### Supporting Jobs for Young Women and Men in Africa: A Framework for Country-Level Analysis

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Working Paper GSYE-001

Bringing Rigour and Evidence to Economic Policy Making in Africa

### Supporting Jobs for Young Women and Men in Africa: A Framework for Country-Level Analysis

By

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### List of abbreviations and acronyms

| ACET     | African Center for Economic Transformation |
|----------|--|
| COVID-19 | Corona Virus Disease 2019                  |
| DRC      | Democratic Republic of Congo               |
| ECI      | Economic Complexity Index                  |
| EPR      | Employment-to-Population Ratio             |
| FDI      | Foreign Direct Investment                  |
| GVCs     | Global Value Chains                        |
| HHPSA    | Hausmann-Hidalgo Product Space Analysis    |
| IDS      | Institute of Development Studies           |
| ILO      | International Labour Organization          |
| IMF      | International Monetary Fund                |
| NEET     | Not in Education, Employment or Training   |
| ODI      | Overseas Development Institute             |
| OEMs     | Original Equipment Manufacturers           |
| PCI      | Product Complexity Index                   |
| PPPs     | Public-Private Partnerships                |
| RCA      | Revealed Comparative Advantage             |
| SAM      | Social Accounting Matrix                   |
| SBR      | State Business Relations                   |
| SET      | Supporting Economic Transformation         |
| SEZs     | Special Economic zones                     |
| SMEs     | Small and Medium-sized Enterprises         |
| TFP      | Total Factor Productivity                  |

### Abstract

A third of Africa's population consists of young people, and a quarter of jobs in Africa go to young people, twice as much as the world average. Finding jobs for the young is very much linked to a general employment challenge. Africa will see some 18 million additional young people entering the working age population each year by 2030, with around two-thirds or 13 million entering the labour market. This compares to nine million additional jobs each year that were created between 2003 and 2016, meaning a step up of 50% in the job creation rate is required to address demographic challenge. The jobs crisis is not a straightforward supply-side or education and skills challenge, as in most African countries, the share of youth unemployment goes up with level of education and the returns to tertiary education has decreased in several African countries. This suggests that a higher level of education is not a guarantee for employment, and we need to consider which complementary actions can develop sectors which can pull in employment opportunities, for young men and women.

This framework paper, therefore, proposes a four-step framework to identify and create opportunities to create jobs for young men and women:

- 1. Identifying promising sectors and activities with high growth and (youth) employment potential;
- 2. Identifying economic and political constraints to developing key sectors relevant for youth employment;
- 3. Identifying general enabling and targeted policies for youth employment; and
- 4. Understanding the political economy around immediate actions to support youth employment.

Each country team will examine specific questions. It is important to take into account the wider issues above whilst conducting such research.

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#### 1. Introduction

Generating jobs for a growing population is a critical challenge that Africa faces. An additional 20 million young people will enter the working age population each year over the next decade. Africa has managed to generate economic growth since the mid 1990s, but this type of growth has failed to be inclusive, transformative, and job-rich.

There are further challenges. For example, the quality of the jobs generated is low. African countries have managed to absorb the volume of young people migrating from rural areas by generating low productivity, low paid jobs in traditional services sector in their cities. The development of key sectors with productivity growth potential (sector transformation) and structural change is critical for the economic transformation process, and hence for increases in jobs and income, including for the young.

COVID-19 has affected economic structures and consumer preferences, production processes, and trade practices. The crisis has accelerated previous trends (e.g., e-commerce) and led to new demand and production patterns (e.g., more home working). The dramatic fall in the global demand of garments and travel, to name a few of the manifestations of the crisis, may require recalibrating economic transformation and development strategies.

Despite these two challenges, targeted or sectoral policies will continue to be essential to the development of any key sector, and some sectors are better able to absorb labour. In this sense, it is critical to identify what are the sectors that present the greatest potential to boost productive employment. This involves assessing their employment and productivity. With a growing influx of young men and women participating in the market, labour supply is expected to be sufficient, in the short and the medium run, to cover demand.

More generally, it is important to establish a set of steps researchers should ideally follow when supporting employment for the young. This involves identifying promising sectors, and an analysis of constraints to further support the development of the sector, policy analysis, and political economy.

