coordination and delays to or non-execution of interventions to improve infrastructure or provide streamlined port and customs services have undermined the effectiveness of certain projects (e.g. Mozagrius, for farming) and hamstrung factories (e.g. Belita, for garments) (Coughlin, 2015).<sup>5</sup> Hanlon (2013: 9) cites one minister confirming that 'with the frenzy in the extractive industries, various ministries began to compete and act alone in an attempt to gain a lead. Each ministry seeks to offer more service than others. The result is the current lack of coordination.' Moreover, the ad hoc inter-ministerial committees convened to coordinate efforts around specific projects do not always operate effectively (Coughlin et al., 2013). Indeed,

the government's inability to synchronize well the policies and interventions of its ministries is especially significant at the central level. As the CEO of a large gas and petroleum investor averred, "ministries have little way to interact. Ministers will not intervene on any matter that touches another ministry beyond asking for a meeting." Thus, the inability to synchronize two or three interdependent industrial investments together with investments in rail and road transportation, social and health infrastructure, and timely education of the workforce is a critical problem. It hampers the government's ability to confront issues and take advantage of opportunities in a timely fashion and to convince investors that interdependent promises for the creation of skills, supplies and infrastructure will, in fact, be executed on time and as promised. Unless investors can trust that this will, in fact, occur and on time, the viability of simultaneous interlinked investments is precarious and the projects are apt to stall or never begin' (Coughlin et al., 2013: 67).

To overcome such awkward central and inter-ministerial inefficiencies, the National Development Strategy (2015-2035) advocates:

<sup>&</sup>lt;sup>5</sup> For more details about why Mozagrius failed, see Alberts and Öhlund (2001:1) and Åkesson et al. (2009: 12 and 4).

the creation of a Coordination Entity for the implementation of the ... [national strategy] coordinated by the Ministry of Planning and Development [MPD] and responding to the highest level of government (... the president and the prime minister). The Coordination Entity should resolve ... impasse[s] and implementation problems for the ... [strategy], assure effective coordination between the ... relevant institutions (ministries, agencies, provincial governments, etc.) and accelerate programs that have been delayed. This entity will also ... (i) control the goals in relation to defined and measurable objectives and (ii) guarantee the alignment of sectoral and territorial plans according to the priorities defined by the ... [national strategy]. The MPD will also be responsible for coordinating some institutions, i.e., programs supporting the implementation of the ... [national strategy], for example, the Integrated Program for Investments (for financing infrastructure and industry) and the program to assist directly the private sector and small and medium enterprises to ensure fulfilment of the goals identified in the [national strategy]' (Mozambique, 2014: 30).

In 2015, the MPD was merged into the new MEF, where the Directorate of Economic and Financial Studies (DEEF) guides the creation of the three-year rolling plans for the *Medium-Term Fiscal Scenario*[s], which are revised annually and encompass and guide the medium-term provincial, sectoral and programmatic allocation of budgetary receipts and expenditures (MEF, 2015). The consolidation of planning and budgetary control may bode 'a major shift in inter-ministerial power relations and improve strategic planning, especially if given backing and clear orientation by the President and Prime Minister and ample authority to realign ministerial budget allocations to achieve national strategic goals' (Coughlin, 2015: 16). As yet, however, the efficacy of the new arrangement and the necessity or not to further strengthen and otherwise improve the MEF's technical capacity and political power to align and coordinate inter-ministerial activities in support of major cross-sectoral programmes have not been studied.

Likewise, the capacity and effectiveness of the newly created Agency for Investment and Export Promotion (APIEX) – established by merging the Investment Promotion Centre (CPI), GAZEDA and the Export Promotion Institute (IPEX) – is not yet clear. The new agency, which will fall under the authority of the Ministry of Industry and Commerce, is currently in a transitional phase and will eventually subsume around 60 of the 160 staff from the three institutions it is replacing (with the remaining staff being transferred to other state entities). A key motivation for establishing the new agency was to eliminate confusion around the respective roles and mandates of the three institutions (CPI, GAZEDA and IPEX) in investment promotion and facilitation in Mozambique, and thereby address the problem of having too many agencies performing similar functions. The creation of APIEX will bring together the promotion of public and private investment and exports under the control of a single agency. This is an important step towards instilling an aligned and coordinated approach around an integrated and consistent agenda that promotes and facilitates public and private investment to support economic transformation. But the effectiveness of APIEX in performing such a lead role will only become clear once it is fully operational, and it may have specific technical assistance and capacity-building needs.

For its part, DEEF offers potential to kick-start the economic transformation process in Mozambique. Our previous research shows that many policies and institutions are associated with successful transformation experiences in Asia. They did many things right at the same time, ranging from skills development to infrastructure improvements and the mobilisation of finance (Ansu et al., 2016a, Leipziger, 2015). Whilst there is a lack of many such actions in Mozambique, it does not follow that nothing can or should be done. In fact, the evidence suggests that progress can be made by building on a successful entity or ministry. In the conclusion we will argue that DEEF could help to design and plan implementation strategies for economic transformation and make initial progress. However, before we do so, we will first focus on what needs to be done.

# 3. PROMISING SECTORS AND VALUE CHAINS FOR ECONOMIC TRANSFORMATION AND JOB CREATION

In this section, we synthesise information from a literature review of 30 key studies, focusing on the sectors and value chains (including important sectors for the development of backward and forward linkages within

industrial value chains) identified in these as promising for economic transformation and job creation in Mozambique. We highlight the core findings across the 30 studies and identify both commonalities and differences in views on the most promising sectors and value chains, as well as gaps (e.g. potentially promising sectors not emphasised in the studies reviewed).

Table 3 presents a summary of the promising sectors identified in key studies in the literature, highlighting the methodologies underpinning the identification of specific sectors and indicating the primary motivations provided in these studies for why the identified sectors are promising sectors for promoting economic transformation and job creation in the Mozambican context. There is variation across the studies in the methodologies used to identify promising sectors, with several studies relying on a review of previous literature and qualitative interviews or surveys. Others include some form of quantitative analysis, although the use of techniques such as product space analysis is limited to just a few studies.

Overall, the **agro-processing**, **construction** and **forestry** sectors are the most widely cited as providing promising avenues for future value addition and employment creation. Manufacturing is generally given less attention, outside of the agro-processing sub-sector and some emphasis on the potential to develop the garment industry (see GDS, 2005; Wagstaff and Maennling, 2009). Similarly, mechanical engineering is given relatively little attention in the literature, despite it being recognised in Mozambique's new industrial strategy and the likelihood that it will grow immensely with the forthcoming investments in steel, fertiliser, gas and energy generation. There are, however, some areas of overlap between the promising sectors identified in the literature and those prioritised in Mozambique's *Industrial Policy and Strategy 2016-2025* (see Section 5.1).<sup>6</sup> We discuss each of the promising sectors highlighted in the literature review in greater detail below.

Table 3. Summary of promising sectors identified in key studies in the literature

Identified sectors	Methodology used	<b>Motivation for inclusion</b>	Source(s)
Agro-business	Literature review, qualitative interviews and quantitative analysis	Job creation, diversification, inclusive growth, and value addition (simple post- harvest handling)	Dutch Ministry of Economic Affairs (2014) UNCTAD (2012) GDS (2005) World Bank (2016d) OECD (2013)
(A) Pigeon pea, soy, sesame	Literature review, qualitative interviews and quantitative analysis	Nutrition potential, farmers' income (and rural job creation for pigeon pea)	USAID (2016)
(B) Fruit- processing, poultry, soybeans, sesame and cashew	Literature review, interviews	Potential of value chain development into processing (linking smallholder farmers to processors through contract farming and outgrower schemes)	Let's Work Partnership (forthcoming)

<sup>&</sup>lt;sup>6</sup> The GoM has also made recent moves to promote the iron and steel, fertiliser and gas sectors in Mozambique. For example, late last year the government approved Capital Iron & Steel Ltd's project including its Zona Franca. Moreover, recently the government has launched a request for proposals to build a fertiliser factory and some gas-based power stations. These investments have the potential to create significant linkages within the economy as well as income-multiplier effects.

Identified sectors	Methodology used	Motivation for inclusion	Source(s)
(C) Maize, horticulture, pigeon pea, sesame seed and poultry	Literature review, qualitative interviews and quantitative analysis	Small-scale job creation (in poultry pilot: 25 aggregator workers over two years, with remaining 1,775 being farmers; maize mills pilot: 200 machinery operators and 5,600 total staff)	Technoserve (2016)
(D) Cassava, cashew, soybeans, pigeon pea	Literature review and secondary data analysis	Cashew: job creation (for smallholder farmers in rural areas, particularly women) and labour-intensive processing (manual shelling with hammer, semi-mechanical cutting, mechanical cutting, impact shelling)  Cassava: employment (smallholder production) and processing (e.g. cassava-based beer)  Soybeans: employment	Let's Work Partnership (2016)
		(smallholders) and rapid productivity growth (if technical skills attained)	
(E) Fruits, vegetables, oilseed, nuts, cassava, maize, rice, beans, dairy, poultry, livestock, honey	Interviews and questionnaire	Job creation in rural areas and allows for some form of processing (in the long term beyond the current 'washing and putting in a box' type of processing).	InfoDev (2013)
Construction	Literature review, qualitative interviews, firm surveys, and quantitative analysis	Can drive transformation and economic growth as well as job creation (temporary demand for unskilled, but also need for technical skilled workers) and can provide on-the-job skills (from farmers to production workers)	ILO Lab (nd) IGC (2012) IGC (2015) Let's Work Partnership (forthcoming) World Bank (2016d)
Forestry	Interviews and firm questionnaire, product space analysis	Job creation and processing (artisan crafts, furniture, paper), and as a potential stepping stone towards other sectors	InfoDev (2013) Wagstaff and Maennling (2009) World Bank (2016d) GDS (2005) World Bank (2016e)
Gas and coal	Secondary data analysis	Economic growth (through extractive revenues coming in) and job creation	IMF (2016) World Bank (2016c) Friedrich Ebert Stiftung (2013) USAID (2013b) Coughlin (2015)

Identified sectors	Methodology used	Motivation for inclusion	Source(s)
Garments	Product space analysis	Potential stepping stone towards other sectors and employment generation (mainly in production, but also more technical roles, e.g. line supervisors)	Wagstaff and Maennling (2009) GDS (2005)

#### **AGRO-PROCESSING**

A number of the studies reviewed for this synthesis paper emphasise the potential of the agro-processing sector to contribute to economic transformation and job creation (particularly in rural areas) in Mozambique – through diversification into higher value added processing activities (some of which are labour-intensive), the development of value chains (linking farmers, especially smallholders, to downstream processors), and the sector's potential contribution to boosting farmers' incomes (GDS, 2005; UNCTAD, 2012; InfoDev, 2013; OECD, 2013; Dutch Ministry of Economic Affairs, 2014; Let's Work Partnership, 2016; Technoserve, 2016; USAID, 2016; World Bank, 2016d; Let's Work Partnership, forthcoming). Within the broad agro-processing sector, the pigeon pea and sesame seed value chains are most widely cited among the studies as offering the most potential for further development. The pigeon pea value chain, for example, is highlighted for its nutritional value for consumers, its potential to create jobs, and the comparatively high level of involvement of farmers (including smallholders) within the value chain (Let's Work Partnership, 2016; Technoserve, 2016; USAID, 2016)

Some variation exists across the studies in the importance afforded to different agro-processing industries and value chains based on their specific contributions. In some studies, value chains in addition to, or other than, pigeon pea and sesame seed are prioritised for different reasons. From a job creation perspective, the maize, horticulture and poultry value chains are seen as offering the most potential to generate small-scale jobs alongside pigeon pea and sesame seed (Technoserve, 2016). The maize and poultry value chains are also emphasised for their potential to create jobs in Mozambique's rural areas, as are forest products, fruits, vegetables, oilseed, nuts, cassava, rice, beans, dairy, livestock and honey (InfoDev, 2013). Alongside pigeon pea, the cashew and cassava value chains involve a high level of farmer participation (at least a million in each industry), including smallholders, and hence can potentially make important contributions to the alleviation of rural poverty. Among these, the Let's Work Partnership (2016) argues cassava is the most important crop in terms of production volume and value, and in terms of the number of farmers engaged in production. Soy products, as well as sesame and pigeon pea, are emphasised by USAID (2016) for their nutritional value to Mozambican consumers. However, from an economic transformation perspective, these are all low-productivity sectors.

Certain crops and agricultural commodities are highlighted in particular studies for their potential to develop downstream value added processing activities. For example, the simplicity of operations involved in cashew processing makes it an important value chain to employ unskilled workers (Let's Work Partnership, forthcoming). A variety of other crops and sub-sectors offer opportunities for some form of value added processing within Mozambique, including forest products, fruits, vegetables, oilseed, nuts, cassava, maize, rice, beans, dairy, poultry, livestock and honey (InfoDev, 2013). The level of domestic demand for some of these products (e.g. honey, beans and poultry products) is also high, suggesting that the risk of failure in developing these value chains may be lower (InfoDev, 2013; Let's Work Partnership, forthcoming).

Overall, the soybeans, fruit processing and poultry industries appear to offer good prospects for productivity improvements linked to the development of value chains and downstream processing within Mozambique. The development of domestic agro-processing capacity linked to these sorts of industries can help support structural transformation through the movement of labour and other resources into higher value-added processing activities. Moreover, the poultry industry, together with particular crops such as pigeon pea, maize, cashew and cassava in which there is scope to involve large numbers of farmers (including smallholders), offer good prospects for job creation. Taken together, these different dimensions suggest an agriculture- and agro-processing-based economic transformation model can combine a job

creation imperative with progress towards structural transformation away from low-productivity agricultural activities.

#### CONSTRUCTION

Construction is regarded as a viable job-creating sector in Mozambique. In other countries, the linkages between construction and other sectors have meant it is not only an important creator of direct jobs but also a significant *indirect* generator of jobs. Referring to Brazil, for instance, the International Growth Centre (IGC) (2012) explains that, for every 100 direct jobs created in construction, the rest of the economy gained 285 indirect jobs as a consequence of the high degree of domestic economic interdependence between construction and other sectors. Construction activity in Mozambique can potentially have similar direct *and* indirect employment generation effects.

The Let's Work Partnership (forthcoming) argues that high growth rates registered in Mozambique's construction sector, which are expected to continue, can be an important driver of job creation. Construction around major new projects in the offshore gas industry is also likely to support employment generation within the sector going forward, although only during the initial construction phase, when the need for employment is greatest (ibid).

The IGC (2015) argues the construction sector can be instrumental in teaching new on-the-job skills to Mozambican workers. Many of the workers employed in the sector previously operated as farmers or petty traders. This is important from an economic transformation perspective, as it can help facilitate shifts in labour from less to more productive activities.

#### **EXTRACTIVE SECTORS**

A small number of studies (Coughlin, 2015; IMF, 2016) reviewed for this synthesis paper mention the potential benefits of the extractive sector for economic transformation and job creation in Mozambique. Emphasis in these studies is placed on coal and gas. Coughlin (2015), for example, stresses the potential multiplier effects from these two sectors. Many studies argue that the multiplier effects from the coal and gas sectors – first from investment, then through operations and resulting revenue flows to the GoM – are likely to be far greater than those experienced from previous megaprojects in the country. Similarly, the IMF (2016) highlights the considerable economic potential of emerging gas projects in Mozambique, although the report cautions that the macroeconomic and fiscal implications of these projects are quite sensitive to international commodity price developments and other risk factors, and there are large depreciation costs in the medium term before the actual revenues are realised. Friedrich Ebert Stiftung (2013) suggest the rents derived from Mozambique's extractive industries can provide a platform for driving growth and diversification if they are allocated appropriately.

However, the majority of the studies reviewed here see limited employment, transformation and value addition prospects in Mozambique's extractive sector in the absence of suitable reforms. The World Bank (2016e) mentions a need to tighten linkages between Mozambique's resource and non-resource sectors in order to expand the distribution of the returns to growth. The experience with Mozal, for instance, showed linkages to local small and medium enterprises (SMEs) could be formed through government intervention, although the overall capacity of local SMEs to link with foreign firms was less developed (Krause and Kaufmann, 2011).

Even so, the mining sector is a major source of FDI inflows into Mozambique (OECD, 2013). Investment in the extractive sector accounts for around 53% of total FDI in Mozambique, compared with 21% in manufacturing (IGC, 2015). Mozambique's comparative advantage in possessing a considerable and diverse mix of mineral resources appropriate for industrialisation could support the development of interdependent industries and affords potential opportunities to develop a range of manufacturing activities linked to the transformation of primary materials.

To date, however, progress in establishing forward and backward linkages to the extractive sector in Mozambique has been limited (Buur, 2014). This is evident in the general absence of strategic intra- and inter-firm and sector linkages with networking and clustering potential (Cruz et al., 2013).

Past weaknesses in the private sector and the difficulties faced by Mozambican firms in meeting international trade standards have been identified as key constraints to effective collaboration between large multinational firms operating in the extractive sector and local SMEs, and this has inspired a number of specific linkage programmes (e.g. the SME Empowerment Linkage Programme and Mozlink (phases I and II) as part of the Mozal mega-project, or the Rio Tinto Coal Mozambique linkage programme) (USAID, 2012). However, while certain linkage programmes have achieved some success, they have generally resulted in few technological or learning spillovers into the domestic economy (Burr, 2014). Moreover, aside from local agro-processing firms supplying those operating in the extractive sector, most others have relied heavily on imported inputs (Krause and Kauffman, 2011).

That said, there is still scope for domestic firms to provide local content and services to supply demand stemming from natural resource-based mega-investments in Mozambique. For example, USAID (2012) highlights a range of linkage opportunities stemming from Rio Tinto's operations in Mozambique, including opportunities related to procurement for Rio Tinto's mining operations, to supply catering services or through linkages to local agro-processing firms. In another study, USAID (2013b) identifies opportunities to develop downstream industries linked to coal mining in Mozambique, including through manufacturing coke, mine phosphate or fertiliser.

Capitalising on these opportunities to maximise forward and backward linkages to the extractive sector is predicated on the presence of suitable capabilities in local firms and overcoming a range of challenges. More needs to be done to promote and mentor Mozambican firms and enhance the availability of finance for local SMEs. Resistance from some international mining firms to purchasing locally produced inputs or services also needs to be addressed (USAID, 2013b). These views were echoed by most stakeholders we interviewed, who generally agreed that more needed to be done to encourage the development of backward and forward linkages to megaprojects and to put the discussion of these linkages onto the negotiating agenda for future megaprojects.

#### FORESTRY AND WOOD PROCESSING

In contrast to the construction and agro-processing sectors, which are widely cited across the studies reviewed for their potential to contribute to economic transformation and job creation, the forestry sector is less often mentioned in this light. However, some studies do see opportunities for value chain development in the forestry sector (Wagstaff and Maennling, 2009; World Bank, 2016d). For instance, Wagstaff and Maennling (2009) use a product space analysis to show that the value chain from forestry and wood production to the manufacture of furniture offers potential as a stepping stone to develop capabilities that can be used in other manufacturing activities, thus providing an entry point for Mozambique to move closer to the core of the product space.

However, aside from furniture manufacturing, the development of other, less labour-intensive wood-processing activities is unlikely to provide major employment generation opportunities in Mozambique. In addition, the potential for value addition in the sector is limited in comparison with in some agro-processing activities, which provide ready opportunities for simple processing such as cleaning, packing, ripening and branding (GDS, 2005).

#### **MANUFACTURING**

Looking generally across the studies we reviewed, there is little emphasis on the potential to develop manufacturing for economic transformation and job creation in Mozambique, outside of the agroprocessing links to manufacturing and the wood-processing value chain (discussed above) or garment

production. Wagstaff and Maennling (2009) emphasise wood-processing and garment production as potential stepping stones into other manufacturing activities.

However, most studies that mention manufacturing tend to focus on the limited scale of the sector in Mozambique. Manufacturing is not currently a significant employer in Mozambique – accounting for less than 1% of total employment (see Table 11 in Appendix II) – and has not been for more than two decades. According to the World Bank (2016d), the vast majority of Mozambican manufacturing firms are very small (most with fewer than 10 employees, with 90% of them SMEs), produce relatively homogenous products using basic technology, and sell mostly to private individuals in the same locality, with limited linkages to the rest of the economy. The same World Bank study notes that the death rate among manufacturing firms is high, particularly in the case of small and micro enterprises in the food and beverage sub-sector. This undermines the stability of manufacturing jobs in Mozambique.