This paper provides a conceptual framework that aims to outline the main principles and factors contributing to the economic transformation and the creation of productive employment, relevant for young men and women. Section 2 of this framework paper sets out the steps to analyse opportunities to create or support jobs for young men and women at the country-level. This includes:

- What are the promising sectors with high growth and (youth) employment potential?
- What are the economic and political constraints to developing key sectors?
- What are the general enabling and targeted policies?
- What are the political factors and political economy issues around the short-tomedium term actions?

The section will also analyse why focusing on the demand-side for employment generally is an effective way of considering jobs for the young people specifically. This is a contribution of this paper, and is distinguished from other approaches that: (1) consider increased skills supply as a more effective way to create jobs; and (2) consider a direct and targeted approach towards young people as more effective than a general jobs strategy.

Section 3 elaborates further on political economy consideration. Section 4, concludes and draws implications for the country case studies.

# 2. A four-step framework to identify and create opportunities to create jobs

We propose a four-step framework to identify and create opportunities to create jobs for young men and women.

- 1. Identifying promising sectors and activities with high growth and (youth) employment potential.
- 2. Identifying economic and political constraints to developing key sectors.
- 3. Identifying general enabling and targeted policies for youth employment.
- 4. Understanding the political economy around immediate actions.

# Promising sectors and activities with high growth and (youth) employment potential

Identifying promising sectors for job creation is a crucial step to create employment opportunities for young men and women in Africa, because (1) many labour market entrants in Africa are young and (2) the level of education is not the only or most obvious determinant of employment.

Figure 1 shows that around a quarter of jobs in Africa go to young people—twice as much as in advanced countries. Africa will see some 18 million additional young people entering the working age population each year by 2030 (Binat et al., 2018) with around two-thirds or 13 million estimated to enter the labour market. This compares to nine million additional jobs each year that were created between 2003 and 2016, meaning a step up of 50% increase in the job creation rate is required to address the demographic challenges. Africa is the youngest continent, and it is estimated that one in four of the world's citizens will be located in Africa. Filmer and Fox (2014) and Fox et al. (2020) suggest that youth unemployment is essentially a missing jobs crisis.



Figure 1: Share of the young (15-24) in total employment (15+)

Source: ILO stats.

Table 1 highlights that the jobs crisis is not a simple supply-side or education and skills challenge. Instead, in many countries, the share of youth unemployment goes up with level of education. The share of youth employment with intermediate and advanced education is in fact greater than the share of youth employment with basic education or less in the following countries: Benin, Burundi, Democratic Republic of Congo (DRC), Kenya, Ghana, Liberia, Madagascar, Mali, Mauritius, Namibia, Nigeria, Tunisia, Zambia, and Zimbabwe. This suggests that a higher level of education is not a guarantee for employment. Instead, this paper argues that we need to consider which sectors of growth can pull in employment opportunities. These ideas are also backed up by the International Labour Organization (ILO, 2020), which suggests that 'youth employment can be promoted by focusing on those sectors and enterprises best able to create productive wage and salaried jobs'. Box 1 shows the sectors that have seen increases in employment shares for the young people. One of the challenges is that youth population in Africa grew by 22.4% over 2005–2015, but non-agricultural jobs grew only by 5.6% (ILO, 2020), which means it is important to focus on creating more opportunities in non-agricultural sectors. A further concern is that youth employment is disproportionally linked to informality, as a staggering 95% of young African workers are in informal employment.

There are a range of methods to analyse which sectors have the greatest potential to create jobs including for the young. Increased growth of sectors will lead to an increase in the demand for jobs, including for the young directly and indirectly, other things being equal. Increased competitiveness of a sector will in the long run help to develop the sector, even though labour productivity changes in the short run may lead to less demand for labour.

|              | Less than<br>Basic | Basic | Intermediate | Advanced | Not<br>Elsewhere<br>Stated |
|--------------|--------------------|-------|--------------|----------|----------------------------|
| Angola       | 0.17               | 0.61  | 0.20         | 0.01     | 0.00                       |
| Benin        | 0.18               | 0.13  | 0.25         | 0.18     | 0.25                       |
| Botswana     | 0.01               | 0.47  | 0.29         | 0.23     | 0.00                       |
| Burkina Faso | 0.70               | 0.22  | 0.04         | 0.04     | 0.01                       |
| Burundi      | 0.37               | 0.10  | 0.47         | 0.06     | 0.00                       |
| Cape Verde   | 0.00               | 0.57  | 0.30         | 0.11     | 0.01                       |
| Chad         | 0.43               | 0.25  | 0.16         | 0.16     | 0.00                       |
| Congo        | 0.09               | 0.63  | 0.07         | 0.09     | 0.12                       |
| DRC          | 0.11               | 0.12  | 0.64         | 0.12     | 0.02                       |
| Ethiopia     | 0.14               | 0.61  | 0.22         | 0.03     | 0.00                       |
| Gambia       | 0.18               | 0.32  | 0.43         | 0.06     | 0.00                       |
| Ghana        | 0.00               | 0.37  | 0.50         | 0.10     | 0.03                       |
| Kenya        | 0.02               | 0.27  | 0.57         | 0.14     | 0.00                       |
| Liberia      | 0.08               | 0.20  | 0.59         | 0.06     | 0.07                       |
| Madagascar   | 0.00               | 0.40  | 0.39         | 0.19     | 0.02                       |
| Malawi       | 0.02               | 0.69  | 0.26         | 0.02     | 0.00                       |
| Mali         | 0.13               | 0.30  | 0.31         | 0.26     | 0.00                       |
| Mauritania   | 0.07               | 0.73  | 0.03         | 0.07     | 0.11                       |
| Mauritius    | 0.00               | 0.34  | 0.42         | 0.24     | 0.00                       |
| Mozambique   | 0.16               | 0.47  | 0.32         | 0.05     | 0.00                       |
| Namibia      | 0.04               | 0.16  | 0.72         | 0.08     | 0.01                       |
| Niger        | 0.62               | 0.35  | 0.00         | 0.02     | 0.01                       |
| Nigeria      | 0.23               | 0.10  | 0.41         | 0.26     | 0.00                       |
| Rwanda       | 0.02               | 0.65  | 0.23         | 0.10     | 0.00                       |
| Senegal      | 0.27               | 0.35  | 0.21         | 0.13     | 0.04                       |
| Sierra Leone | 0.16               | 0.27  | 0.24         | 0.00     | 0.33                       |
| South Africa | 0.03               | 0.48  | 0.40         | 0.09     | 0.00                       |
| Tanzania     | 0.51               | 0.38  | 0.08         | 0.03     | 0.00                       |
| Togo         | 0.17               | 0.45  | 0.21         | 0.17     | 0.00                       |
| Tunisia      | 0.01               | 0.14  | 0.45         | 0.41     | 0.00                       |
| Zambia       | 0.03               | 0.31  | 0.41         | 0.09     | 0.16                       |
| Zimbabwe     | 0.00               | 0.28  | 0.58         | 0.14     | 0.00                       |

 Table 1:
 Share of youth unemployment, by level of education, Africa countries

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Source: ILO stats, latest year available (2020, 2019, 2018, and in some cases earlier depending on data).

#### Box 1: Youth (un)employment in Africa: Key facts

An ILO report discusses a range of statistics relevant to youth unemployment in Africa.

- Africa is a young continent, with youth comprising more than a third (34.2%) of the population, and it is the only region in the world today whose labour force is expanding rapidly.
- The youth unemployment rate was highest in southern Africa at 50.3% in 2019. Eastern Africa had the lowest youth unemployment rate at 6.2% in 2019. Figure 2 shows differences across countries.
- The not in education, employment or training (i.e., NEET) rates among youth in Africa are higher than the unemployment rates. In 2019, the NEET rate was 21.5%. This indicates that one in five young Africans neither has a job nor is enrolled in education or training.
- Employment-to-population ratios (EPR) are highest in eastern Africa and lowest in northern Africa. They are characterized by huge differences between men and women, with the EPR for men in 2019 over 17.3 percentage points higher than for women.
- The share of informal employment in total employment ranges from 40% in southern Africa to over 90% in central, eastern and western Africa. This applies especially to agriculture. Close to 80% of women's total employment is in the informal economy compared to 68% for men.
- Figure 2 shows that agriculture remains the main sector for employment in 2019, but construction and services have seen the greatest increases in employment shares over 2006–2016. There seems to be a particular challenge in manufacturing, whose employment share increased for adults but decreased for young people.