But these studies tend to miss the potential for developing manufacturing linkages to future megaprojects in Mozambique. There is potential for megaprojects to stimulate backward and forward linkages from multinational corporations to local SMEs. For instance, there may be upstream opportunities to develop capacity to supply manufactured equipment, parts and components for use in activities around megaprojects. However, past attempts at creating such linkages have not been fully effective in enhancing local capacity. One reason for this appears to be that the teams negotiating with multinationals were ill prepared and thus may have lost many opportunities to improve local linkages to megaprojects. Interviewees highlighted clear capacity issues that affect Mozambique's ability to effectively negotiate deals with multinational companies investing in megaprojects. For example, there is a need for training on how to undertake due diligence analysis of prospective investors and the technical and financial assumptions underlying potential investments prior to entering into agreements for new megaprojects see Box 2 in Coughlin (2015). Improving capacity to conduct negotiations with multinationals with a view to enhancing local content in industrial production represents one of several ways to transform the Mozambican economy and create jobs. Policy-makers in Mozambique would benefit from a tool that helps them decide when it is appropriate to push for local content and how to do this during contract negotiations and/or during a project's implementation and ongoing operations.

There may also be broader possibilities to develop export-oriented light manufacturing (e.g. garments, footwear or light motor vehicle assembly) in Mozambique. Balchin et al. (2016) show, on the basis of a Manufacturing FDI Potential Index, that Mozambique is among the most promising African countries for attracting FDI into export-based manufacturing. This is aided by several comparative advantages in favour of an export-led manufacturing model:

- Mozambique has a relatively large pool of labour resources that could support labour-intensive manufacturing (USAID, 2013a); although relatively high wages, low productivity and scarce skills currently undermine competitiveness.
- Mozambique's long coastline and significant ports imply there is potential to develop manufacturing
  on the coast based on the transformation of imported inputs both for domestic sale and for
  exporting to regional and overseas markets. Direct access to overseas markets via Mozambique's
  ports provides a significant advantage over landlocked competitors such as Ethiopia and Rwanda.
- While the domestic market in Mozambique is relatively small, the country's close proximity to Malawi, South Africa, southern Tanzania, Zambia and Zimbabwe generates prospects for manufacturing to supply regional markets. In addition, Mozambique benefits from duty- and quotafree access into the US market for a range of manufactured goods including garments (and those manufactured with third-country fabric) through the African Growth and Opportunity Act (AGOA), thereby providing a further advantage in terms of market access (although existing garment exports from Mozambique to the US under AGOA remain limited).

On this basis, although labour-intensive manufacturing in Mozambique is very limited at present (USAID, 2014), there may be potential to develop the cotton-to-textile value chain (but this will require a substantial increase in cotton production), or even garment manufacturing, if steps are taken to raise competitiveness and productivity levels in the sector and improve trade facilitation to take advantage of the country's coastal

access to ports and shipping. Some stakeholders we engaged with in Mozambique were bullish about potential opportunities in this area – particularly, for example, with Chinese garment manufacturers looking to move away from Lesotho due to issues with AGOA. Some felt it would be possible to reinvigorate the manufacturing activity around garments and cotton and textile production that was a feature of the 1960s and 1970s, especially given the good quality cotton available in Mozambique.

Such efforts would be in keeping with Mozambique's current industrial policy priorities. Clothing, textiles and footwear are listed among the priority sectors in Mozambique's *Industrial Policy and Strategy 2016-2025*, with a particular focus on producing school uniforms; clothing for civil servants, teachers and military and paramilitary personnel; and garments for use in hospitals. Mozambique could look to build capacity to substitute certain imports (especially those coming in from South Africa) with domestically produced items while supplying neighbouring markets within the region, and in South Africa in particular. However, competing with South African producers – who benefit from access to a much greater pool of skilled labour, superior manufacturing infrastructure and advanced transport and logistics services – remains a significant challenge. These challenges are magnified at the global level given the highly competitive nature of global apparel value chains.

At present, garment production in Mozambique is limited, and mostly concentrated in a small number of companies operating at low productivity that export limited volumes of garments to South Africa (ibid). Encouragingly, however, attracting garment firms is not impossible, even as a short-term project, as long as the government is really committed to such a strategy and willing to overcome investor problems (e.g. as done in Ethiopia's SEZs and industrial parks). In the past, Belita, a foreign-owned company and one of thirteen subsidiaries of the Palmar Group based in Mauritius, set up a subsidiary in Beira (at one point employing as many as 500 workers) in response to rising labour costs in Mauritius and successfully exported to the US under AGOA as well as to South Africa. Mozambique has also, in the past, attracted a limited number of labour-intensive, export-oriented garment firms aiming to supply the South African market. Mozambique's port access to major markets coupled with the potential to build a value chain from cotton to textiles and garments suggests it could yet be a desirable location for future investment in the textile and garment sectors. But reviving the garment sector and attracting new garment firms to Mozambique will require significant improvements to the business climate and supporting infrastructure (e.g. in the reliability of energy supply). Balchin et al. (2016) show that Mozambique fares poorly even in comparison to similar African countries, and well below the low-income country average, on a range of indicators related to determinants of FDI in manufacturing. The development of SEZs and industrial parks can help to overcome some of these challenges at the micro level. Similarly, locations where support services have developed around megaprojects could offer the necessary infrastructure, logistics and services to attract targeted investment into light manufacturing such as garment assembly. Moreover, upgraded regional infrastructure along the Maputo Development Corridor, which runs from Johannesburg through Swaziland to Maputo, creates opportunities for better access to both input materials and markets for manufactures within the region. Finally, a greater focus on attracting FDI into export-oriented manufacturing can improve access to long-term capital and support the development of a viable manufacturing sector.

#### LINKING PROMISING SECTORS AND TRANSFORMATION MODELS

Table 4 matches each of the promising sectors and value chains identified in the literature review with the major transformation models outlined in Section 2.3. None of the promising sectors and value chains highlighted in the literature review fit readily within a services-led transformation model, although the emphasis on construction as a viable job-creating sector may include some opportunities in construction-related services industries. Other services sectors such as logistics and transport services and tourism were given little attention in the literature reviewed for this study. The lack of emphasis on tourism is perhaps surprising given the potential for the sector to contribute to Mozambique's economic development, directly through its contribution to GDP (which is currently estimated at around 3-4%) and the income

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<sup>&</sup>lt;sup>7</sup> This strategy paid off in Ethiopia, for example, when Huajian Shoes, a Chinese-owned producer of women's footwear for a variety of high-profile global brands, set up a factory in the Eastern Industrial Park outside Addis Ababa in 2012. Huajian Shoes was attracted to set up manufacturing operations in Ethiopia due to the country's competitive labour costs and lower energy costs compared to China.

generated from tourism exports (tourism already accounts for nearly 30% of Mozambique's total services exports), but also through possibilities to develop more extensive backward linkages from tourism to the rest of the economy.

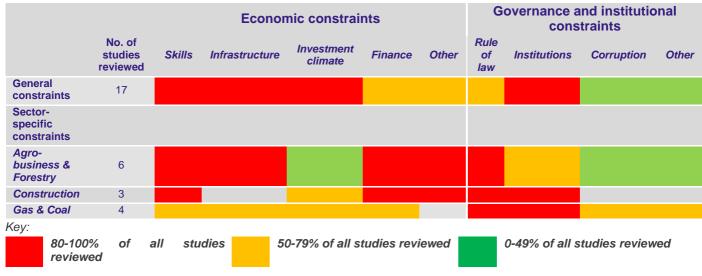
Table 4. Linking promising value chains and sectors to major transformation models

Major transformation models	Relevant promising sectors and value chains
Agriculture- and agro-processing-based economic transformation	Beans; cassava; cashew; dairy; fruits; fruit processing; honey; horticulture; livestock; maize; nuts; oilseed; pigeon peas; poultry; rice; soy; sesame; soybeans; vegetables
Natural resources-led economic transformation	Coal Gas (and potential downstream and upstream linkages to these sectors)
Manufacturing-led economic transformation	Agro-processing Garments Wood processing (manufacturing furniture, crafts)
Services-led economic transformation	Construction-related services Logistics and transport services Tourism

## 4. CONSTRAINTS TO ECONOMIC TRANSFORMATION AND JOB CREATION

We reviewed binding constraints to economic transformation and job creation in Mozambique. Following McMillan et al. (2017), we distinguish between general constraints, which cut across all sectors, and specific issues that constrain the development of the promising sectors and value chains highlighted in Section 3. For the general constraints, we distinguish further between economic, governance and institutional constraints. The results are summarised in Table 5 and discussed further in the subsections that follow. Table 16 in Appendix III provides a more detailed summary of the economic and political constraints – general or sector-specific – identified in each of the studies reviewed for this paper.

 Table 5. Summary of economic and political constraints identified in the literature review



### 4.1 GENERAL CONSTRAINTS TO ECONOMIC TRANSFORMATION AND JOB CREATION

#### **ECONOMIC CONSTRAINTS**

The literature reviewed for this paper identified insufficient skills in the workforce, difficulties accessing credit, inadequate infrastructure and investment climate, and difficulties related to the regulatory framework (specifically around the regulation of labour, access to land, taxation, investment and customs) as issues affecting sectors across the board in Mozambique.

#### Skills shortages

The bulk of the labour force in Mozambique has low skill and education levels. On average, the adult population has just 3.2 years of formal education, compared with, for example, 8.8 years in Botswana, 7.5 years in Indonesia, 5.2 years in Nigeria and 5.1 years in Tanzania (UN Development Programme (UNDP) Human Development Index (HDI) data). Just one in four workers has completed primary school, and only 13% have completed secondary school (AfDB et al., 2012; Jones and Tarp, 2016). Just one quarter of workers aged over 30 who are employed in urban areas attended post-primary school (World Bank, 2016d). Put simply, it is difficult for firms in industrial sectors to source employees with appropriate and internationally certified technical skills in a labour market dominated by people without appropriate qualifications (Cruz et al., 2014). Even so, according to the World Bank (2016d), the private sector rarely mentions skill shortages as one of the top constraints to starting and growing a business in Mozambique.

#### Inadequate infrastructure

Many studies also highlight poor infrastructure, particularly in rural areas, as a constraint to growth and development in Mozambique (Castel-Branco, 2014; BTI, 2016; Let's Work Partnership, 2016; USAID, 2016; World Bank, 2016c, 2016d, 2016e). This includes poor transportation infrastructure (particularly in the shape of poor quality roads, lack of investment in railways and inefficient port infrastructure) and unreliable power supply, especially in rural areas (OECD, 2013; Cruz et al., 2014; USAID, 2015, 2016; Technoserve, 2016; World Bank, 2016e). The poor quality of transport infrastructure is exacerbated by limited connectivity among urban and economic clusters, with a shortage of road and other transport linkages to connect parallel corridors to each other (Jones and Tarp, 2016).

There is a general lack of refrigeration facilities in Mozambique's ports (USAID, 2016). Maputo Port has also operated at well below full capacity in recent years (at around 30% of capacity according to Nucifora and da Silva (2011)). Users of Maputo Port also face high scanning fees for imported containers compared with fees at competing ports such as Durban (Wagstaff and Maennling, 2009).

An intermittent electricity supply affects productive activity in Mozambique (Technoserve, 2016). This owes in part to an underdeveloped and unreliable electricity grid as well as overloaded electricity infrastructure as a result of limited expenditure to maintain and increase electricity generation capacity (Cruz et al., 2014; World Bank, 2016e). Electrification rates are very low in the country's rural areas (World Bank, 2016e).

#### Investment climate constraints

The majority of the studies we reviewed highlight the quality of the investment climate in Mozambique as a constraint to growth and development. This encompasses a variety of different regulatory issues. Restrictive labour regulations are seen as a constraint, particularly for SMEs (Friedrich Ebert Stiftung, 2013). For example, the labour codes in Mozambique usually do not support low-paid or unpaid internships or other types of on-the-job training (World Bank, 2016d), and there is a limit to the number of foreign experts firms can employ. Firms in SEZs, including labour-intensive apparel manufacturers, have complained about recent increases in the minimum wage without any reference to productivity improvements (USAID, 2015).

Other studies highlight difficulties accessing land as a constraint, particularly on foreign investment. This is a result of a rigid land tenure system that involves complex and time-consuming procedures for accessing land through a system of allocation of land-user rights that grants private persons the right to use and benefit from the land (the rights are known as *Direito do Uso e Aproveitamento da Terra* or DUAT) (Nucifora and da Silva, 2011; UNCTAD, 2012; OECD, 2013). Aside from this, land reallocations remain a sensitive issue in Mozambique, potentially creating difficulties when looking to earmark land for industrial activity. In some cases, previous land resettlements have been plagued by lack of dialogue between companies, communities and state representatives; bribery of traditional leaders; unfulfilled and unrealistic promises made to relocated people; and threats to and criminalisation of those who raise questions about resettlement, land-grabbing and/or a lack of accompanying job creation (Coughlin et al., 2013).

In addition, Mozambique's corporate income tax regulations are said to be inefficient and skewed towards benefiting large, capital-intensive projects (IMF, 2016). For instance, Fjeldstad and Heggstad (2011) show that large mining projects undertaken by foreign companies in Mozambique contributed just 3% of total tax revenues, despite accounting for as much as 12% of GDP. In part, this is due to the lack of a clearly defined strategy to guide tax policy, especially around corporate taxation and the provision of investment incentives (UNCTAD, 2012). Poor tax administration has also been identified as a major constraint, reflected in issues such as the arbitrary implementation of the tax code, high frequency of inspections, overly complicated paperwork and procedures, a lack of guidelines on how to comply with tax requirements, delays and difficulties in obtaining value added tax (VAT) refunds, and inadequate dispute resolution mechanisms (Cruz et al., 2014; USAID, 2015). Cruz et al. (2014) argue that these issues with the current tax system are particularly problematic for manufacturers.

Inefficiencies are also noted elsewhere, for instance in customs procedures. Wagstaff and Maennling (2009) point to high rates of inspection of both export and import shipments, which delay import and export procedures unnecessarily and often result in lengthy delays in clearing goods through customs. For example, the average time taken to comply with documentation requirements for exports is 70 hours in Mozambique – shorter than the average across SSA (92.6 hours), Tanzania (96 hours) or Nigeria (131 hours), but much longer than in Mauritius (9 hours, the shortest time among SSA countries) or other African countries such as Togo (11 hours), Kenya (19 hours), Botswana (24 hours) and Senegal (26 hours) (World Bank Doing Business Indicators 2016 data). This is especially problematic for the garment sector, where fulfilling orders in a reliable and timely manner is an important determinant of a producer's competitiveness.

#### Difficulties accessing finance

Only 10% of the population has access to the formal banking system, and only 3% qualify for credit (BTI, 2016). Difficulties accessing finance affect not only individuals but also firms and sectors. Indeed, lack of access to finance is a constraint in many sectors in Mozambique. Lending by banks into the productive sectors of the economy decreased between 2011 and 2014, while the proportion of financial assets (investment in financial bonds and other lending institutions) almost doubled (owing to their attractive rates and low risk) (Castel-Branco, 2014). At the sectoral level, the structure of credit has also changed, with the proportion going to trade, industry and agriculture falling significantly since the early 2000s, while that for construction, transport and communications, and other sectors (including mineral and energy resources, forestry and electricity) has risen (ibid).

#### **GOVERNANCE AND INSTITUTIONAL CONSTRAINTS**

In addition to the general economic constraints outlined above, our literature review identified a number of overarching governance and institutional issues affecting transformation. The most prominent among these are issues related to the rule of law and limitations in government and institutional capacity.

#### Corruption

The majority of studies we reviewed regarded pervasive corruption as a constraining factor. According to Coughlin (2015), around one fifth of all SMEs in Mozambique report issues related to corruption. Some government officials remain stakeholders in private companies, although new legislation, in the shape of

a code of ethics that came into force in 2013, has restricted this (Friedrich Ebert Stiftung, 2013). Membership of the ruling party is also a de facto prerequisite for access to positions within the public administration or judiciary (BTI, 2016), and there are close ties between party cadres and leading businesses (Krause and Kaufmann, 2011). In addition, bureaucratic hurdles are often used to enforce patronage systems, and the ability of officials to 'expedite' administrative processes is a key tool for extracting rents from the private sector (World Bank, 2016e).

In some instances, a lack of transparency causes negotiations and contracts between the government and businesses in Mozambique to remain shrouded, particularly when it comes to concessions provided in megaprojects and the taxation agreements that govern those projects (Friedrich Ebert Stiftung, 2013). Corruption also hampers the implementation and enforcement of legislation and business regulations in Mozambique (Krause and Kaufmann, 2011).

#### Government and institutional capacity

In the past, the industrial policies of the GoM have been criticised for lacking coherence across strategies, for failing to provide sufficient emphasis on potentially promising sectors such as garment manufacturing or forestry, and for lacking measurable targets to monitor progress (Castel-Branco, 2002; Wagstaff and Maennling, 2009; Cruz et al., 2014). To a certain extent, the *Industrial Policy and Strategy for 2016-2025* has addressed some of these issues. For instance, the policy provides a clear prioritisation of sectors, emphasising food and agro-industry; clothing, textiles and footwear; non-metallic minerals; metallurgy and manufacture of fabricated metal products; wood processing and furniture; chemicals, rubber and plastics; and paper and printing as the highest priority industries. It also outlines specific areas for monitoring and control around particular policy objectives and interventions.

Even so, the government still faces challenges in devising and implementing effective linkage-development programmes that will help foster the transfer of technical skills and knowledge between foreign multinationals and domestic enterprises (Baloyi and Zengeni, 2015). Previous attempts to create linkages between large foreign enterprises and small local firms (as in the case of Mozal) have not been fully effective in enhancing local capacity (Krause and Kaufmann, 2011).

More generally, many of the studies reviewed in this synthesis paper identify limited institutional capacity as a constraint. As one example, Coughlin (2015) explains how the National Directorate of Industry still has no senior personnel with master's or doctoral degrees and, consequently, conducts no in-house sectoral studies. In addition, the Let's Work Partnership (forthcoming) notes that existing laws are often not implemented owing to a lack of knowledge and human capital.

## 4.2 BINDING CONSTRAINTS TO DEVELOPING PROMISING SECTORS AND VALUE CHAINS

The general constraints to economic transformation and job creation outlined above cut across sectors throughout the Mozambican economy. The studies reviewed for this synthesis paper also highlight a number of binding constraints specifically affecting the agro-processing, construction and forestry sectors in Mozambique. These constraints are discussed in turn below and summarised in Table 6.

Consistent with the profile of promising sectors presented in Section 3, the studies reviewed here give little attention to binding constraints to the manufacturing sector, outside of those affecting agro-processing and downstream wood processing (e.g. furniture manufacture).

Table 6. Summary of sector-specific constraints affecting agro-processing, construction and forestry

Type of sector	Specific constraints
Agro-processing	<ul> <li>Lack of facilities to support processing activities (especially in rural areas)</li> <li>Poor transportation infrastructure</li> <li>Poor supply of packaging</li> <li>Limited testing, certification and traceability, hampers access to export markets</li> </ul>
Construction	<ul> <li>Skills shortages (especially managers and engineers)</li> <li>High cost of inputs</li> <li>Outdated technology</li> <li>Difficulty accessing credit (especially for small construction firms)</li> </ul>
Forestry	<ul> <li>Capacity and skills shortages</li> <li>Rigid labour regulations</li> <li>Large distances between forestry areas and processing mills</li> </ul>

#### AGRO-PROCESSING

Lack of facilities to support agro-processing represents a major constraint to the development of higher value added activities in the sector. Key areas of concern are the limited availability of (cold chain) storage facilities (InfoDev, 2013; Dutch Ministry of Economic Affairs, 2014; Technoserve, 2016) as well as downstream processing facilities (GDS, 2005; Coughlin, 2015; USAID, 2016; Let's Work Partnership, forthcoming). The processing facilities that are available are mostly located in urban areas, with few in rural areas. For example, few banana growers have on-site post-harvest processing facilities. A lack of credit to establish processing units is highlighted as a major constraint (Dutch Ministry of Economic Affairs, 2014). The limitations regarding facilities for agro-processing are exacerbated by a general lack of skills and knowledge among producers in the sector (Let's Work Partnership, forthcoming).

As a result, almost no substantial processing of fruit occurs in Mozambique, and vegetable processing is limited. The bulk of Mozambique's horticulture produce is sold informally by traders after undergoing only rudimentary processing (such as washing produce and placing it in a box) (Dutch Ministry of Economic Affairs, 2014). For example, very little processing of pigeon peas is undertaken beyond basic cleaning and drying (USAID, 2016). Processing activities in the cotton industry are mostly confined to cotton ginning; while curing and baling of tobacco leaves is often done prior to supplying cigarette makers (InfoDev, 2013). There is also considerable variation in the quality of domestic processing (USAID, 2016).

Poor transportation infrastructure greatly raises the costs for agro-processors. Raw materials typically account for between 60% and 80% of their total costs owing to the high transportation costs in the country (InfoDev, 2013).

Issues further downstream also affect agro-processors. For example, there is a generally poor supply of appropriate quality packaging for processed agricultural products in Mozambique (InfoDev, 2013). Furthermore, limited capabilities in testing, certification and traceability hamper expansion into lucrative international export markets (USAID, 2016).

#### CONSTRUCTION

Skills shortages are especially acute in the construction sector. According to IGC (2012), 60% of employees in the sector hold only a primary school certificate. Qualified labour for the construction sector is particularly limited in the north of Mozambique, where the majority of the construction projects take place (Let's Work Partnership, 2016). The limited availability of qualified labour is not confined to the management and engineering level, but also applies with regard to lower skilled workers.

High costs associated with accessing inputs affect the competitiveness of the construction sector. Results from a survey conducted by IGC (2012) indicate that around 60% of the inputs used by producers of building materials and heavy construction companies are imported, either because of the high cost of 28

domestic alternatives (45% of the time) or their complete unavailability (35% of the time). Construction firms face additional costs to hire an import broker to begin the import process, pay import duties, clear the imported materials and arrange delivery to the factory (ibid).

An associated issue is the weak use of modern technology by Mozambican construction firms. The IGC (2012) survey found that as many as 62% of companies surveyed had not made major acquisitions of new technologies since the 1990s.

This may owe, in part, to difficulties associated with accessing credit. The restriction of credit is particularly notable for the local construction sector. Financing constraints are especially acute among small local firms in the sector, which inhibits them from taking part in large projects. To be eligible for projects amounting to more than 3,500,000 MT, for example, a company in Mozambique pays a premium of 1.5% of the total project cost as insurance (IGC, 2012: 22). Once the project is awarded, market practice requires the payment of 50% of the total project costs as the first instalment. As a result, only 5% of local contractors manage to bid for significant construction projects (IGC, 2012). Limited certification, poor credibility and short track records also hamper the ability of smaller local construction firms to participate in the bidding process (Let's Work Partnership, 2016).

#### **FORESTRY**

The literature review also pinpointed a range of issues affecting the forestry sector in Mozambique. As in other sectors, capacity and skills shortages are prevalent, with a particular need for more education and training in forestry technology, entrepreneurship, business management and marketing (Let's Work Partnership, forthcoming). Even though four university-level forestry programmes are operational, no technical vocational education and training (TVET) programme is in place. In addition, the rural labour force has little practical experience in the forestry sector (ibid).

Labour regulations have also been highlighted in the past as constraining transformation in the forestry sector. A decade-old study, GDS (2005), suggested that a rigid labour code and the fact that all the labour used in the forestry sector was contracted on per volume basis meant the majority of the players in the sector perceived investment in additional machinery that required training and hiring of permanent workers as a nuisance to be avoided. The study suggested that this has been a key determinant of the apparent preference of the sector for logging business over wood processing and value addition.

Processing activity is also constrained by the long distance between the location of the forestry activities and the processing mills (Let's Work Partnership, 2016). Furthermore, discriminatory high tariffs on processed wood products in export destination countries is said to discourage licence-holders from processing locally (ibid).

#### 4.3 LINKING CONSTRAINTS AND TRANSFORMATION MODELS

This final subsection matches the economic, governance and institutional constraints outlined above with the four major transformation models (outlined in Section 2.3) they are most likely to affect (see Table 7). Some constraints – such as capacity and skills shortages, unreliable energy supply, restrictive labour regulations, poor tax administration, difficulty accessing finance, corruption, and limited government and institutional capacity – apply to all transformation models and are likely to affect progress on economic transformation regardless of which model (or combination of models) is followed. Other specific issues are related to particular sectors and hence affect a particular transformation model or subset of models, such as the lack of refrigeration facilities at ports; shortage of facilities to support processing in rural areas; scarce supply of quality packaging or limited testing, certification and traceability systems affecting agriculture- and agro-processing-based economic transformation; or the difficulty accessing land, which may undermine agriculture- and agro-processing-based transformation or manufacturing-led transformation.

Table 7. Linking economic, governance and institutional constraints to the major transformation models they are most likely to affect

Horizontal (cross-sectoral) constraints affecting all transformation models	Sector-specific constraints relevant to particular transformation models
Capacity and skills shortages	Agriculture- and agro-processing-based economic transformation
Unreliable power supply	Poor transportation infrastructure
Restrictive labour regulations	<ul><li>Difficulty accessing land</li><li>Inefficient corporate income tax regulations</li></ul>
Poor tax administration	<ul> <li>Inefficient customs procedures</li> <li>Lack of refrigeration facilities at ports</li> </ul>
Difficulty accessing finance	<ul> <li>Lack of facilities to support processing activities (especially in rural areas)</li> </ul>
• Corruption	<ul> <li>Poor supply of packaging</li> <li>Limited testing, certification and traceability, hampering access to export markets</li> </ul>
Limited government and institutional capacity	Natural resources-led economic transformation     Poor transportation infrastructure     Inefficient customs procedures
	Manufacturing-led economic transformation  Poor transportation infrastructure Difficulty accessing land Inefficient corporate income tax regulations Inefficient customs procedures Large distances between forestry areas and processing mills (for wood-processing-related manufacturing) High tariffs on processed wood products in export destinations, discouraging local processing (for wood-processing-related manufacturing)  Services-led economic transformation
	<ul><li>Inefficient corporate income tax regulations</li><li>Weak use of modern technology (potentially</li></ul>

# 5. POLICIES FOR ECONOMIC TRANSFORMATION AND JOB CREATION

affecting construction-related services)

Against the backdrop of the plethora of challenges facing Mozambique, the GoM has developed a range of policies and strategies designed to promote national development, industrialisation and employment generation. We discuss these briefly in Section 5.1. In Section 5.2, we highlight key proposals in the literature on how to address Mozambique's challenges and promote economic transformation and job creation in the country.

#### 5.1 CURRENT GOVERNMENT OF MOZAMBIQUE POLICY INITIATIVES

A number of recently published national policies and strategies aim to promote industrialisation and job creation in Mozambique. These include the Five-Year Plan 2015-2019, published in 2015, and the *Industrial Policy and Strategy 2016-2025* and National Employment Policy (NEP) released the following year. Since these policy initiatives are relatively new, and the *Industrial Policy and Strategy 2016-2025* and NEP in particular have only recently been released, progress in terms of their implementation is 30

unclear. The strategic priorities and objectives of each of these policy initiatives are described, in turn, below. The successful achievement of these objectives may ultimately hinge on whether or not the GoM is able to overcome challenges related to the coordination and integration of development planning (described previously in Section 2.4).

#### **FIVE-YEAR PLAN**

The GoM approved the Five-Year Plan 2015-2019 in April 2015. This aims to increase employment, productivity and competitiveness, in order to improve the living conditions of Mozambicans, in a peaceful and tranquil environment and in a democracy with inclusive participatory governance.

The plan has five priorities:

- 1. national unity, peace and sovereignty
- 2. human and social capital
- 3. employment, productivity and competitiveness
- 4. economic and social infrastructure
- 5. management of natural resources and the environment.

The strategic objectives for the promotion of employment, productivity and competitiveness include the following:

- increase production and productivity in all sectors with an emphasis on agriculture
- promote industrialisation to modernise the economy and increase exports
- promote employment, labour law and social security
- promote the value chain of the national primary products ensuring the integration of local content.

#### **INDUSTRIAL POLICY**

The government's *Industrial Policy and Strategy 2016-2025* emphasises the development of industry as a key driver of structural transformation and of raising the competitiveness of the Mozambican economy. The strategy targets export-oriented industrialisation to modernise the economy and raise exports as well, and seeks to promote the development of value chains by adding value to primary products within the country using local content. This encompasses exploring the potential to better utilise the country's natural resources – which include gas, coal, iron ore, limestone, heavy sands, graphite, copper, and precious and semi-precious stones – to drive industrial development. Similarly, the Industrial Policy and Strategy champions the potential for the agriculture sector to help develop national industries, with specific emphasis on maize, rice, cassava, oilseeds and livestock. The strategy also looks to promote employment and improve productivity and competitiveness across the economy, while raising the quality of the business environment in Mozambique.

These broad goals are enshrined in a more specific set of industrial policy objectives, centred on the following:

- increasing industrial production, by attracting more investment into the industry sector, developing
  economies of scale in industrial production and facilitating greater access to domestic and foreign
  markets for companies operating in the industrial sector
- boosting employment by investing in labour-intensive industries and supporting MSMEs
- improving the trade balance by investing in industries with potential for substitution of imports
- expanding value chains and the production of value added products through greater use of raw materials sourced locally
- promoting the use of greater local content in industrial production, through greater economic linkages both upstream and downstream.

To achieve these goals, the strategy identifies the following as priority sectors for industrial development:

- food and agro-industry
- clothing, textiles and footwear
- non-metallic minerals
- metallurgy and manufacture of fabricated metal products
- wood processing and furniture
- chemicals, rubber and plastics
- paper and printing.

These sectors are prioritised on the basis of their potential to create economic links both upstream and downstream, their contribution to addressing the country's key challenges, and their ability to generate jobs, substitute imports and help raise the level of industrial production.

The specific policy interventions outlined in the strategy to support the development of the abovementioned priority sectors are consolidated around the following eight key policy pillars:

- 1. *improvement of infrastructure for economic development* (e.g. consolidating strategies around industrial parks, development corridors, transport systems and industrial free zones)
- 2. human capital development (e.g. accelerated training of industrial technicians, reforming professional education programmes, establishing a fund for human capital development)
- 3. promoting entrepreneurship, training and the protection of national industries (e.g. implementing quality management systems, promoting greater local content, facilitating privileged local access to procurement opportunities and to support for megaprojects)
- 4. providing access to suitable financing (e.g. extending the scope of the National Investment Bank, creating new credit lines for industrial financing, entering into agreements with the commercial banking sector to develop credit products for industry)
- 5. promoting business linkages (e.g. mapping of industrial companies, incubating industrial firms, promoting access to information and local markets)
- 6. providing investment incentives to the industry sector (e.g. deepening business environment reforms, developing a specific incentive package for industry)
- 7. enhancing innovation, access to modern technology, and research and development activity (e.g. promoting access to new technologies, establishing research centres to support industrial development, deepening partnerships and opportunities for knowledge transfer)
- 8. defining an institutional model that is suitable for promoting industrial development (e.g. restructuring and training the National Industry Directorate, creating a platform for public—private sector coordination)

#### NATIONAL EMPLOYMENT POLICY

Despite strong recent growth, poverty remains widespread in Mozambique and the unemployment rate is high. This challenge underscores the need for structural transformation and the creation of decent work opportunities. With the latter objective in mind, Mozambique's NEP was adopted in September 2016. The overriding aim of the NEP is to create more, sustainable and better jobs for all Mozambicans. To work towards these aims, implementation of the NEP is being supported by the International Labour Organization (ILO) with funding from the Swedish International Development Cooperation Agency (Sida).

#### 5.2 POLICY INTERVENTIONS PROPOSED IN THE LITERATURE

In this section, we apply the SET approach (McMillan et al., 2017) to synthesise existing information on proposed policies – both horizontal (cross-sectoral) policies to improve fundamentals and targeted (sector-

specific) interventions – to create jobs and promote economic transformation in Mozambique. Table 8 summarises the core horizontal and targeted interventions proposed in the reviewed studies, distinguishing further between (1) actions designed to support structural change and productivity growth and (2) actions designed to support job creation and broad-based economic growth.

**Table 8.** Horizontal and targeted policies identified in the literature to promote economic transformation in Mozambique

Mozambique		•
	Improving fundamentals (cross-sectoral)	Targeted interventions (sector-specific)
Actions that support structural change and productivity growth	<ul> <li>General expansion of training capacity, including development of training for managerial and technical roles (e.g. TVET schemes)</li> <li>Macroeconomic reforms (i.e. fiscal and monetary policy)</li> <li>Technology advancement (e.g. improving access to more specialised technology)</li> <li>Trade policy (e.g. addressing uncompetitive import scanning fees)</li> <li>Development of enabling (e.g. productivity-enhancing) infrastructure, particularly in rural areas and at border crossings (including also rail connections between growth corridors and transport hubs), focusing also on local firms' needs for infrastructure</li> </ul>	<ul> <li>Establish (rural) cold chain storage and processing units (agro-business and forestry), including packaging, and upgrading of processing units (agro-processing)</li> <li>Certification for accessing international markets (agro-business) and large-scale procurement bids (construction)</li> <li>On-the-job training (construction)</li> <li>Link products within value chains (e.g. soy and poultry, but also contract farming and out-grower schemes to link farmers and processors)</li> <li>Reconsider the effects of the raw export ban on upstream producers (particular for agro-business and forestry)</li> </ul>
Actions that support job creation and broadbased economic growth	<ul> <li>Taxation (speed up the VAT reimbursement system, improve tax efficiency and increase the exemption threshold in the small taxpayer special regime)</li> <li>Labour regulations (address labour overtime restrictions and rebalance minimum wage differences by sector)</li> <li>Procurement (reconsider the nonmandatory local participation clause in procurement policy)</li> <li>Customs efficiency/trade facilitation (improve efficiency of custom procedures and inspections)</li> <li>Stage public—private forums (e.g. on land reform, incentives, business needs)</li> <li>Enhanced credit access, particularly for domestic and rural SMEs</li> <li>Offer a single incentive package available to all investors irrespective of the origin, type and location of the investment</li> <li>Ensure SEZs are integrated into the national planning process</li> <li>Promote collaboration among investment promotion agencies</li> <li>Tighten linkages between the resource and non-resource sectors</li> </ul>	<ul> <li>Certification for SME participation in procurement (construction sector)</li> <li>Distribute market information about opportunities to farmers (agro-business)</li> <li>Set up vocational training for the forestry sector to absorb labour in rural areas</li> </ul>

#### HORIZONTAL (CROSS-CUTTING) INTERVENTIONS

The following key cross-cutting areas for intervention to improve fundamentals in Mozambique are those highlighted most consistently across the studies we reviewed: (1) taxation and procurement policies; (2) education and skills; (3) government coordination and capacity; and (4) investment strategies and incentives. In addition, some studies emphasise the importance of interventions in the financial sector and those to promote macroeconomic stability through sound fiscal, monetary and exchange rate policies (Nucifora and da Silva, 2011; IMF, 2016; World Bank, 2016c). Other studies focus on the need for infrastructure improvements. We discuss the broad trajectory of the proposed interventions under each of the themes below.

#### Infrastructure development

Most of the studies reviewed recognise poor infrastructure in Mozambique as a key constraint to economic transformation. In response, several stress the importance of coordinating infrastructure development to address the needs of firms beyond those operating in the mining sector to include other parts of the economy (OECD, 2013; Baloyi and Zengeni, 2015; BTI, 2016; Let's Work Partnership, 2016; World Bank, 2016d, 2016e). Other proposals are more specific, for instance for interventions to improve transportation infrastructure or processing facilities. In the case of the former, Coughlin (2015) notes the need to improve the transportation network. He also proposes a progressive shift in cargo transportation away from expensive road transport and towards the use of trains and ships. In relation to processing, InfoDev (2013) and Coughlin (2015) highlight the need for greater investment in processing facilities, which are mostly in short supply in rural areas and tend to be spatially biased around Maputo.

#### Education and skills development interventions

The analysis in Section 4 highlighted skills shortages as a general constraint to economic transformation in Mozambique as well as a specific issue in individual priority sectors. To address this issue, the World Bank (2016e) calls for improvements to the quality of public education. It is suggested that this encompass efforts to address declining primary school completion rates and low secondary school completion (particularly among girls) and interventions to improve educational outcomes for female learners. Various studies advocate upgrading the vocational training system (IGC, 2012; InfoDev, 2013; World Bank, 2016d; Let's Work Partnership, forthcoming; ILO Lab, nd), including greater coordination and utilisation of installed capacity in training institutions. Others promote the idea of 'on-the-job training' schemes that could also help integrate domestic and international companies (IGC, 2015). InfoDev (2013) emphasises the need for the GoM to encourage the transfer of management skills and technological knowledge from foreign multinationals to their local counterparts, and to introduce a qualification system for assessing technicians to help build support of technical skills in Mozambique.

DFID's activities in Mozambique already include specific programmes to support training and skills development. For instance, the JOBA (Skills for Employment) programme funds innovative models for improving access to quality, affordable and market-relevant skills training for youth, women and girls. At a sector-specific level, the Skills for Oil and Gas Africa (SOGA) initiative focuses on skills development for the gas supply chain in Mozambique (see Box 1 for further details).

However, there is no census of demand for – and supply of – skills and skills training, nor are there periodic rolling five- and 10-year projections; their absence hinders educational planning and the maintenance of an evidence-based regulation of labour immigration, which can adjust to the 'growing and specific manpower needs of industry' (Coughlin, 2015: 3). Thus, in order

'to adequately plan professional, technical and vocational education, Mozambique and, indeed, the region require accurate and detailed estimates of the supply, demand and current training for professional, technical and vocational skills listed according to professional qualifications classifications. For this, Mozambique urgently requires the development of statistical models and reporting systems to generate such data in order to improve educational planning and avert the current mismatch between skills training and the market's requirements for skills.' (Coughlin, 2015: 44).

The need for a broader assessment of Mozambique's skills development needs was echoed in interviews with key stakeholders in Maputo in February 2017. It was suggested that collecting reliable data and initiating rolling projections about education, skills and training demand and supply (e.g., for professionals and artisans) would be an important first step.

#### Box 1: DFID's relevant growth and employment programmes

The Governance and Inclusive Growth Team has a considerable portfolio (over £130 m) of project support for growth and employment:

- the Beira Agricultural Growth Corridor, with a £7 m contribution from DFID, investing in agri-business
- Linking Agri-business and Nutrition, a £4.8 m programme that aims to improve the nutritional status of 623,000 people in the Beira Corridor of Mozambique
- Brilho (Energy Africa Mozambique), a £34 m programme and an off-grid energy project that aims to improve energy access for rural households and business
- Financial Sector Deepening Mozambique, a £13.5 m programme to provide greater access to financial services, especially in rural areas
- Let's Work Partnership, a £3.5 m programme that harnesses the potential for job creation
- Mozambique Land Action, a £15.5 m programme that promotes land tenure security
- Muva, a £14 m programme connecting urban girls and women to Mozambique's economic growth
- JOBA (Skills for Employment), an £18 m programme that will increase the income of marginalised youth, especially women, in Mozambique by funding innovative models for improving access to quality, affordable and market-relevant skills training
- SOGA (Skills for Oil and Gas Africa) initiative, with a £25 m contribution from DFID, to equip people with the right skills to get sustainable (self-) employment in the gas supply chain in Mozambique
- Youth Trailblazing Initiative, which supports young people to transition into early adolescence, and from education into employment, as well as to be agents and advocates for change.

Several DFID projects relate to sectors such as agri-business or oil and gas and horizontal issues such as jobs, finance or infrastructure, with special attention to the position of rural, female and young groups.

Examples of other donor programmes are the African Development Bank (AfDB) Agricultural Fast Track Programme; ILO programmes (Decent Work, SME development, skills in extractives industries); USAID (Feed the Future, linkage development); Switzerland (horticulture, TVET); the German Agency for Development Cooperation (GIZ) (skills/TVET); the German Development Bank (KfW) (public and private TVET institutions); Norway (skills/local content in oil and gas); Canada (skills for employment); World Bank (TVET, Growth Poles, higher education); Italy/Spain /South Korea (TVET); and others. This suggests quite a lot of attention to the oil and gas industry, especially in skills development.