### Figure 2: Youth unemployment (%) 2020 (left); sectoral employment share (changes 2006-2016)



The report argues that key interventions to address jobs for the young include stabilization of the macro-economy, mechanizing the agricultural sector, advancing education and training aimed at improving demand and supply driven skills, promoting active labour market programmes, and adopting the advantages of a digital economy.

Source: ILO (2020).

How do we know whether a sector is competitive globally? There are several trade-data based analytical measures that can help us answer this question. The Revealed Comparative Advantage (RCA) index calculates the degree of export specialization by a country compared to the world average, to assess in which activities a country has a comparative advantage. The Hausmann-Hidalgo Product Space Analysis (HHPSA) uses RCA data to compute several measures of Economic Complexity Index (ECI) of countries. The ECI helps to identify the degree of diversification of a country's exports in comparison with how common these exports are on the global market. The Product Complexity Index (PCI), which is based on the ECI and can be used to describe transformational capacity of individual products, ranks products by the 'amount of capabilities or know-how necessary to manufacture them' (Hidalgo at all., 2017). Products with a higher PCI score can provide greater transformative potential as they represent higher productivity capabilities within an economy. It is also possible to use the PCI ranking as a proxy for technological intensity, as more complex products will likely require more technologically complex production processes. The HHPSA can be used to assess a country's Product Space. This is a graphical representation of the products a country makes and how these are connected to other goods.

The IMF's export diversification measures, such as an export diversification index (with an extensive and intensive margin—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) and export quality measures can be used to explore diversification.

Increased participation in global value chains (GVCs) can lead to productivity gains. Sectoral data can be used to provide a good idea of the degree of export orientation of the target sector vis-a-vis other sectors or the same sector in comparator countries and the degree of participation of the country within GVCs, where greater levels of participation in both metrics tend to result in higher levels of productivity and growth. One can examine trade in value-added using the Eora database—this can be used to separate domestic and foreign value-added in exports, with a sector breakdown. This can be used to examine determinants of value chain participation and domestic value addition. A further possibility is to use 'mapping' of firm capabilities in identified/specific growth sectors (Sutton & Olomi, 2012).

The use of **production-based analytical measures** can further help to understand promising and competitive sectors relevant to job generation. These include, for example, sectoral value-added and employment data using national data sources and internationally comparable sector databases, including gender dimensions. It is also possible to analyse sector labour productivity levels and trends—this can show productivity gaps between sectors in a country and examine the extent to which productivity change owes to structural change between sectors or innovation within sectors (see McMillan & Rodrik, 2011).

A further important extension using production data is to calculate employment/ value-added multipliers of different sectors using input-output models (on the basis of national sources, or, e.g., Eora) to understand how sector shifts can affect output and employment (and other factors of production) in other sectors. Growth in one sector may not be very employment intensive, but if that sector has forward linkages into other sectors or is supplied by other sectors which are employment intensive, including where young people work, it should inform appropriate sector policy. Developing a sector that is not job intensive may yet be an effective job creation strategy depending on production linkages amongst sectors. Consider, for example, agro-processing or financial services, both of which are capital intensive, but which also have strong backward and forward linkages into job creating sectors. A compendium paper (Mendez-Parra, 2021) discusses how to calculate I-O multipliers for specific sectors for each of the country case studies.<sup>1</sup>

Firm-level productivity analysis using firm-level surveys in a comparative context can be used to examine average productivity levels and changes of a number of firms in the same industry in different countries (see e.g., Saliola & Seker, 2011). Firm-level TFP analysis can also be used to understand how far firms are from the global technological frontier. This can also compare sectoral average TFP with the national level TFP which helps us understand how far the firms in a sector are from the national technology frontier; or, compared with the US TFP as the current technology frontier country (Dabla-Norris et al., 2015).

Assessing sectors according to skill levels of workers helps identify areas where positive spill-overs from investment are likely to be more readily absorbed. National labour force surveys or specific sectoral surveys can be used to assess the distribution of labour skills at the sectoral level. Labour skills also help absorb technology, as sectors that are closest to the technological frontier can both reap greater benefits from FDI and be more productive.

Finally, Mincerian wage equations, which explore how earnings are related to levels of education, can be used to relate to where people work, e.g., in different locations such as cities or other agglomerations, or in different sectors. In their simplest forms, wages of individuals or households depend on the level of education achieved, e.g., primary or secondary education. However, a positive correlation may lead to the wrong impression that more education always raises earnings, whereas in fact it depends on where the person is employed.