Source: DFID Mozambique, draft stocktake; Let's Work Partnership sector notes by Sindy Karberg.

Financial sector reforms to improve access to finance

A number of studies emphasise the need for reforms in the financial sector to improve the accessibility of finance for SMEs in Mozambique (Castel-Branco, 2002; GDS, 2005; Cruz et al., 2014; Smart and Hanlon, 2014; Coughlin, 2015; Krause and Kaufmann, 2015; BTI, 2016). One study, InfoDev (2013), offers a number of proposals on how to do so, including through

- introducing a credit guarantee system based on mediation between SMEs and commercial banks through an institution for the promotion of credit guarantee
- setting up a system of leasing for SMEs
- promoting the operation of investment funds
- strengthening institutions of rural credit and micro credit, including the development of micro-loans.

Interviews with stakeholders in February 2017 highlighted a range of more general interventions, including diversifying financial service providers, introducing more transparent lending requirements and developing an inclusive financial system.

#### **Taxation**

The existing VAT exemption policy in Mozambique supports the importation of equipment, but more needs to be done to inhibit the substantial inflow of cheap, low-quality imports from abroad, particularly within the agro-processing sector (Dutch Ministry of Economic Affairs, 2014). In addition, the existing special tax regime for small taxpayers could be improved by increasing the exemption threshold to ensure small taxpayers are not unduly burdened (IMF, 2016). Several studies also emphasise the need for continued efforts to reduce delays in VAT refunds, which create cash flow constraints for firms (InfoDev, 2013; Cruz et al., 2014; USAID, 2015). Finally, the bureaucratic burden for small companies could be greatly reduced by requiring them to turn in VAT reports just bi-monthly or tri-monthly instead of every month.

The studies reviewed largely agree the tax system is skewed towards benefiting large-scale foreign investors (Castel-Branco, 2002, 2014; Friedrich Ebert Stiftung, 2013; USAID, 2015; IMF, 2016). The Organisation for Economic Co-operation and Development (OECD) (2013) and InfoDev (2013) highlight the need for further studies on the efficacy of the current tax regime in Mozambique. For instance, OECD (2013) proposes establishing a mechanism for the systematic cost-benefit analysis of tax incentives for investment.

#### Investment promotion and incentives

A number of the studies we reviewed suggest unifying and rebalancing Mozambique's current array of investment incentives. The US Agency for International Development (USAID) (2015) proposes offering a single incentive package to strengthen the institutional framework around investment. Similarly, the UN Conference on Trade and Development (UNCTAD) (2012) calls for equal treatment of all foreign investors to avoid creating special regimes. OECD (2013) proposes to group all sector restrictions on FDI within a regularly updated negative list. Looking specifically at SEZs, USAID (2015) calls for SEZs to be integrated into the national planning process.

Other changes in incentives are proposed to improve the inflow and efficiency of investments. These include proposals to (1) streamline regulations and licensing requirements to enable GAZEDA to function as a one-stop shop for investment approval, and (2) review fiscal incentives to ensure increased transparency (USAID, 2015). UNCTAD (2012) calls for measures to ensure foreign investors are free to repatriate earnings and capital, and for the government to eliminate the obligation to convert foreign exchange earnings into meticais and allow companies to hold foreign exchange in local accounts.

#### Land policies

A number of the studies we reviewed criticised the red tape involved in accessing and using land in Mozambique (see, e.g., Nucifora and da Silva, 2011; UNCTAD, 2012; World Bank, 2016e; Let's Work Partnership, forthcoming). To improve access to land for industrial development, OECD (2013) suggests establishing an electronic land registry (one already exists for mining rights), simplifying procedures for community consultation and improving investor access to land-use rights.

#### Procurement policies and local content

Various studies highlight the need to reform the government procurement code (InfoDev, 2013; Baloyi and Zangeni, 2015). This is regarded as particularly important for the construction sector, where government demand plays an important role in driving the sector's growth (IGC, 2012, 2015; Let's Work Partnership, forthcoming).

The issue of procurement policy is linked to the broader subject of local content. There was general consensus among interviewees we met in February 2017 on the importance of local content for development in Mozambique, but most felt that this will require (1) increasing the capacity of Mozambican

firms (including their management capacity), (2) directing government procurement to purchase specific products from local suppliers, and (3) possibly establishing a working group to develop a clear agenda around the issue of local content. There was a feeling that there are already certain areas where local content could be promoted (e.g. vegetables and catering for megaprojects (such as the planned steel plant), and Vale – the Brazilian mining company (the second largest in the world) – could be encouraged to source more inputs from local farmers and cattle growers, e.g. using domestic poultry and beef rather than importing them from Brazil).

#### Policies to improve government coordination, capacity and dialogue

Echoing the discussion in Section 2.4, a handful of studies highlight the need to enhance coordination either across departments and agencies within the GoM or between the government and private sector representative bodies. In relation to the latter, the need to improve public—private dialogue is emphasised. The International Labour Organization (ILO) Lab (nd), for instance, points to the need to initiate a cooperation and information platform between government and private sector representative organisations such as chambers of commerce and business associations. Similarly, IGC (2012) calls for the establishment of a forum to discuss the introduction of government reforms, particularly in relation to land rights. Specifically in relation to investment, OECD (2013) suggests that mechanisms need to be formalised to enhance collaboration among investment promotion agencies (e.g. Investment Promotion Centre, Mozambique Tourism Authority, Institute for Export Promotion), for instance through the use of inter-ministerial committees; and, more generally, to improve communication between the government and the business community.

Referring to institutional capacity, the World Bank (2016c) emphasises the need to improve the GoM's capacity to manage public investments, including through enhanced processes for evaluating projects that are likely to expose the country to fiscal risks (e.g. in extractive sectors such as gas and coal).

Finally, OECD (2013) emphasises the importance of monitoring project implementation and revising the privileges enjoyed by state-owned enterprises across infrastructure sub-sectors. However, the study cautions that the current political environment may not allow for the effective implementation of interventions. In particular, the strong dominance of a single party, the *Frente de Libertação de Moçambique*, may weaken checks and balances.

#### Trade facilitation

Aside from the need for infrastructural improvements, Coughlin (2015) calls for better government customs' services to facilitate exports and coastal trade. Several studies suggest creating a system of simplified customs inspections (Nucifora and da Silva, 2011; InfoDev, 2013; USAID, 2015). Nucifora and da Silva (2011) also identify the need for the GoM to introduce standards and certification mechanisms that enable local firms to compete more effectively in international markets.

#### TARGETED (SECTOR-SPECIFIC) INTERVENTIONS

In addition to the cross-cutting interventions discussed above, the literature highlights a range of targeted interventions to aid the development of specific sectors in Mozambique. These interventions largely focus on the promising sectors – agro-processing, construction and forestry – outlined in Section 3.

#### Agro-processing

A few studies emphasise the importance of improving processing facilities to support higher value added agro-processing activities in Mozambique (USAID, 2016). Technoserve (2016), for example, highlights the need to create access points to agro-processing facilities in the country's rural areas. That study also mentions the importance of enhancing the efficiency of downstream linkages to processing facilities, for instance by improving the fragmented system of collection, drying, storage and delivery of maize to processing facilities in order to impose standards and curtail production losses. Further downstream in

agro-processing value chains, improved systems for certification and traceability could enhance access to lucrative international export markets (USAID, 2016).

At the same time, some studies point to a need to consider more carefully the effects of incentives provided to encourage agro-processing. One such incentive is the export tax on pigeon peas. While the tax is intended to stimulate domestic processing, Krause and Kaufmann (2011) and the Let's Work Partnership (2016) caution that it may cut producers' farm gate prices and incomes by as much as 20%, thereby posing a risk to the sustainability of the crop for smallholders.

For certain products, the need for better integration across the value chain is mentioned. For instance, Jones and Tarp (2016) highlight the success of efforts to develop a more integrated value chain running from, for instance, the production of chicken feed (soya) by emergent commercial farmers to domestic production of chickens.

More generally, the literature has also proposed specific ways to mitigate the risks facing farmers. For instance, Smart and Hanlon (2014) suggest the GoM could share the risks by providing a form of insurance through loans and thereby encourage farmers who are loath to expand owing to perceived risks of increasing production.

#### Construction

Several studies emphasise the need to build local capabilities in construction. The ILO Lab (nd) recommends introducing SME finance programmes, developing and introducing an upgraded curriculum for conservative building construction, and creating a regular formal communication mechanism to provide practical training. The Let's Work Partnership (2016) suggests opportunities for joint/regional partnerships to build capabilities in local firms. The same study also mentions regional development financing, establishing local manufacturing of strategic construction material, developing skills and reducing delays in importing inputs through borders, as potential interventions to improve the capabilities of local construction firms.

Some studies also highlight a need to develop certification programmes involving all aspects of the construction industry (IGC, 2012; Let's Work Partnership, forthcoming). At the same time, the need to enhance access to credit for firms in the construction and building materials industry is highlighted (IGC, 2015), with regional development financing identified as a possible mechanism through which to do so (Let's Work Partnership, 2016). A large literature exists documenting the exorbitant real annual interest rates charged by banks and, especially, microcredit lenders.

#### Forestry

In the forestry sector, the emphasis on suggestions to transform the sector and develop value chains is focused on ways to develop downstream wood-processing activity in Mozambique. The Let's Work Partnership (2016) calls for the GoM to reconsider the effectiveness of existing policies. For example, a temporary log export ban for major wood species has spurred sawmilling exports, but the extent to which it has contributed to the development of major in-country processing is unclear (the outright ban only came into effect at the start of 2017 and was lifted in late June 2017) (ibid). There are concerns that the domestic processing sector does not possess sufficient capacity to absorb the logs (Hui, 2016). Other studies highlight the importance of investing in infrastructure and facilities, especially to support further processing (e.g. sawmill facilities in close proximity to forestry areas) (see e.g. GDS, 2005). The Global Development Solutions (GDS) (2005) study also suggests the establishment of an industrial cluster and/or supporting industries – to include accessories manufacturers, pulp and paper producers, kiln-drying facilities, and design and engineering capabilities and learning centres for the industry.

A couple of studies by the Let's Work Partnership also highlight the importance of further skills development for the forestry sector. The studies suggest this should be centred on vocational education

and training in forestry technology and on raising the level of practical experience in the sector within the rural labour force (Let's Work Partnership, 2016, forthcoming).

#### LINKING POLICY INTERVENTIONS AND TRANSFORMATION MODELS

Table 9 matches the various policy interventions suggested in the literature (and highlighted above) to the particular transformation model or models (described in Section 2.3) they are most likely to support. A large share of the suggested policy interventions are cross-cutting in nature and likely to apply regardless of which transformation model is followed. Other interventions are sector-specific and hence congruent with a specific type of model; and those suggested in the literature mostly support either agriculture/agro-processing-based economic transformation or manufacturing-led economic transformation. In comparison, very few of the proposed interventions directly support natural resources-led or services-led economic transformation. The GoM will need to determine what role it will play in the horizontal and the sector-specific interventions required to support economic transformation. In some areas, it is logical for the GoM to undertake certain interventions directly, such as macroeconomic policy reforms, regulatory and business environment improvements, integration of SEZs into the national planning process or reforms to government procurement. In other cases – such as education and skills development interventions, or those designed to improve access to credit for firms – the GoM may look to facilitate the design and implementation of interventions by the private sector or through donor support programmes.

Table 9. Linking policy suggestions in the literature to the transformation models they are most likely to support

## Horizontal interventions relevant for all transformation models

Education and skills development interventions

- Improve the quality of public education
- Upgrade the vocational training system (including technical and vocational education and training schemes, and managerial and technical training)
- Expand capacity in institutions providing training capacity
- Encourage the transfer of management skills and technological knowledge from foreign multinationals to local firms

#### Macroeconomic policy reforms

 Promote macroeconomic stability through sound fiscal, monetary and exchange rate policies

#### Innovation and technological advancement

Improve access to specialised technology

#### Infrastructure development

 Coordinate infrastructure development to address firm needs across different sectors and develop enabling infrastructure, particularly in rural areas and at border crossings

#### Regulatory and business environment improvements

- Better tax administration (exemption thresholds for small businesses, reduce delays in VAT refunds, less onerous VAT reporting requirements)
- Less restrictive labour regulations

#### Local content and procurement policies

Reconsider the non-mandatory local participation clause in procurement policy

## Sector-specific interventions to support particular transformation models

## Agriculture- and agro-processing-based economic transformation

- Improve processing facilities to support higher value added activities (incl. by establishing cold chain storage and processing units)
- Provide certification for accessing international markets
- Improve integration within value chains (e.g. through contract farming and out-grower schemes to link farmers and processors)
- Reconsider the effects of raw export bans/taxes on upstream producers (e.g. for pigeon peas)
- Distribute market information about opportunities to farmers
- Mitigate risks faced by farmers (e.g. through government-backed loans to increase production)

## Natural resources-led economic transformation

 Tighten linkages between the resource and nonresource sectors

#### Manufacturing-led economic transformation

- Ensure SEZs are integrated into the national planning process
- Improve access to land for industrial development by establishing an electronic land registry (over and above the existing one for mining rights), simplify procedures for community consultation and improve investor access to land-use rights
- Invest in infrastructure and facilities to support wood processing
- Establish an industrial cluster and/or supporting industries for wood processing (to include accessories manufacturers, pulp and paper

## Horizontal interventions relevant for all transformation models

Trade rules and trade facilitation

• Improve efficiency of custom procedures and inspections

#### Investment promotion, facilitation and aftercare

- Offer a single investment incentive package and equal treatment of all foreign investors
- Improve the inflow and efficiency of investments (streamline regulations and licensing requirements, review investment incentives to ensure greater transparency)
- Improve government capacity to manage public investments (e.g. better processes tor evaluating projects)
- Establish mechanisms (e.g. inter-ministerial committees) to enhance collaboration among investment promotion agencies

#### Financing productive activity

- Reforms to the financial sector to improve access to finance (introduce credit guarantee system, leasing for SMEs, strengthen institutions providing rural and microcredit)
- Enhance access to credit, particularly for domestic and rural SMEs

## Interventions to improve public sector efficiency, effectiveness and coordination

- Enhance coordination across government departments and agencies and between GoM and private sector bodies (e.g. by staging public-private forums on land reform, incentives, business needs)
- Improve monitoring of project implementation

## Sector-specific interventions to support particular transformation models

- producers, kiln-drying facilities, design and engineering capabilities and learning centres)
- Provide vocational education and training in the forestry sector (potentially to support the forestry to wood-processing value chain)

#### Services-led economic transformation

- Reform government procurement certification to aid large-scale procurement bids as well as SME participation in procurement
- Provide on-the-job training
- Build local capabilities in construction (introduce SME finance programmes, upgrade curriculum for conservative building construction, create a formal mechanism to provide practical training)
- Enhance access to credit for firms (e.g. through regional development financing)

Table 17 in Appendix IV links the policy suggestions and transformation models outlined in Table 9 to the most relevant priority sectors, pillars and programmes present in the government's *Industrial Policy and Strategy 2016-2025*. Table 17 also lists relevant donor activities (donors already operating in the broad areas associated with the priority programmes and the suggested policy interventions for each transformation model) and highlights gaps where support could be directed. In general, needs related to skills development and TVET (especially in Mozambique's extractive industries), infrastructure and access to finance appear to be relatively well covered through existing (or very recently completed) donor activities, although the effectiveness of these activities is not assessed here.

There are, however, other areas where more support could be targeted. For instance, regardless of which transformation model is followed, more donor support for attracting investment, including through the design and provision of appropriate investment incentives and sector development policies, could add value. This could be framed, for example, through technical assistance and capacity-building support for the newly established APIEX. There also appear to be opportunities to support the development of the agriculture and agro-processing sectors through greater focus on improving the availability of particular types of infrastructure (e.g. processing facilities) and specialist skills that support higher value added activities. This could be complemented by greater donor support for improving product quality control and certification systems that help Mozambican producers to access international markets. More donor support for firms to upgrade equipment and technology could help to boost both natural resources-led and manufacturing-led transformation. Donor support for manufacturing through existing programmes appears to be especially limited, suggesting there is scope, for example, to ramp up support to establish industrial clusters and provide more targeted vocational education and training programmes that focus on meeting demand for specific skills in priority manufacturing sub-sectors. There also appears to be significant scope

for greater emphasis in donor programmes on supporting the development of services sectors in Mozambique, which appear to receive comparatively little donor support at present.

#### 6. CONCLUSIONS AND NEXT STEPS

#### 6.1 MOZAMBIQUE'S CHALLENGES

Mozambique faces major development challenges. The short-term macroeconomic situation is severe. Both the government and current account deficits are high in comparison with those in similar countries. Debt levels are high and Mozambique is in partial default. Over the longer term, the development path since the 1990s has been of low quality: Mozambique has grown more than 5% over the past decade but this has not been accompanied by structural change or sufficient job creation (and 46% of the population is classified as poor).

We argue that there is another path. Economic transformation is crucial to address the macroeconomic challenges and to create jobs in a sustainable way. Mozambique has a number of development models it can follow, whereas maintaining the status quo is not tenable in the short or long term. Mozambique is a natural resource-dependent country that has not used its resources well, and it must do better if it wants to transform and create jobs. It has not moved into manufacturing or high-productivity services, which it will have to do if it is to generate job-creating growth (McMillan et al., 2017). Mozambique needs to think more carefully how it can use its natural resources better and transform the economy. But it also needs to do more to promote manufacturing linked to its comparative advantages, such as location, availability of agricultural products and the presence of megaprojects around which linkages can be improved.

Achieving this will require addressing a number of binding constraints – both general and sector-specific – to economic transformation and job creation. Economic, governance and institutional constraints exist. General economic constraints include skills shortages, inadequate infrastructure (including poor transport infrastructure and unreliable energy supply, particularly in rural areas) and a range of investment climate constraints related to different issues around the regulation of labour, access to land and finance, taxation, investment and customs. The most prominent governance constraints affecting transformation are corruption and limitations in government and institutional capacity. Large institutional challenges, ranging from inefficient use of funds to a lack of coordination and integration of development planning, undermine prospects for generating job-creating growth. This makes policy-making and implementation very difficult, even in the presence of good strategies. There are also a range of binding constraints specifically affecting the agro-processing, construction and forestry sectors.

Moreover, current policies – including the recently announced industrial strategy, employment policy and five-year plan – are insufficient on their own to kick-start manufacturing and higher value added activities in other sectors, transform the economy and create jobs.

#### 6.2 DEBATING FUTURE ACTIONS AND IMPLEMENTATION

Choosing a transformation model that is suitable for Mozambique

A reasonable consensus exists across the studies we reviewed about the sectors that can help economic transformation in Mozambique. Overall, the agro-processing, construction and forestry sectors are the most widely cited in the literature we reviewed as providing promising avenues for future value addition and employment creation. Manufacturing is generally given less attention, outside of the agro-processing sub-sector and some emphasis on the potential to develop the garment industry. But manufacturing can be an important driver of economic transformation. Experiences in Asia have shown that export-intensive manufacturing can generate significant numbers of jobs; and countries such as China and Bangladesh have used light manufacturing (specifically through the development of textile and garment industries) to kick-start industrialisation. Innovation and productivity growth tends to be faster in manufacturing compared to other sectors; and diversification out of commodities and into manufacturing builds resilience against external shocks (Balchin et al., 2016). Mozambique benefits from a relatively large pool of labour resources, a long coastline and ports providing direct access to major overseas markets and ready entry points for imported inputs, and close proximity to a sizable regional market, advantages that could support an export-led manufacturing model.

Looking ahead, the GoM could follow a combination of an agro-processing-based transformation model, an Indonesia-style natural resources cum diversification transformation model and a Mauritius/Ethiopia model of diversification into manufacturing. These models can be complementary. A targeted push towards industrialisation lies at the heart of all these strategies. Agro-processing is a form of manufacturing with high backward multipliers. The megaprojects in natural resources could feature more and higher-quality linkages, especially to the local manufacturing sector.

Mozambique is currently facing significant macroeconomic constraints and efforts to address these constraints will need to be prioritised in the short term. Beyond these, however, a range of possible policy interventions could be prioritised to kick-start the industrialisation process.

Mozambique can make a push towards industrialisation by focusing first of all on addressing general constraints, through:

- improving the regulatory framework, including more consistent investment policy, more streamlined trade facilitation, financial sector reform and better land policy;
- supporting transportation infrastructure, and improving the availability and quality of processing facilities and downstream linkages to these facilities; and
- improving dialogue with business.

The GoM could also target various sectors through focused interventions to address sector-specific constraints. In agro-processing, it could focus on improving the efficiency of downstream linkages to processing facilities, for instance by improving the fragmented system of collection, drying, storage and delivery of maize; in construction, it could focus on building local capabilities including through better access to finance; and, in forestry, it could focus on investing in infrastructure and facilities to support value added processing, and on further skills development. It is also important to promote innovation and moving into modern sectors such as manufacturing.

The GoM will need to determine what role it will play in interventions to address general and sector-specific constraints as part of the transformation process. In some instances, the GoM may opt to undertake certain interventions directly; in others, it may be more efficient to facilitate the design and implementation of interventions by the private sector or through donor support programmes.

In addition to addressing various constraints, specific interventions to boost manufacturing could also be prioritised in order to kick-start industrialisation around the combination of economic transformation models

suggested above. For instance, building on the presence of natural resources, the GoM could support manufacturing by working better around megaprojects. There is potential for megaprojects to stimulate backward and forward linkages from multinational corporations to local SMEs in Mozambique. But past attempts at creating such linkages have not been fully effective in enhancing local capacity; and evidence suggests this owes, at least in part, to a lack of capacity to negotiate advantageously with multinational companies investing in megaprojects. Improvements in the management of future negotiations with multinationals can help to enhance local linkages, local content and job creation in future megaprojects in Mozambique.

Another way to industrialise would be to target export-oriented manufacturing such as garments, through the use of SEZs. By providing guaranteed reliability of essential infrastructure services (e.g. reliable power supply and essential transport infrastructure connections to local, regional and global markets), along with regulatory, financial and other incentives, SEZs can create competitive conditions for export-oriented manufacturing and can help to attract manufacturing FDI and skilled labour into priority manufacturing industries in Mozambique. Similarly, they can serve as a mechanism to attract local investment into manufacturing activities. They can also catalyse wider improvements in domestic manufacturing capabilities, if domestic participation is encouraged together with forward and backward linkages to the domestic economy and technology transfers from SEZ investors to local firms. Moreover, the establishment of successful SEZs could have important demonstrational effects, for instance by showing that the government and private sector can work together effectively.

#### Implementing transformation policies

We should think not only about what can be done but also about how to do it in Mozambique. Our previous work has suggested there are four broad institutional factors (Ansu et al., 2016b) for the effective implementation of economic transformation strategies:

- 1. Building consensus around the direction of an economic transformation strategy
- 2. Giving one public agency the power to override coordination challenges within government
- 3. Building trust between government and the private sector
- 4. Monitoring implementation of the impact of economic transformation plans as well as evaluating and adjusting economic transformation plans where necessary.

The DEEF within the MEF in the Government of Mozambique is a key entity for driving the design and implementation of transformation strategies, and it can work in close coordination with the APIEX, the newly created agency for promoting and facilitating investment (established through the merger of GAZEDA, CPI and IPEX), which can do the actual implementation. DEEF would need to consult widely in developing Mozambique's future economic transformation strategies. Comparing Mozambique's situation with other countries in Africa and South Asia suggests the scope, capacity and planning around economic transformation needs to be enhanced considerably.

To this end, the GoM, and the DEEF in particular, needs to enhance the capacity to execute specific industrial policy functions that help foster industrialisation. Previous work by Ansu et al. (2016a) and Balchin and te Velde (2017) suggests Mozambique should focus on the following functions to support industrialisation:

- Pursuing a high quality industrial policy process, by building consensus across the public and private sectors on the strategic direction of the economy and the desired transformational model for Mozambique; instituting a robust and inclusive process for formulating and implementing industrial policies and strategies; building capacity within an effective lead agency to coordinate actions and interventions necessary for economic transformation; and ensuring effective monitoring of implementation.
- Putting in place conducive trade rules and trade facilitation (including corridors) geared towards
  exporting and openness and towards lowering trade costs, including through a sound tariff regime,
  active support for exporters, trade standards and efficient port and customs procedures.

- Provision and regulation of SEZs, industrial clusters or hubs (including the required infrastructure and skills), supported by efficient legislation and coordinated and speedy action.
- Effective investment facilitation (including aftercare), with clear roles, responsibilities and mandates for the APIEX, government ministries and other institutions tasked with investment promotion and facilitation; effective identification of suitable investors; and active engagement with, and support for, firms operating within Mozambique.
- Local capability-building (for local content or acquisition of key capabilities by national firms or
  public agencies), including through capacity-building programmes to support the development of
  skills and technology in tandem with the private sector; and institutional support for upgrading and
  increasing productivity.
- **Supportive infrastructure planning**, including through prioritising infrastructure that supports industrialisation and efficient transport logistics.
- Selective, conditional support to building firm capabilities (including finance), by developing a banking system that supports Mozambique's industrial priorities; ensuring mechanisms are in place to hold firms operating in Mozambique to commitments; and allowing for experimentation and adaptability in industrial policy processes in order to facilitate the discovery of approaches that work for industrialisation in the Mozambican context and in specific sectors.
- Learning with the private sector to address initial and emerging constraints, with emphasis
  on building effective state—business relations by facilitating formal and informal dialogue and
  public—private collaboration, developing a relationship between the public and private sectors that
  is based on trust and reciprocity and ensuring mechanisms are in place to hold the GoM
  accountable for commitments.

Public-private dialogue around industrialisation is key. Effective mechanisms need to be in place to facilitate this dialogue and, at the same time, build trust between the public and private sectors and enable the private sector to input into the policy agenda and priorities for industrialisation. To this end, the GoM will need to work in close collaboration with the private sector both in the development of a shared vision for economic transformation and in the implementation of programmes and strategies to support this transformation. The GoM could look to examples in Vietnam (the Vietnam Business Forum), Malaysia (Pemandu and Permudah platforms) and Mauritius (Joint Economic Council), where successful institutional arrangements have been created to enable such collaboration and coordinate public and private actors to facilitate key interventions for economic transformation.

#### Support from donors

**Donors such as DFID** already have wide-ranging portfolios of projects, including those targeted at agribusiness, SMEs and the oil and gas sectors or at horizontal issues such as jobs, finance or infrastructure, with special attention to the position of rural, female and young groups. The discussion in this paper provides some pointers to possible gaps in the support to industrialisation and high-productivity services, for example in relation to infrastructure around SME development and the need for linkage policy. In this respect, donor support could take the form of capacity-building for policy development and investment climate reform or financial support (e.g. through grant aid, concessional loans or non-concessional finance) for infrastructure development. There may also be opportunities for development partners to engage in institutional support for key ministries and agencies tasked with designing and implementing a distinctly Mozambican transformation and job creation strategy.

### APPENDIX I: ANALYSIS OF MACROECONOMIC SHOCKS IN **MOZAMBIQUE**

There are key macroeconomic challenges and shocks that must be managed by the GoM which impact Mozambique's financing landscape and its ability to promote economic transformation. They include unsustainably high levels of debt and debt default, twin current account and fiscal deficits, the sharp depreciation in the metical, the global commodity price downturn and declining reserves. The combination of these shocks is likely to continue and could exacerbate Mozambique's growth slowdown. After falling to a 15-year low of 3.6% in 2016, real GDP growth is expected to gradually pick up to 6.6% by 2018 (World Bank, 2016b) as macroeconomic stability improves; However, tighter fiscal policy will limit growth prospects.

#### DEBT SUSTAINABILITY IS A PRIMARY MACROECONOMIC RISK

Mozambique's fiscal challenges are significant and have been largely triggered by previously undisclosed external debt guarantees of roughly of \$1.4bn8 being brought to light. The undisclosed debt amounted to approximately 11% of its GDP and resulted in the IMF suspending their program to Mozambique in April 2016 (World Bank, 2016a, 2016b). The adverse fiscal situation has meant that the government has limited capacity to make payments to external commercial creditors from 2017; this could continue until 2022 (Standard Bank, 2016). Therefore, the government not only has limited ability to raise finance, but a restricted capacity to pay back existing commitments which will hinder economic growth and the likelihood of sustained economic transformation.

Mozambique's level of debt took on an exponentially higher path with the addition of previously undisclosed loans, contracted by state-owned enterprises (SOEs) with illegal state guarantees. As these loans come due, neither the government nor the SOEs are easily able to repay them. As it stands, Mozambigue's external debt-to-GDP ratio is one of the highest in Africa and is climbing higher (Figure 6). The pace of currency depreciation has created severe liquidity constraints that have reduced Mozambique's capacity to meet debt service obligations. As a consequence, the economy's financing landscape is uncertain and highly contingent on the government's ability to negotiate new terms with commercial creditors in 2017.

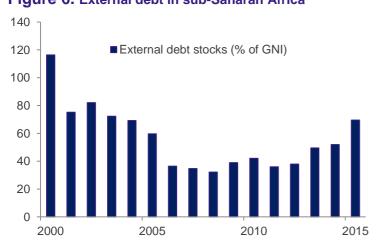


Figure 6. External debt in sub-Saharan Africa

Source: WDI.

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<sup>8</sup> http://www.imf.org/en/news/articles/2015/09/14/01/49/pr16184

Largely as a result of commercial borrowing by unprofitable SOEs in 2013-14, the lack of transparency regarding the composition of Mozambique's debt burden has triggered significant market volatility undermining international investor confidence. Mozambique Asset Management (MAM), a state-owned firm, failed to make its first principal repayment on a government-guaranteed loan in May. And according to the existing repayment schedule, the government's external debt- servicing costs will exceed US\$800m in 2017, equivalent to almost 15% of GDP (Standard Bank, 2016) prompting discussion of commercial debt restructuring.

Debt restructuring negotiations are likely to be complicated by ongoing investigations of the SOEs involved in illegally contracted debt. The risk is that SOEs' assets are worth significantly less than the debt they received. The government is prioritising its obligations to domestic, bilateral and multilateral lenders. The GoM has defaulted on its \$59.8m coupon payment, and further missed payments are a risk (Coppola, 2017). The fiscal deficit is projected to accelerate from 5% of GDP in 2015 to 8.9% of GDP by the end of 2016 (Economist Intelligence Unit, 2016).<sup>9</sup>

#### MOZAMBIQUE'S TWIN DEFICITS

Alongside its fiscal deficit, at 39% of GDP, Mozambique's current account deficit is also one of the largest compared to its African counterparts (Figure 7). The current account has narrowed more recently, though this has been largely driven by a collapse in imports. External funding, such as foreign direct investment, remains largely dependent on resource intensive extractive sectors in coal and gas, and has also reversed. Imported consumer goods have been widely affected, including basic imports such as cereals, sugar and cooking oil, along with items such as imported vehicles. This indicates an adjustment in the import bill as currency depreciation and foreign exchange scarcity make imports increasingly unaffordable (World Bank, 2016a).

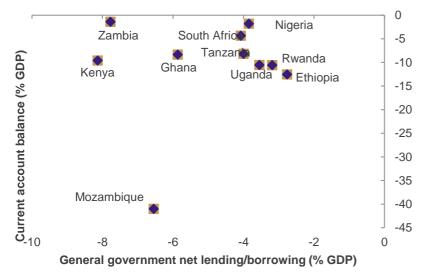


Figure 7. Twin deficits in sub-Saharan Africa

Source: WDI.

#### BROADER MONETARY AND MACROECONOMIC RISKS

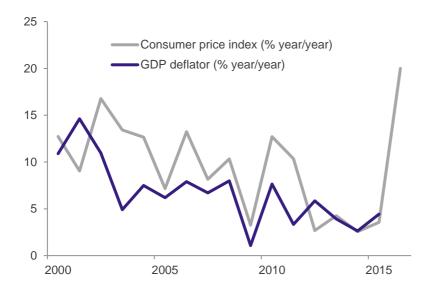
The depreciation in the metical has triggered a significant inflation shock (Figure 8). High import dependence has made currency deprecation a key inflation driver (World Bank, 2016b). Mozambique's metical has depreciated by 42% against the US dollar in the first ten months of 2016, and 57% when

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<sup>&</sup>lt;sup>9</sup> The fiscal deficit figures exclude grants.

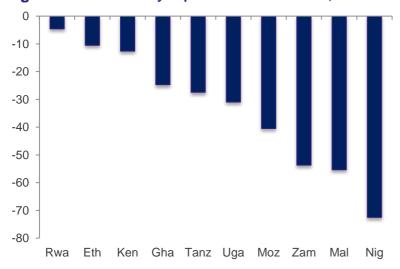
compared to the start of 2015. The rate at which the Mozambican currency depreciated was at par with a few other African commodity exporters, including Nigeria and Zambia who have also seen terms-of-trade shocks (Figure 9). Average year-on-year inflation reached 25% in October 2016, with food price inflation at 40%. Inflation is set to remain elevated at approximately 20%, due in part to lagged currency depreciation effects and food shortages.

Figure 8. Inflation trends in Mozambique



Source: WDI.

Figure 9. SSA currency depreciation vs US dollar, 2015-2016



Source: Bloomberg.

As Mozambique's inflation increases and economic activity decelerates, monetary policy tightening, largely in the form of higher interest rates, is likely to continue, has already occurred in order to restore macroeconomic stability. The prospect of higher interest rates has stabilised the currency somewhat, and has caused a slight narrowing in the current account deficit. The BDM has already raised its policy rate eight times since October 2015: the policy interest rate rose from 7.5% in September 2015 to the current level of 23.25%. During the same period, reserve requirements in local currency nearly doubled, from 8% to 15.5%, and a foreign currency reserve requirement was introduced, currently at 15.5%.

Central Bank reserves have declined significantly. Mozambique's net international reserves fell from \$2bn, equivalent to 3.2 months of imports, at the end of 2015 to \$1.72bn, or 2.9 months of imports, by September 2016. Additionally, shortfalls in its balance of payments financing suggest continued downside risks to its reserve position, particularly given the continued liquidity demand for basic food and fuel imports as well as the government's debt service obligations. Continued reductions in reserves will limit the BDM's ability to contain currency volatility, particularly as capital outflows persist. Its currency weakness and deteriorating reserves put Mozambique in a similarly weak financial position as other African economies (Figure 10).

0.0 -1.5 00 -1.0 -0.5 0.5 1.0 1.5 2.0 -0.5 Currency change in 2016 (standardised DRC -1.0 -1.5 Rwanda Nigeria -2.0 Ghana Kenya ◆ Malawi Tanzania Mozambique South Africa Zambia -3.0

**Total Reserves (in months of imports)** 

Figure 10. Mozambique's declining reserve buffer

Source: Bloomberg and WDI.

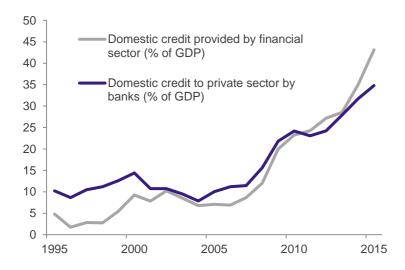
#### DEBT SPIRAL COULD EXACERBATE SYSTEMIC FINANCIAL RISKS

Even in the absence of its debt problems, access to credit has been a constraint to Mozambique's growth outlook. Access to finance is a significant constraint for certain sectors and for MSMEs. Agriculture contributes more than 25 percent to GDP. And yet, the sector has access to only approximately 5% of total lending. Moreover, a full 75% of MSME owners indicate that they do not use any formal or informal financial services. With its external debt burden at unsustainably high levels, access to credit is likely to continue to act as a significant constraint and limit the prospects for broader-based economic growth outside of the extractive industry.

Contagion and potential linkages from risk-taking international banks that have a presence in Mozambique, could also lead to domestic financial instability and credit tightening, harming growth further. Of the 19 banks registered in Mozambique, five of the largest banks account for 95% of the country's banking assets. A large number of these banks comprise subsidiaries of Portuguese and South African banks (World Bank 2016a). Bank credit is dominant in overall lending (Figure 11). What's more, the divergence between deposits and the low level of credit indicates that the financial sector has not yet effectively channelled adequate resources to the private sector; this, in turn, is likely to slow the growth of promising industries, hinder competitiveness and inhibit economic diversification.

<sup>&</sup>lt;sup>10</sup> FinScope MSME Survey Mozambique, 2012.

Figure 11. Mozambique's private sector credit trends



Source: WDI.

Domestic bank failures, such as that of Nosso Banco that was placed in liquidation, signify that possible contagion may be stemming from the country's sovereign credit pressures. The bank failures add to fiscal and economic deterioration at a time when the government's financing options and prospects of restoring international funding in the near term are already low. Moreover, financial fragility will complicate negotiations with creditors and could make it less likely that sustainable debt restructuring is achieved. This casts doubt on Mozambique's prospects of resuming international financing for its economic growth and transformation given domestic fiscal and financial stress.

Continued stalemate between the GoM and its creditors is likely to lead to further defaults. According to the IMF's debt sustainability framework for low-income countries, Mozambique is in 'debt distress' as the country is in breach of all five of the IMF's debt sustainability thresholds: (i) present value of external public and publicly guaranteed (PPG) debt to GDP at 67% against a threshold of 40%; (ii) present value of external PPG debt to exports at 232% compared to a threshold of 150%; (iii) present value of external PPG debt to revenue at 293% against 250%; (iv) external PPG debt service to government revenues at 26.5% against a threshold of 20% and (v) external PPG debt service to exports projected at 22.9% this year against a threshold of 20% (Standard Bank, 2016).

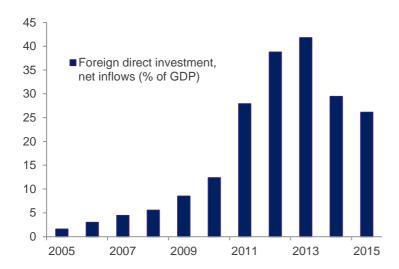
#### MOZAMBIQUE'S EXPOSURE TO THE COMMODITY PRICE SHOCK

Mozambique's weaker growth has been due in part to its exposure to the commodity price downturn that worsened its terns-of-trade position. Looking ahead, the weaker growth outlook is likely to be driven in part by the postponement of large energy-related investments. Its investment prospects have also been hampered by successive downgrades to its debt that have subsequently weakened investor confidence further. FDI looks to have peaked and is expected to continue to have declined by end 2016 (Figure 12). Public sector consolidation amid debt negotiations, currency depreciation and monetary tightening are also likely to contribute to the investment slowdown.

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<sup>&</sup>lt;sup>11</sup> See: <a href="https://www.moodys.com/research/Moodys-downgrades-Mozambique-sovereign-ratings-to-Caa3-changes-outlook-to--PR\_351635">https://www.moodys.com/research/Moodys-downgrades-Mozambique-sovereign-ratings-to-Caa3-changes-outlook-to--PR\_351635</a>

Figure 12. Mozambique's foreign direct investment trends

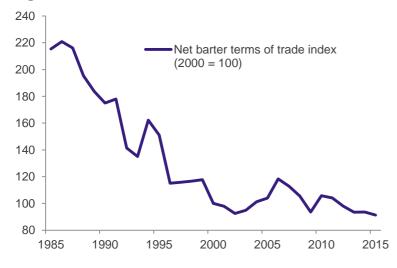


Source: WDI.

Mozambique has seen its terms-of-trade continue to deteriorate to multi-decade lows (Figure 13) with weaker revenues linked to subdued aluminium and coal prices. Its extractive and manufacturing sectors showed a 60% decrease in the contribution to growth in the first three quarters of 2016. However, the outlook could now start to shift given recent progress regarding the final investment decision for the Rovuma basin gas megaprojects (World Bank, 2016a).

Mozambique is likely to be exposed to such shocks in the future given its lack of significant diversification from its extractive industry: longer-term economic growth prospects are disproportionately linked to its liquefied natural gas (LNG) sector. According to a key operator in the Rovuma basin, Mozambique has the potential to be the world's third-largest exporter of natural gas, and 2020-2021 is seen as the earliest start date for production. Global demand for LNG is growing. And yet, reliance on it as the driving factor for Mozambique's longer-term growth prospects risks an unsustainable growth path, without requisite transformation into non-extractive industry.

Figure 13. Mozambique's terms-of-trade shocks



Source: WDI.

<sup>&</sup>lt;sup>12</sup> Anadarko, 'Anadarko Discoveries in Mozambique', <a href="http://www.anadarko.com/Operations/Upstream/Africa/Mozambique/">http://www.anadarko.com/Operations/Upstream/Africa/Mozambique/</a>. 50

#### POLICY AGENDA DOMINATED BY DEBT RESTRUCTURING

The GoM's fiscal policy response in the second half of 2016 has been marked by the revised budget for 2016 taking into account previously undisclosed debt, and, secondly, by the initiation of debt restructuring talks with creditors. Both signify some willingness to tackle the debt burden. However, given the depth of Mozambique's financing crisis and its dependence on external capital for growth, the need to restore and maintain economic stability could continue beyond 2017. The overwhelming policy focus on debt restructuring and the likelihood of little fiscal leeway for spending will mean that other policies priorities, such as those pertaining to economic transformation, may not realistically garner enough attention.

In the context of debt renegotiations and maintaining macroeconomic stability, with policy geared towards credibly restoring fiscal sustainability, accessing finance is likely to be a key challenge in the near to medium-term. As long as Mozambique's twin current account and fiscal deficits persist, foreign capital inflows will likely remain weak and the limited ability of the government to issue debt affordably will impede its overarching policy goal of spurring economic growth. The fiscal outlook is made even more difficult by the fact that revenues are only expected to pick up sustainably as LNG exploration and production come online in 2021-2022 and generate royalties and tax revenue.

# APPENDIX II: PROGRESS ON INCLUSIVE TRANSFORMATION IN MOZAMBIQUE OVER THE PAST TWO DECADES

In the transition period immediately following Mozambique's independence in 1975, the country was the eighth largest industrial producer in SSA (Cruz et al., 2014). In the period between 1975 and 1986, further development of industry (along with agriculture) through a model of centralised economic planning was regarded as key to any future structural transformation of the economy. This saw some diversification of the manufacturing sector (e.g. through a focus on the production of rubber, metal works, textiles, oils and soaps) under high effective rates of protection and an emphasis on import substitution (ibid). However, declining and stagnating output, falling average labour productivity and declining levels of capacity utilisation, particularly in manufacturing, from the mid-1970s until the early 1990s, punctuated by a series of shocks (including drought and civil war) in the 1980s, led to a massive slowdown in industrial activity and undermined progress towards industrialisation.

Liberalisation and a transition to a more market-oriented economy followed in the late 1980s. After this, from the mid-1990s, came some improvement in manufacturing sector growth, in part because of improvements in capacity utilisation, productivity growth and new private investment in manufacturing, and some development of light manufacturing, mostly to supply the domestic market (Cruz et al., 2014). A number of megaprojects were also initiated, principally in mining and energy but also in manufacturing. However, the level of integration of these projects with the broader economy has been relatively limited (Castel-Branco, 2008, 2010; CIP, 2013).

Today, Mozambique is still a predominantly agricultural economy, which is reflected in the large shares of agriculture in GVA and total employment. There have been some attempts at further industrialisation, especially around the development of industrial clusters (e.g. around Maputo-Matolo and Beira-Dondo, SEZs in Nacala and Beira, and an industrial free zone in Beluluane), and to build light manufacturing capacity around agro-processing (Cruz et al., 2014). The government's latest *Industrial Policy and Strategy 2016-2025* identifies the food and agro-industry; clothing, textiles and footwear; non-metallic minerals; metallurgy and manufacture of fabricated metal products; wood processing and furniture; chemicals, rubber and plastics; and paper and printing as priority sectors for industrial development. This is on the basis of their potential to create economic links both upstream and downstream, their contribution to addressing the country's key challenges, and their potential to generate jobs, to substitute imports and to help raise the level of industrial production. However, to date, there has generally been relatively little structural transformation of the Mozambican economy from agriculture into industry. In fact, the share of manufacturing value added in GDP has declined steadily, particularly since 2005 (discussed below).

The contribution of manufacturing, and industry in general, to structural transformation in Mozambique has been limited (Castel-Branco, 2003; Jones and Tarp, 2012; Rand and Tarp, 2013). This is reflected in little diversification of industrial activities or manufactured products and a lack of development of linkages from industry to agriculture, fisheries and other natural resource-based sectors (Cruz et al., 2014) Employment remains concentrated largely in agriculture, and mostly in low productivity jobs with low earnings (Walker, 2016). As a result, levels of poverty and inequality remain high. More generally, while productivity improvements have been a key driver of GDP growth since the mid-2000s, this has occurred off a low base, and agricultural productivity remains low (ibid).

We discuss these developments in more detail below, analysing progress on inclusive economic transformation in Mozambique through the SET lens (see McMillan et al., 2017). We focus, in particular, on recent trends in economic growth and changes in the broad structure of the Mozambican economy; sectoral shifts in employment; trends in labour productivity and its sectoral components; the structure of trade and progress towards diversification of economic activities; and, finally, a brief assessment of the

contribution of manufacturing in Mozambique compared with four other natural resource-dependent countries (Botswana, Indonesia, Nigeria and Tanzania).

#### ECONOMIC GROWTH AND ECONOMIC STRUCTURES

There has been substantial growth in the size of the Mozambican economy since 1990. In real terms, GDP (in constant 2010 prices) expanded from \$2.3 billion in 1990 to \$4.6 billion in 2000 and \$14.3 billion in 2015 (see Figure 14). The acceleration in the expansion of GDP has been particularly rapid over the past decade, with total GDP doubling since 2005. This has been accompanied by generally high annual GDP growth rates. After considerable fluctuation in GDP growth rates between 1990 and the early 2000s, followed by a peak in the growth rate at nearly 10% in 2006, Mozambique's annual GDP growth rate has generally remained in the range of 6-7% over the past decade (averaging 7.4% between 2005 and 2015).

16 30 14 25 20 12 growth (% bn 10 15 GDP, USD 8 5 6 0 -5 -10 GDP (USD bn, constant 2010 USD) GDP growth (annual %)

Figure 14. Historical GDP (US\$ billion, constant 2010 prices) and GDP growth rate, Mozambique, 1990-2015

Source: WDI.

Table 10 outlines the composition of Mozambique's economy in GVA terms, comparing sectoral contributions to GVA in 1975, 1991, 2000, 2005, 2010 and 2015. Of particular note is the declining importance of agriculture – the sector's share of total GVA dropped back by 11.3 percentage points between 1991 and 2015. Even so, the agriculture sector remains an important contributor to total GVA in Mozambique.

Notably, the share of manufacturing in GVA has declined considerably since 1975. Much of this decline occurred between 1975 and 1991, a period marked by declining and stagnating output, particularly in manufacturing. Moreover, a series of shocks (including the civil war beginning in 1977 (and ending in 1992) and drought in 1983) undermined Mozambique's industrialisation progress and led to an industrial slowdown in the 1980s. The late 1980s were also marked by disruptions to private sector production and generally low levels of capacity utilisation, especially in manufacturing (Cruz et al., 2014). The importance of manufacturing has also declined more recently, with the sector's contribution to GVA dropping back by more than 5 percentage points since 2005. In 2015, manufacturing accounted for less than 10% of GVA in the Mozambican economy.

The declining significance of agriculture and manufacturing has been counterbalanced by increases in the relative importance of the mining and utilities, wholesale, retail and hotels, and transport, storage and

communications sectors in GVA terms. The contribution of mining and utilities to GVA, for example, increased by nearly 8 percentage points between 1991 and 2015. The shares of the other two sectors in GVA increased by around 3-4 percentage points over this period.

Table 10. Sectoral contributions to gross value added in Mozambique, 1975-2015

Economic activity	Gross	Gross value added (current US\$, %)					
	1975	1991	2000	2005	2010	2015	
Agriculture	35.9	36.8	22.8	25.4	28.9	24.6	
Mining and utilities	1.0	0.4	2.1	4.2	5.4	8.8	
Manufacturing	29.7	15.0	16.8	15.1	11.1	9.8	
Construction	3.2	1.3	4.1	1.5	2.1	2.5	
Wholesale, retail, hotels	9.9	16.4	19.1	12.4	13.4	14.0	
Transport, storage, communications	8.1	11.5	16.2	14.3	13.7	11.3	
Other	12.2	18.5	18.9	27.2	25.4	29.1	
Total	100	100	100	100	100	100	

Notes: The sectoral employment figures for 2015 used in these calculations are ILO projections.

The sectoral contributions to GVA are derived by calculating labour productivity levels (gross value added at constant prices divided by number of persons employed per sector) and expressing the result as a ratio of total economy labour productivity. Numbers may not sum due to rounding.

Source: SET data (<a href="http://set.odi.org/data-portal">http://set.odi.org/data-portal</a>), calculations using UNSD National Accounts Main Aggregates data on 'Value added by economic activity' (<a href="http://unstats.un.org/unsd/snaama/selCountry.asp">http://unstats.un.org/unsd/snaama/selCountry.asp</a>) and ILO WESO – Trends 2015 supporting dataset 'Employment by sector and sex' (<a href="http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm">http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm</a>).

#### **EMPLOYMENT**

The size of Mozambique's labour force stands at around 12.4 million people (WDI, 2014 data), of whom some 9.4 million are in employment (ILO statistics). Recent growth in Mozambique's labour force has been relatively rapid, with a large number of people entering the labour force on an annual basis. According to Walker (2016), the economically active population in Mozambique is expanding at around 3% annually, and as many as 420,000 young people enter the labour market each year. This is a not insignificant share of a total population of around 25.7 million people in 2015 (National Institute of Statistics, 2015) and an economically active population of around 11.6 million (Danish Trade Union, 2014). Yet, the number of jobs created by the private sector is limited. According to Bertelsmann Stiftung's Transformation Index (BTI, 2016), the private sector creates only 18,000 new jobs each year.

Historically, the majority of the Mozambican workforce has been absorbed into employment within the agriculture sector. In 1991, agriculture accounted for more than 81% of total employment, although the sector's employment share has declined by around 6 percentage points since then (see Table 11). Nevertheless, agriculture remains the principle source of employment in Mozambique. As of 2015, three-quarters of the labour force was employed in the agriculture sector. Much of this employment remains concentrated in smallholder agriculture (Walker, 2016).

The relative contributions of the construction, wholesale, retail and hotels, and transport, storage and communications sectors all increased between 1991 and 2015. After agriculture, the construction sector

is the second largest employer among the sub-groups in Table 11, accounting for 3.1% of total employment.

The manufacturing sector is a comparatively minor source of employment in Mozambique. In 2015, just 0.6% of the labour force was employed in manufacturing. This share has remained stagnant for more than two decades.

Table 11. Employment by sector (% of total employment) in Mozambique, 1991-2015

Economic activity	Employment by sector (%)							
	1991	2000	2005	2010	2015 <sup>p</sup>			
Agriculture	81.3	79.3	78.3	77.3	75.3			
Mining and utilities	0.6	0.6	0.6	0.6	0.5			
Manufacturing	0.7	0.7	0.7	0.6	0.6			
Construction	1.6	2.8	2.0	2.1	3.1			
Wholesale, retail, hotels	1.9	2.1	2.0	2.1	2.2			
Transport, storage, communications	0.8	0.9	1.0	1.1	1.2			
Other	13.1	13.7	15.3	16.2	17.1			
Total	100	100	100	100	100			

Note: The sectoral employment figures for 2015 are ILO projections

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using ILO WESO – Trends 2015 supporting dataset 'employment by sector and sex' (<a href="http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm">http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm</a>).

These broad patterns are replicated when the sectoral employment shares are disaggregated by gender in Table 12. Much of the decline in agriculture's share in employment has been among males (falling by 9.2 percentage points between 1991 and 2015, compared with 1.5 percentage points in the case of the share of females employed in the sector). In several other sectors (mining and utilities, manufacturing, construction and transport, storage and communications), the sectoral shares of female employment have remained unchanged since 1991. Employment of females in these sectors is very limited in Mozambique.

Agriculture accounts for a markedly larger share of total female employment in Mozambique (90.4% of females were employed in agriculture in 2015 versus 59.5% of males). In contrast, the gender division in employment in most other sectors is skewed towards males, with the exception of the wholesale, retail and hotels sector.

Among males, the share of employment in manufacturing has remained stagnant for much of the past two decades (in the range of 1.2-1.5%). Growth in the relative shares of total employment among the male segment of the labour force between 1991 and 2015 was confined to the construction, transport, storage and communications, and wholesale, retail and hotels sectors.

Table 12. Employment by sector and gender (% of total employment) in Mozambique, 1991-2015

	Male employment by sector (%)					Fem	nale emp	loyment	by secto	or (%)
Sector	1991	2000	2005	2010	<b>2015</b> <sup>p</sup>	1991	2000	2005	2010	<b>2015</b> <sup>p</sup>
Agriculture	68.7	65.9	64.6	62.2	59.5	91.9	91.0	90.6	91.4	90.4
Mining and utilities	1.2	1.2	1.2	1.1	1.0	0.1	0.1	0.1	0.1	0.1
Manufacturing	1.5	1.4	1.5	1.3	1.2	0.1	0.1	0.1	0.1	0.1
Construction	3.4	5.7	4.1	4.3	6.1	0.1	0.1	0.1	0.1	0.1
Wholesale, retail, hotels	0.9	0.9	0.9	0.9	1.1	2.8	3.1	3.0	3.2	3.3
Transport, storage, communications	1.7	1.8	2.1	2.2	2.3	0.1	0.1	0.1	0.1	0.1
Other	22.7	22.9	25.5	28.0	28.8	4.8	5.4	5.9	5.1	6.0

Note: The sectoral employment figures for 2015 are ILO projections

Source: ILO WESO – Trends 2015 supporting dataset 'Employment by sector and sex' (http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm).

#### LABOUR PRODUCTIVITY AND ECONOMIC TRANSFORMATION

In this section we unpack growth in labour productivity and its sectoral components in Mozambique since 1991. Figure 15 decomposes the respective portions of labour productivity change in Mozambique into growth owing to either structural changes between sectors or within sector change for four different subperiods between 1991 and 2015. In the period from 1991 to 2000, annualised labour productivity growth was low, and almost completely dominated by productivity change owing to structural change. In contrast, in the decade between 2000 and 2010, labour productivity growth in Mozambique was overwhelmingly driven by within-sector productivity changes (especially in the period from 2005 to 2010). More recently, the relative contribution of structural change to overall growth in labour productivity has increased, with similar contributions from the structural change and within sector components between 2010 and 2015. According to Jones and Tarp (2016), this has been driven by capital-intensive growth in the mining sector as well as growth in employment in services (although this mostly in relatively low-productivity services activities). Annualised labour productivity growth between 2010 and 2015 was lower than in the first decade of the new millennium. Within-sector productivity growth in Mozambique is highly uneven between sectors and increasing (Jones and Tarp, 2016).

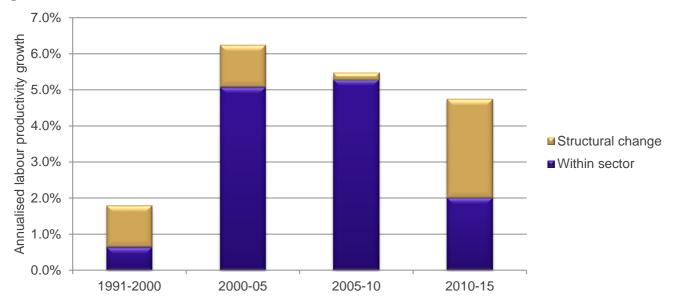


Figure 15. Decomposition of labour productivity change in Mozambique, 1991-2015

Note: The sectoral employment figures for 2015 used in these calculations are ILO projections

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using UNSD National Accounts Main Aggregates data on 'gross value added by kind of economic activity' (<a href="https://data.un.org/search.aspx?q=gross+value+added+datamart%5bsnaama%5d">https://data.un.org/search.aspx?q=gross+value+added+datamart%5bsnaama%5d</a>) and ILO WESO – Trends 2015 supporting dataset 'employment by sector and sex' (<a href="http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm">https://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm</a>).

Table 13 examines labour productivity changes at the sectoral level in Mozambique. Panel (a) expresses sectoral labour productivity levels in 2000, 2005, 2010 and 2015 as an index relative to 1991 levels. Growth in labour productivity has been recorded in all sectors relative to productivity levels in 1991, but there is considerable variation in the rates of productivity growth across sectors. Relative to 1991 levels, the largest gains in terms of labour productivity growth have been recorded in the mining and utilities, construction and manufacturing sectors. Megaprojects have been an important driver of growth in labour productivity in these sectors, with labour productivity in megaprojects more than doubling since 1997 (World Bank, 2016d). Growth in labour productivity in the agriculture sector has been much more modest relative to the 1991 level.

These broad observations are also reflected in the annualised growth in labour productivity figures in panel (b) of Table 13. Between 1991 and 2015, labour productivity in the mining and utilities sector grew at an annualised rate of 12.8%, well above the overall growth rate across sectors (4.1%). The next fastest growth sectors were construction (annualised rate of 5.8%), manufacturing (4.5%) and transport, storage and communications (4.4%). In comparison, annualised growth in labour productivity was much slower in the agriculture sector (2.6%). However, in the most recent period (2010-2015), annualised growth in manufacturing labour productivity slowed considerably (to a similar rate to that of agriculture), and the equivalent growth rate was negative in the case of construction.

 Table 13. Labour productivity levels and changes in Mozambique, 1991-2015

Economic activity	Labou	(a) Labour productivity (index, 1991=100)					(b) Annualised growth in labour productivity				
	1991	2000	2005	2010	2015 <sup>p</sup>	1991- 2015	1991- 2000	2000- 2005	2005- 2010	2010- 2015 <sup>p</sup>	
Agriculture	100	105.5	135.9	174.5	184.4	2.6%	0.6%	5.2%	5.1%	1.1%	
Mining and utilities	100	315.6	571.9	969.8	1,783.6	12.8%	13.6%	12.6%	11.1%	13.0%	
Manufacturing	100	147.5	250.7	271.6	289.9	4.5%	4.4%	11.2%	1.6%	1.3%	
Construction	100	150.3	248.0	423.8	389.1	5.8%	4.6%	10.5%	11.3%	-1.7%	
Wholesale, retail, hotels	100	92.8	128.2	183.1	238.2	3.7%	-0.8%	6.7%	7.4%	5.4%	
Transport, storage, communications	100	165.7	187.8	244.3	283.3	4.4%	5.8%	2.5%	5.4%	3.0%	
Other	100	95.7	108.9	138.6	184.8	2.6%	-0.5%	2.6%	4.9%	5.9%	
Total	100	117.3	158.9	207.4	261.3	4.1%	1.8%	6.2%	5.5%	4.7%	

Notes: The labour productivity index is derived by calculating labour productivity levels (GVA at constant 2005 prices divided by number of persons engaged) and expressing the results as an index related to 1991 levels. The sectoral employment figures for 2015 used in these calculations are ILO projections.

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using UNSD National Accounts Main Aggregates data on 'gross value added by kind of economic activity' (<a href="https://data.un.org/search.aspx?q=gross+value+added+datamart%5bsnaama%5d">https://data.un.org/search.aspx?q=gross+value+added+datamart%5bsnaama%5d</a>) and ILO WESO – Trends 2015 supporting dataset 'employment by sector and sex' (<a href="https://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm">https://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm</a>).

We also compare productivity levels in each sector relative to total economy labour productivity (see Table 14). In 2015, labour productivity in the manufacturing sector was around 48 times higher than that in agriculture (this gap has widened marginally since 1991) and mining and utilities was 44 times more productive than agriculture. The gap between relatively productivity levels in the manufacturing and mining and utilities sectors has closed substantially since 1991, when labour productivity in manufacturing was almost 7 times higher than in the mining and utilities sector. As of 2015, manufacturing was only marginally more productive than mining and utilities in relative terms.

Table 14. Relative productivity levels by sector in Mozambigue, 1991-2015

Economic activity		Relative productivity levels						
	1991	2000	2005	2010	2015			
Agriculture	0.4	0.3	0.3	0.3	0.3			
Mining and utilities	1.9	5.2	7.0	9.0	13.2			
Manufacturing	13.1	16.5	20.6	17.1	14.5			
Construction	0.5	0.6	0.7	1.0	0.7			
Wholesale, retail, hotels	7.6	6.0	6.2	6.7	7.0			
Transport, storage, communications	11.6	16.4	13.7	13.7	12.6			
Other	2.6	2.1	1.8	1.7	1.8			
Total	1.0	1.0	1.0	1.0	1.0			

Notes: Derived by calculating labour productivity levels (GVA at constant prices divided by number of persons employed per sector) and expressing the result as a ratio of total economy labour productivity. The sectoral employment figures for 2015 used in these calculations are ILO projections.

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using UNSD National Accounts Main Aggregates data on 'gross value added by kind of economic activity' (<a href="https://data.un.org/search.aspx?q=gross+value+added+datamart%5bsnaama%5d">https://data.un.org/search.aspx?q=gross+value+added+datamart%5bsnaama%5d</a>) and ILO WESO – Trends 2015 supporting dataset 'employment by sector and sex' (<a href="http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm">https://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm</a>).

#### TRADE AND DIVERSIFICATION

The value of Mozambique's total trade (imports plus exports) with the rest of the world has grown more than 12 times over the past two decades, expanding from around \$0.9 billion in 1995 to \$1.5 billion in 2000 and \$11.1 billion in 2015 (UN Comtrade data). Over the same period, the value of exports from Mozambique to the world grew from less than \$0.2 billion in 1995 to nearly \$0.4 billion in 2000 and as high as \$4.1 billion in 2015 (see Figure 16).

We focus the trade analysis in this section on exports from Mozambique. Mozambique's trade is still dominated by goods exports, and the share of services in total exports has, overall, not changed significantly over the past decade – increasing by 1 percentage point to 17% in 2015 (although with some clear fluctuations in the intervening years between 2009 and 2012) (see Figure 16). Mozambique's services exports are dominated by exports of transportation and tourism services. The former accounted for around 60% of Mozambique's total services exports in 2014, much higher than in Kenya (44.6%) and Tanzania (26.3%), two comparable countries on Africa's East Coast with large ports (calculations using UN Comtrade data). Tourism accounted for 28.5% of Mozambique's total services exports in 2014, higher than in Kenya (16.5%) but well below the share of tourism in Tanzania's total services exports (59.1%).

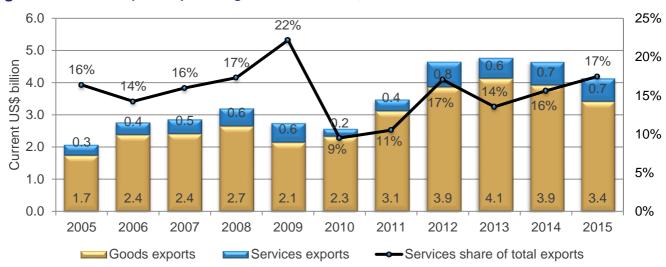


Figure 16. Mozambique's exports of goods and services, 2005-2015

Source: SET data (<a href="http://set.odi.org/data-portal/">http://set.odi.org/data-portal/</a>), calculations using WDI data.

We first consider Mozambique's export diversification along both the extensive and intensive margins. Extensive export diversification reflects an increase in the number of export products or trading partners. Intensive export diversification considers the shares of export volumes across active products or trading partners. Higher values on the index (either intensive or extensive margins) reflect *lower* levels of diversification. A country is less diversified when only a few sectors or trading partners drive export revenues, even though the country might be exporting many different goods or to many different trading partners. Countries with a more evenly balanced mix of exports or trading partners have a higher level of intensive diversification.

Figure 17 presents Mozambique's export diversification index for both the extensive and the intensive margins for a selection of years between 1965 and 2010. We can make a variety of observations from this. First, it is evident that Mozambique's diversification index value for the intensive margin has increased since 1965, and particularly since 2005, suggesting that the share of export volumes is concentrated in fewer active products, leading to lower diversification. Mozambique's trade statistics indicate the number of HS 6-digit codes exported has declined overall – from 1,252 in 2005 to 869 in 2010 and 1,238 in 2015. Second, in contrast with the value of the index on the intensive margin, that on the extensive margin has

been declining over time, indicating that Mozambique has increased its number of export partners. Since 2005, the number of export partners for Mozambique has risen, going from 91 to 103 in 2010 and 122 in 2015. Even so, the reality that fewer sectors are driving export revenues means Mozambique is becoming less diversified, even though the falling value of the diversification index on the extensive margin suggests it is exporting an increasing number of different goods or to an increasingly diverse mix of trading partners. This is reflected in the rising overall value on the export diversification index, which shows Mozambique's exports have, overall, become less diversified since 1965.

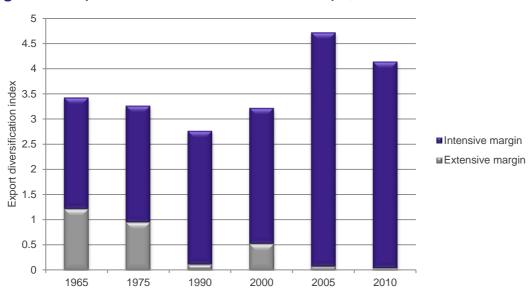


Figure 17. Export diversification index for Mozambique, 1965-2010

Note: Higher values reflect lower diversification.

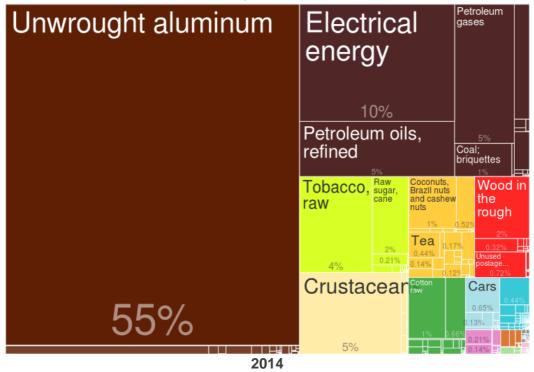
Source: DFID-IMF Diversification Toolkit (<a href="http://www.imf.org/external/np/res/dfidimf/diversification.htm">http://www.imf.org/external/np/res/dfidimf/diversification.htm</a>): Export Diversification Database.

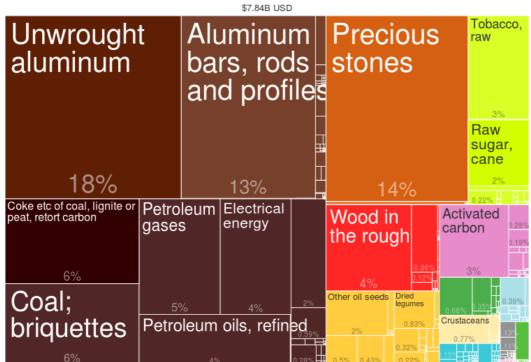
To provide a more comprehensive picture of the diversity of Mozambique's exports at the product level, Figure 18 presents a visual comparison of the shares of different products in total exports in 2005 and 2014. Comparing the two export visualisations, it is clear that the bulk of Mozambique's exports are still concentrated in natural resource-based products, and mostly raw materials or products that have undergone relatively little value added processing prior to export. This is also clear from Figure 19, which highlights Mozambique's top export products at the HS 6-digit level between 2012 and 2015. Coke and semi-coke, natural gas, titanium ores, activated natural mineral products and raw sugar cane all feature prominently among Mozambique's top exports, alongside electrical energy, tobacco and aluminium bars and rods.

The dominance of aluminium products in Mozambique's export basket is unsurprising given the presence of the Mozal aluminium smelter in Beluluane Industrial Park in Maputo. Bars or rods of non-alloy aluminium accounted for 27%, on average, of Mozambique's total exports between 2012 and 2015 (Figure 19). There was a large decline (of 37 percentage points) in the share of unwrought aluminium exports in Mozambique's total exports between 2005 and 2014 as the share of aluminium bars, rods and profiles in total exports increased. This highlights the increasing influence of the Mozal aluminium smelter in facilitating some shift towards more value added processing within the export-oriented segment of the aluminium industry.

Figure 18. Export visualisation for Mozambique, 2005 and 2014 2005

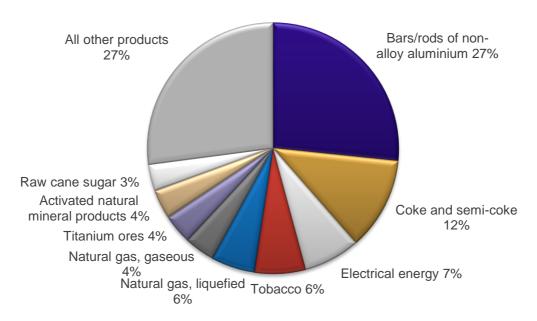
\$2.25B USD





Source: 'The Atlas of Economic Complexity', Center for International Development at Harvard University (<a href="http://www.atlas.cid.harvard.edu">http://www.atlas.cid.harvard.edu</a>).

Figure 19. Mozambique's top export products, average 2012-2015

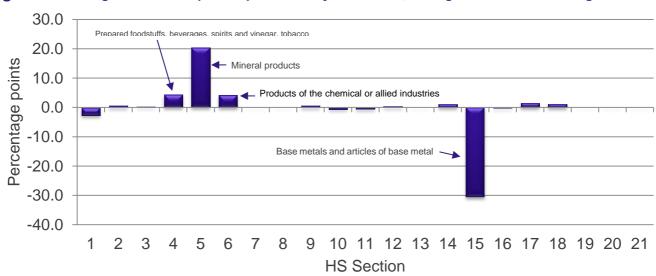


Note: At HS 6-digit level.

Source: SET data (http://set.odi.org/data-portal/), calculations using data from UN Comtrade database.

A comparison of changes in the average shares of total exports between 2005-2008 and 2012-2015 across different product groups at the HS 2-digit level (see Figure 20) shows that the share of mineral products in Mozambique's total exports has increased substantially (by around 20 percentage points). Comparatively large gains in export shares have also been recorded among prepared foodstuffs, beverages, spirits and vinegar and tobacco as well as products of the chemical or allied industries. In contrast, the share of exports of base metals and articles of base metal fell considerably (by around 30 percentage points between the two periods).

Figure 20. Change in Mozambique's export share by HS section, average 2005-2008 vs average 2012-2015



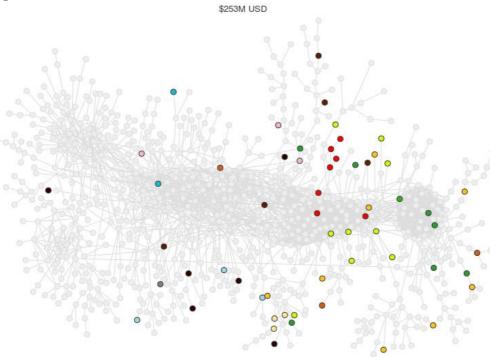
Source: SET data (http://set.odi.org/data-portal/), calculations using UN Comtrade data.

Another way of looking at diversification in production and trade in Mozambique is to examine and compare the country's product space maps in 1995 and 2014. The product space describes the network of relatedness between products, referring to the similarity of the inputs (such as skills, infrastructure or 62

technology) required to produce particular products. In the product space maps, a line connects products that two or more countries export significantly. The core idea is products that require similar capabilities to produce are positioned close to each other whereas products requiring different production capabilities are located further away from each other in the product space. It is easier for countries to add new capabilities and expand to new products (and hence diversify production) in the relatively dense part of the product space where products are connected to many other products, whereas it is more difficult in the peripheral parts of the product space with loosely connected products. As firms in a particular country produce more and more products that require similar capabilities in production and move into the production of more complex products (requiring, for example, higher-skilled labour or more advanced technology), the country's level of product diversity and complexity in production increases. In essence, this entails moving towards the central dense core of the product space, which is dominated by products such as machinery, metal products, chemicals and capital-intensive goods. In this context, countries with better capabilities can produce a greater number of products as well as products that are less ubiquitous (i.e. that few other countries can make). Such countries tend to be concentrated in the central part of the product space, and to enjoy high growth (because they are located close to many products), and can relatively easily diversify into the production of new products. In comparison, poorer countries with relatively limited capabilities are usually located at the periphery of the product space and may not be able to produce new products in order to diversify production and boost growth.

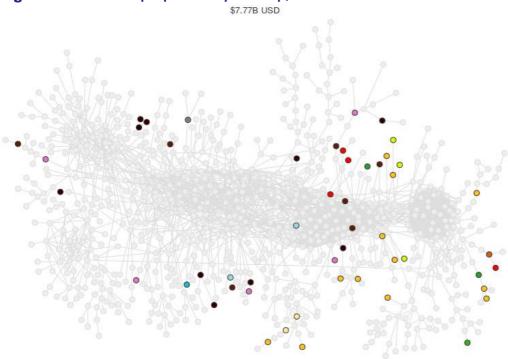
A comparison of Mozambique's product space maps in 1995 (Figure 21) and 2014 (Figure 22) indicates that the country's production structure is still dispersed around the periphery of the product space, producing mostly loosely connected products with little diversification. Very little progress has been made in building new capabilities in Mozambique in order to shift production into more complex products with higher levels of sophistication that are located closer to the core, dense part of the product space.

Figure 21. Mozambique product space map, 1995



Source: http://atlas.cid.harvard.edu/explore/product\_space/export/moz/all/show/1995/.

Figure 22. Mozambique product space map, 2014



Source: http://atlas.cid.harvard.edu/explore/product\_space/export/moz/all/show/2014/.

## BENCHMARKING MOZAMBIQUE'S ECONOMIC TRANSFORMATION: FOCUS ON MANUFACTURING AND ECONOMIC COMPLEXITY

In this final section, we briefly compare a limited set of transformation indicators focused on manufacturing and economic complexity in Mozambique against four other natural resource-dependent countries (Botswana, Indonesia, Nigeria and Tanzania) as well as the average levels across SSA. Botswana, despite strong growth in recent decades and attempts at diversification, remains vulnerable to external shocks owing to the overwhelming reliance of the economy on a single commodity (diamonds). This challenge is exacerbated by the small size of the economy and the fact that Botswana is landlocked. In contrast, Indonesia and Nigeria are populous oil-rich countries and major oil exporters, although Nigeria is much less diversified and suffers from a lack of diverse production capabilities and low levels of investment (te Velde et al., 2016). In Tanzania, the government has expressed a desire for industrialisation and some progress has been made in developing manufacturing (real manufacturing value added grew by 7.5% annually between 2005 and 2015). At the same time, recent discoveries of natural gas deposits bring the promise of major future revenue inflows into Tanzania. Finally, outside of Africa, Indonesia is a particularly interesting comparator, given that it has successfully transformed its agriculture sector, while also being dependent on natural resources (such as oil), and made good progress in driving industrialisation despite heavy natural resource dependence.

Figure 23 compares the trend in Mozambique's GDP per capita (in constant 2011 US\$) between 1990 and 2015 with the four comparator countries as well as the average for SSA as a whole. At the start of this period, the level of GDP per capita in Mozambique was lower than all the other comparators, and the country has made little progress in bridging the gap over 25 years. From a much higher initial base, GDP per capita in Botswana and Indonesia reached \$14,876 and \$10,385, respectively in 2015, compared with just \$1,120 in Mozambique (which was less than one-third of the average GDP per capita across SSA – \$3,488 in 2015).

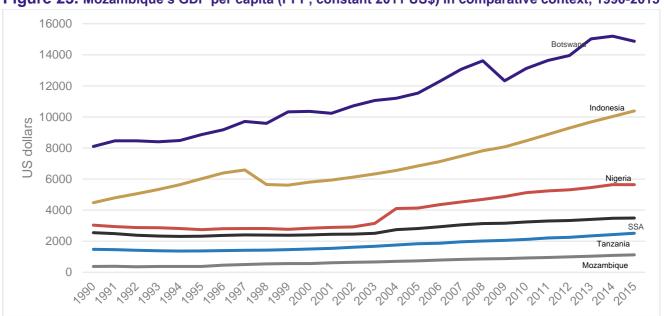


Figure 23. Mozambique's GDP per capita (PPP, constant 2011 US\$) in comparative context, 1990-2015

Note: SSA is the average across all SSA countries.

Source: WDI.

The share of manufacturing value added in GDP (see Figure 24) is notably higher in Indonesia (approximately 21% in 2015) compared to Mozambique (10% in 2015) and the other comparators (10.5% across SSA, 9.5% in Nigeria, 6.3% in Botswana and 5.6% in Tanzania in 2015). Manufacturing's share in GDP has declined markedly in Indonesia since 2008, although this has been driven primarily by positive

movements into quality services. The GDP contribution of manufacturing value added has declined steadily since the early 2000s in Mozambique and Tanzania, whereas it has more than tripled in size since 2009 in Nigeria and hovered around the 6% mark in Botswana. The average share of manufacturing value added in GDP across SSA has fluctuated between 10-11% since 2000, but has dropped back from more than 13% in the early 1990s.

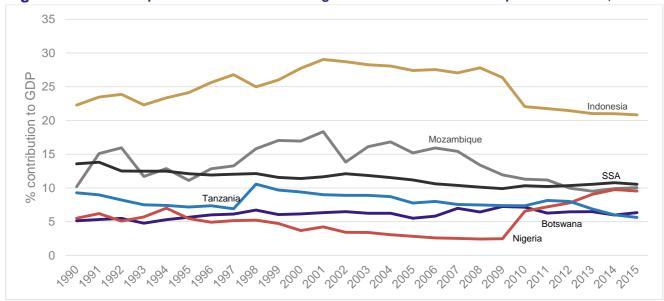


Figure 24. Mozambique's share of manufacturing value added in GDP in comparative context, 1990-2015

Note: SSA is the average across all SSA countries.

Source: WDI.

Earlier, in Table 11, we highlighted the very low and stagnant share of manufacturing in total employment in Mozambique over the past two decades. This is now compared in Table 15 with the equivalent shares in Botswana, Indonesia, Nigeria and Tanzania and across SSA in 1991, 2000, 2005, 2010 and 2016. In the case of all the comparators, manufacturing accounts for much larger shares of overall employment – ranging from around 3% in Tanzania, 5% across SSA and 7% in Botswana (although the share has fallen over the past two decades) and Nigeria to 13% in Indonesia.

Table 15. Mozambique's manufacturing share in total employment in comparative context, 1991-2016

Manufacturing share in total employment (%)								
Country	1991	2000	2005	2010	2013	<b>2016</b> <sup>p</sup>		
Mozambique	0.7	0.7	0.7	0.6	0.7	0.6		
Botswana	9.9	8.9	7.6	7.9	7.2	6.9		
Indonesia	10.3	13.0	12.7	12.8	13.3	13.0		
Nigeria	12.3	11.5	8.2	6.6	7.3	7.9		
Tanzania	2.1	1.5	2.5	3.2	3.3	3.2		
SSA average	6.1	5.9	5.4	5.2	5.2	5.3		

Note: Data for 2016 is projected.

Source: ILO WESO - Trends 2015 supporting dataset 'employment by sector and sex'.

In Figure 25 we compare the economic complexity of Mozambique with that of Botswana (for a limited sub-period only, for reasons related to data availability), Indonesia, Nigeria and Tanzania and the average across SSA over the period from 1991 to 2014, as measured by scores on the Economic Complexity Index (ECI). The ECI scores are designed to provide a holistic indication of the production characteristics of a given economy by measuring the relative complexity of a country's exports. Except in the early 1990s (and with Botswana between 2008 and 2011), Indonesia has had a notably higher ECI score than Mozambique as well as the other comparators, suggesting it has more capabilities to produce diverse and more complex products and, thus, more productive knowledge. Moreover, while Indonesia's ECI score has followed a general upward trajectory since 1991, the opposite has occurred in Mozambique (suggesting a relative decline in product diversity and production capabilities). While Mozambique historically enjoyed better capabilities to produce diverse products than Nigeria (reflected in a consistently higher ECI score), the two countries' scores have converged since 2010 and they now have a similar level of economic complexity.

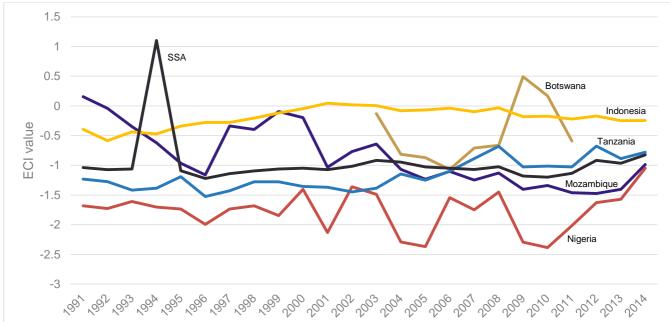


Figure 25. Trends in Economic Complexity Index values, 1991-2014

Notes: Data for Botswana are only available for the sub-period 2003-2011. The SSA average is calculated over all countries for which data are available across the whole 1991-2014 period (it excludes Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Lesotho, Namibia, Niger, Réunion, Rwanda, São Tome and Príncipe, Seychelles, Sierra Leone, Somalia, South Sudan, Swaziland, The Gambia, Togo and Western Sahara).

Source: Atlas of Economic Complexity (http://atlas.media.mit.edu/en/rankings/country/).

Finally, Figure 26 plots ECI values against the level of natural resource dependence (measured as the combined percentage share of fuel, ores and metals exports in total merchandise exports) for Mozambique and a selection of natural resource-dependent countries (Indonesia, Nigeria and Tanzania) as well as the SSA average. <sup>13</sup> After Nigeria, Mozambique has both the second lowest level of economic complexity and the second highest level of natural resource dependence. This is indicative of the scale of the challenge faced by Mozambique to diversify away from such a heavy dependence on natural resources and towards higher value added, more complex and specialised production.

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<sup>&</sup>lt;sup>13</sup> Botswana is excluded from this comparison because diamonds, which account for the majority of Botswana's resource exports, are not among the fuel, ores and metals exports used to calculate the natural resource dependence measure.

0 -0.2 Indonesia -0.4 ECI value -0.6 Tanzania -0.8 SSA Mozambique -1 Nigeria -1.20.0 10.0 20.0 70.0 80.0 100.0 30.0 40.0 50.0 60.0 90.0 Natural resource dependence (% share of fuel, ores and metals exports in total merchandise exports)

Figure 26. Economic complexity and level of natural resource dependence in Mozambique, Indonesia, Nigeria, Tanzania and SSA, 2014

Note: The SSA average is calculated over all countries for which data are available across the whole 1991-2014 period (it excludes Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Lesotho, Namibia, Niger, Réunion, Rwanda, São Tome and Príncipe, Seychelles, Sierra Leone, Somalia, South Sudan, Swaziland, The Gambia, Togo and Western Sahara). Ores and metals comprise the commodities in SITC sections 27 (crude fertilizer, minerals not elsewhere specified); 28 (metalliferous ores, scrap); and 68 (non-ferrous metals).

Source: WDI and Atlas of Economic Complexity (http://atlas.media.mit.edu/en/rankings/country/).

## APPENDIX III: ECONOMIC AND GOVERNANCE AND INSTITUTIONAL CONSTRAINTS TO ECONOMIC TRANSFORMATION IN MOZAMBIQUE

Table 16 summarises the broad economic and governance and institutional constraints – both general constraints and sector-specific issues – identified in each of the 30 studies reviewed for this synthesis paper.

Table 16. Summary of literature review on broad economic and governance and institutional constraints to economic transformation in Mozambique

to economic	to economic transformation in Mozambique								
	Econo	mic constraint	S			Gover	nance and ir	nstitutional c	onstraints
Study	Skills	Infrastructure	Investment climate	Finance	Other	Rule of law	Institutions	Corruption	Other
General constra	<u>ints</u>								
World Bank (2016d)	X	Χ	X	Χ		Χ	X	X	
<b>USAID (2015)</b>	X	Х	X	Χ	X (illegal imports)	Х	Х	X	
LWP (forthcoming)	X	Х	X	Χ		Х	Х	X	
LWP (2016)	Χ	Χ	X		X (limited processing)	X (in timbe r)			
Jones & Tarp (2016)	X	X	X		X (high fertility rates)		X		
OECD (2013)		X	X		X (limited domestic market)	X	X		
UNCTAD (2012)	X		Х		X (limited domestic market)	Х	Х		
World Bank (2016c)	Χ	X	X	Χ	X (reduced global demand)	Х	X		
Nucifora & da Silva (2011)	X	X	X		X (limited benefit from megaprojects)				
Castel-Branco (2002)	Χ	Χ	X	X	X (limited linkages)				
BTI (2016)	X	X	Χ	X			X	Х	X (quality of elections)
Wagstaff & Maennling (2009)			Χ				X		X (strategy different from oppor- tunities
Cruz et al. (2014)	X	Х	Х	X		X	Χ	X	
Baloyi and Zengeni (2015)	Χ	Χ		Χ		Х	X		
Castel-Branco (2014)	Х	Χ		X		Х	Χ		X (increased indebted- ness)
									-

Study		omic constraint Infrastructure	S Investment climate	Finance	Other	Government of law		nstitutional c Corruption	Other
Krause & Kaufmann (2011)	X	X	X	X	X (absenteeism, lacking trade networks)	X	X	X	X (weak business associati ons, civil society organisati ons and think- tanks)
World Bank (2016e)	X	X	X	X		X	X	X	
Agro-business &									
DMEA (2014)	Χ	Х		X	X (limited processing units)	Х	X		
<b>USAID (2016)</b>	Х	X		Х	X (processing units)		X		
Technoserve (2016)	Χ	Х	X	X	X (smallholder farming, low demand)	Х			
InfoDev (2013)	X	X		X	X (issues in raw materials, processing, marketing)	X	X	X (in timber)	
Smart and Hanlon (2014)	Х	Χ		Х		X			X (failed agriculture policy approach)
GDS (2005)	Χ	Χ	Χ	Х	X (utilisation rates)	Х	X	X (in timber)	
Construction									
ILO Lab (nd)	X			Χ	X (building materials & engineers)	Х	Х		
IGC (2012)	Χ		X	X	X (building materials)	X	X		
IGC (2015)	Χ		X	X	X (low demand construction)	X	X		
Gas and Coal									
IMF (2016)		X	X	X		Χ	Χ		
FES (2013)	X		X	Χ		Χ	Χ	X	
USAID (2013b)	Χ					Х	Χ	Х	X (weak CSOs)
Coughlin (2015)	Х	Χ		X		X	X	Х	X (limited comprehe nsive national strategy)

## APPENDIX IV: LINKING TRANSFORMATION MODELS, GOVERNMENT INDUSTRIAL POLICY PRIORITIES, POLICY SUGGESTIONS AND EXISTING DONOR ACTIVITIES

Table 17 links the policy suggestions provided in the literature we reviewed, and the transformation models for which they apply, to the most relevant priority sectors, pillars and programmes present in the government's *Industrial Policy and Strategy 2016-2025*. The final two columns list existing donor activities (donors already operating in the broad areas associated with the priority programmes and the suggested policy interventions for each transformation model) and highlight gaps where further support could be directed.

Table 17. Linking transformation models to government industrial policy priority sectors, pillars and programmes; policy suggestions in the literature; and existing donor activities

Transformation model	Relevant priority sector(s) for industrial development in the GoM's <i>IPS</i> 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
All	Clothing, textiles and footwear  Food and agroindustry  Non-metallic minerals  Metallurgy and manufacture of fabricated metal products  Wood processing and furniture  Paper and printing  Chemicals, rubber and plastics	n/a	Improving infrastructure for economic development	Infrastructure  Japan International Cooperation Agency  advisors for road projects, capacity development of road maintenance  DFID: Brilho (Energy Africa Mozambique)  programme and off-grid energy project to improve energy access for rural households and businesses  Swiss Agency for Development and Cooperation (SDC) — Investing in infrastructure and capacity-building to assist local governments to improve the quality of basic services  KfW Development Bank — funding to build economic infrastructure (roads, markets, bus stations), together with advisory and training to complement investments  Norwegian Agency for Development Cooperation (Norad) — Support to boost the capacity of the Ministry of Resources	More support towards attracting investment, including through the design and provision of appropriate investment incentives

Transformation model	Relevant priority sector(s) for industrial development in the GoM's <i>IPS</i> 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
	2010/2023		modern technology and research and development activity  Improve access to specialised technology  Providing investment incentives  Offer a single investment incentive package and equal treatment of all foreign investors  Improve the inflow and efficiency of investments (streamline regulations and licensing requirements, review investment incentives to ensure greater transparency)  Establish mechanisms (e.g. inter-ministerial committees) to enhance collaboration among investment promotion agencies  Less restrictive labour regulations  Better tax administration  Improve efficiency of custom procedures and inspections  Providing access to suitable financing  Enhance access to credit, particularly for domestic and rural SMEs  Reforms to the financial	and Energy and of the state power company (EdM)  World Bank – support for the expansion of photovoltaic solar energy programmes, funding for new transmission lines and distribution networks  Human capital development USAID: Spending on Education and Social Services (Basic Education) – training teachers and school directors, encouraging use of reading diagnostic tools, promoting greater parent engagement in education  GIZ – basic education and TVET  KfW Development Bank – teacher training and improvement to further education; strengthen education and vocational training system (e.g. support for vocational colleges to expand training capacity and improve vocational training offerings)  DFID: Muva – programme connecting urban girls and women to Mozambique's economic growth  DFID: JOBA (Skills for Employment) – programme aiming to increase the income of marginalised youth, especially women, by funding innovative models for improving access to quality market-relevant skills training	
			sector to improve access to finance (introduce credit guarantee system, leasing for SMEs, strengthen institutions providing rural and micro credit)	DFID: Youth Trailblazing Initiative – supports young people to transition into early adolescence, and from education into employment, as well as to be agents and advocates for change	

Transformation model	Relevant priority sector(s) for industrial development in the GoM's IPS 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
			suitable for promoting industrial development  Improve government capacity to manage public investments (e.g. better processes for evaluating projects)  Enhance coordination across government departments and agencies and between the government and private sector representative bodies (e.g. by staging public—	increase the number and raise the quality of graduates at undergraduate and graduate levels, to strengthen national	

Transformation model	Relevant priority sector(s) for industrial development in the GoM's <i>IPS</i> 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
				access credit, savings and insurance products	
				GIZ – strengthening the microfinance sector	
				KfW Development Bank – help to establish micro finance institutions, including to provide loans to farmers and small craftsmen; work with the Mozambican Central Bank to set up a deposit insurance fund to guarantee savings deposits	
				Institutional support  USAID: Economic Development (Trade and Investment) – work with Minister of Industry and Commerce to improve ability to negotiate and implement trade agreements (specifically around permanent membership in the SADC Free Trade Area)	
				<b>DFID:</b> <i>Mozambique Land Action</i> – programme to promote land tenure security	
				World Bank: Integrated Growth Poles Project – institutional development and capacity-building through support to key public agencies to strengthen their capacity to plan, coordinate, implement, monitor and evaluate public and multilateral investment projects	
				Danish International Development Agency (Danida) – linking budget support to good governance (through broad-based pluralistic political development) *	
Agriculture- and agro-processing-	Food and agro- industry	Improving infrastructure for economic development	Improving infrastructure f economic development	for USAID: Economic Development (Agriculture) – increased investment,	More targeted support for the <b>development of</b>

Transformation model	Relevant priority sector(s) for industrial development in the GoM's <i>IPS</i> 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
based economic transformation		<ul> <li>irrigation</li> <li>roads, railways and ports</li> <li>water and energy</li> <li>Human capital development</li> <li>agronomists, food technologists, nutrition extension</li> <li>Promoting entrepreneurship, training and the protection of national industries</li> <li>product quality control</li> <li>Providing access to suitable financing</li> <li>loans for agriculture and agro-industry</li> <li>Promoting business linkages</li> <li>Support companies to provide services to other sectors (e.g. hospitality, tourism, megaprojects)</li> <li>Providing investment incentives to the industry sector</li> <li>incentives to purchase raw materials</li> <li>exemption of duties on equipment imports</li> <li>Enhancing innovation, access to modern technology and research and development activity</li> <li>access to new technologies and equipment</li> <li>partnerships for knowledge transfer</li> </ul>	Improve processing facilities to support higher value added activities (incl. by establishing cold chain storage and processing units)  Promoting entrepreneurship, training and the protection of national industries      Better integration within value chains (e.g. through contract farming and outgrower schemes to link farmers and processors)  Promoting business linkages      Certification for accessing international markets     Distribute market information about opportunities to farmers  Providing access to suitable financing      Mitigate risks faced by farmers (e.g. through government-backed loans to increase production)  Other      Reconsider the effects of raw export bans/taxes on upstream producers (e.g. for pigeon peas)	loans in rural areas, training in food security or short-term agricultural productivity, application of new technologies  DFID: Beira Agricultural Growth Corridor – financial contribution to the development of the Corridor, focusing on agri-business  European Union (EU) and United Nations Children's Fund – pledge to reduce food insecurity and chronic malnutrition  EU: National Indicative Programme – improve food security and nutrition through production improvement, and increase access to food and markets through appropriate transport infrastructure  DFID: Linking Agri-business and Nutrition – programme to improve nutritional status of people in the Beira Corridor  African Development Bank (AfDB), USAID, DANIDA, Swedish International Development Cooperation Agency: Agriculture Fast Track Fund – grant funding support for financially sound, environmentally sustainable and socially beneficial food security projects (incl. facilitating investment in high-value agriculture infrastructure projects)  World Bank: Integrated Growth Poles Project – support for upgrading feeder roads, public investments towards boosting	specific types of infrastructure (e.g. processing facilities) to higher value added activities  Greater emphasis on specialist skills development (e.g. agronomists, food technologists)  Support for product quality control and certification geared towards accessing international markets for agricultural produce and processed products  Support to design appropriate investment incentives and policies to support growth in agricultural and agro-processing activities

smallholder production and linking MSMEs to emerging supply chains)  USAID: SPEED Programme – support competitiveness of agriculture (direct support to Ministry of Agriculture), support activities specifically identified by the public sector (reduce impact of various taxes on smallholders in large commercial supply chains)  USAID: Feed the Future – targeted investments in agricultural productivity, expanding markets and trade, and increasing the economic resilience of vulnerable rural communities. Includes emphasis on gender integration, improved nutrition, private sector engagement, and research and capacity-building.  SCD: HortlSempre – addressing bottlenecks to the production of locally grown horticultural productions in roter to increase se farmers revenue (focus on Nacala Comfort, Malena, Ribaule e Ascala included facilitating access to new, affordable seed varieties, supporting affordable inrigation solutions, improved unities, upporting affordable inrigation solutions, improving practices, sund establishing Nampula as the horticultural production for no promoting practices, and establishing Nampula as the horticultural production in crease their yields  DANIDA – support for agriculture to promote inclusive growth (emphasis on	Transformation model	Relevant priority sector(s) for industrial development in the GoM's IPS 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
creating a strong private sector for		2016-2025			to emerging supply chains)  USAID: SPEED Programme – support competitiveness of agriculture (direct support to Ministry of Agriculture), support activities specifically identified by the public sector (reduce impact of various taxes on smallholders in large commercial supply chains)  USAID: Feed the Future – targeted investments in specific regions to increase agricultural production through investments in agricultural productivity, expanding markets and trade, and increasing the economic resilience of vulnerable rural communities. Includes emphasis on gender integration, improved nutrition, private sector engagement, and research and capacity-building.  SCD: HortiSempre – addressing bottlenecks to the production of locally grown horticultural products in order to increase farmers' revenue (focus on Nacala Corridor, Malema, Ribaué e Nacala and Monapo districts). Key activities included facilitating access to new, affordable seed varieties, supporting affordable irrigation solutions, improving practices, and establishing Nampula as the horticultural hub of Northern Mozambique.**  SCD: M4P Project – supporting small-scale farmers to increase their yields  DANIDA – support for agriculture to	

Transformation model	Relevant priority sector(s) for industrial development in the GoM's <i>IPS</i> 2016-2025	Most relevant <i>IPS 2016-2025</i> priority pillars and programmes for industrialisation	Policy interventions suggested in the literature linked to <i>IPS 2016-2025</i> priority pillars	Relevant donor activities	Gaps where further support could be directed
Natural resources-led economic transformation	Non-metallic minerals  Metallurgy and manufacture of fabricated metal products	<ul> <li>Improving infrastructure for economic development         <ul> <li>roads, railways and ports</li> <li>water and energy</li> </ul> </li> <li>Human capital development         <ul> <li>chemistry, engineers (mechanical/electrical), metallurgy, geology, maintenance and service</li> </ul> </li> <li>Promoting entrepreneurship, training and the protection of national industries         <ul> <li>exemptions/reductions in duties on imported materials</li> <li>product quality control</li> <li>tax breaks</li> <li>state procurement</li> </ul> </li> <li>Providing investment incentives to the industry sector         <ul> <li>reduction/exemption of duties in equipment and raw materials imports</li> <li>tax reductions for investment and building infrastructure</li> </ul> </li> <li>Enhancing innovation, access to modern technology and research and development activity         <ul> <li>upgrade technology and equipment</li> </ul> </li> </ul>	Promoting business linkages  • Tighten linkages between the resource and non-resource sectors	World Bank: Mozambique Mining and Gas Technical Assistance Project – support for mining reforms to make the sector more sustainable in the long run, better prepared for inevitable shocks, and better linked to the rest of the economy  USAID: SPEED Programme – focuses on potential impact of resource boom on competitiveness of overall economy and helps to manage inflow of foreign exchange expected to enter the country in the coming years  United Nations Joint Programme – seeking ways to contribute to the creation of more and better jobs in local economies of Mozambique where large-scale extractive industry investments take place  World Bank: Mozambique Water Services and Institutional Support Project – support for reforms aimed at consolidating water supply operations and increasing coverage in large urban centres/small towns  USAID: Environment – support for conserving biologically significant areas, sustained private investment  DFID: Contribution to SOGA initiative – to equip people with the right skills to get sustainable (self-) employment in the gas supply chain in Mozambique  Norad: Oil for Development Programme – assistance for natural resource management (incl. legal assistance to revise the Petroleum Act, indirect assistance in negotiations with oil and gas companies on licences	Support to design appropriate investment incentives and policies to support value-addition and beneficiation activities  Support for upgrading technology and equipment used locally in the extractive sector

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				Canada: Skills Training for Employment in Mozambique – teacher training, management training and procurement of industrial training equipment for four technical and vocational institutes focused on the extractive sector (mining, oil and gas)	
Manufacturing-led economic transformation	Clothing, textiles and footwear  Metallurgy and manufacture of fabricated metal products  Wood processing and furniture  Paper and printing  Chemicals, rubber and plastics	<ul> <li>Improving infrastructure for economic development         <ul> <li>consolidate strategies around industrial parks, development corridors, transport systems and industrial free zones</li> <li>roads, railways and ports</li> <li>energy</li> </ul> </li> <li>Human capital development         <ul> <li>designers, carpenters for wood and furniture</li> <li>technical textile production and wiring, professional tailors, technical maintenance of equipment for clothing, textiles and footwear</li> <li>engineers (chemical, mechanical), industrial management for chemicals, rubber and plastics</li> </ul> </li> <li>Promoting entrepreneurship, training and the protection of national industries         <ul> <li>product quality control</li> <li>training (incl. management training)</li> <li>local procurement</li> <li>support access to foreign markets</li> </ul> </li> <li>Providing access to suitable financing</li> <li>Providing investment incentives to the industry sector</li> </ul>	Improving infrastructure economic development	World Bank: Integrated Growth Poles Project – Support for the development of the Nacala SEZ in the Nacala Corridor	Support to establish industrial clusters to support manufacturing activities  More targeted vocational education and training focused on meeting demand for specific skills in priority manufacturing sub-sectors  Support for firms to access new equipment and modern technologies that enhance product quality and competitiveness in priority manufacturing activities

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		- reduction/exemption of duties in equipment and raw materials imports - market access facilitation instruments - tax reductions/exemptions on investments  • Enhancing innovation, access to modern technology and research and development activity - access to new equipment and modern production technologies - partnerships for knowledge transfer	above the existing one for mining rights), simplify procedures for community consultation and improve investor access to landuse rights		
Services-led economic transformation	None	Human capital development     Providing access to suitable financing	potentially extend to support for construction-related services  Promoting entrepreneurship, training and the protection of national industries  Reform government procurement of aid largescale procurement of bids as well as SME participation in procurement  On-the-job training Build local capabilities in construction (introduce SME finance programmes, upgrade curriculum for conservative building construction, create a formal mechanism to provide practical training)		Mostly covered in the general donor activities outlined in the first row above, but there is scope for greater emphasis in donor programmes specifically supporting services sectors
			Providing access to suitable financing		

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			<ul> <li>Enhance access to credit for firms (e.g. through regional development financing)</li> </ul>		

Notes: \* Aid provided between 2012 and 2015; \*\* Project completed at the end of 2016

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