Table 2 outlines advantages and disadvantages of the analytical techniques discussed.

|   | competitiveness  |  |  |   |  |  |  |  |
|---|--|--|--|---|--|--|--|--|
| Measure   | Use/Objective  | Data Required/<br>Level of<br>Complexity   | Pros   | Cons  |  |  |  |  |
| Revealed<br>Comparative<br>Advantage                                | Assess the degree<br>of competitiveness<br>of the country in<br>the export of the<br>product                                   | <ul> <li>Disaggregated<br/>country and<br/>world export</li> <li>Easily replicated<br/>and updated</li> </ul>                        | <ul> <li>Easily available</li> <li>Intuitive results</li> <li>Disaggregated<br/>analysis</li> </ul>  | <ul> <li>Assessment<br/>based on past<br/>data</li> <li>Production<br/>capabilities not<br/>assessed</li> <li>Only available<br/>for goods, not<br/>services</li> </ul>               |  |  |  |  |
| Export<br>Orientation<br>and World<br>Demand<br>Analysis            | Assess the export<br>orientation of<br>sectors and their<br>expansion potential<br>based on the<br>response of world<br>demand | <ul> <li>Disaggregated<br/>world imports<br/>and national<br/>sectoral exports</li> <li>Easily replicated<br/>and updated</li> </ul> | <ul> <li>Easily available</li> <li>Intuitive results</li> <li>Disaggregated<br/>analysis</li> </ul>  | <ul> <li>Assessment<br/>based on past<br/>data</li> <li>Only available<br/>for goods, not<br/>services</li> </ul>   |  |  |  |  |
| Economic<br>Complexity<br>(HHPSA/ECI/<br>PCI)                       | Based on the<br>existing production<br>capabilities, allows<br>identification of<br>other products and<br>sectors              | <ul> <li>Disaggregated<br/>exports</li> <li>Calculations<br/>readily available</li> </ul>  | <ul> <li>Prospective<br/>analysis</li> <li>Disaggregated<br/>analysis</li> </ul>   | <ul> <li>Assessment<br/>based on past<br/>data</li> <li>Only available<br/>for goods, not<br/>services</li> <li>Complex<br/>interpretation</li> </ul>                                 |  |  |  |  |
| Input-Output<br>Multipliers<br>and Social<br>Accounting<br>Matrices | Identifies the<br>backward linkages<br>of sectors in output<br>and employment  | <ul> <li>Social Accounting<br/>Matrix/input-<br/>output table</li> <li>Calculations are<br/>complex</li> </ul>                       | <ul> <li>Combines goods<br/>and services</li> <li>Goes deeper into<br/>the country's<br/>economy</li> </ul>  | <ul> <li>Data available<br/>with important<br/>lags</li> <li>Data may<br/>be costly to<br/>produce</li> <li>Data very<br/>aggregated</li> <li>Calculations are<br/>complex</li> </ul> |  |  |  |  |
| Productivity<br>(TFP)<br>Analysis                                   | Identifies<br>sectors/products<br>with potential<br>productivity growth  | <ul> <li>Firm-level<br/>productivity</li> <li>Calculations may<br/>be complex</li> </ul>   | <ul> <li>Combines goods<br/>and services</li> <li>Allows to look<br/>simultaneously<br/>to structural<br/>change and<br/>within-sector<br/>productivity</li> </ul> | <ul> <li>Data available<br/>with important<br/>lags</li> <li>Data may<br/>be costly to<br/>produce</li> <li>Data very<br/>aggregated</li> <li>Calculations are<br/>complex</li> </ul> |  |  |  |  |

### Table 2: Pros and cons of techniques used to analyse sector growth and competitiveness

continued next page

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| Measure  | Use/Objective   | Data Required/<br>Level of<br>Complexity   | Pros   | Cons   |
|--|---|--|--|--|
| Labour Skills<br>Analysis                            | Identifies where<br>positive spill-<br>overs from FDI or<br>innovation could<br>be more readily<br>absorbed | • National-level<br>employment<br>statistics   | • Easy to analyse<br>and use in<br>conjunction with<br>productivity and<br>input-output<br>techniques to<br>understand links<br>between sectors<br>ad skill levels | <ul> <li>Does not<br/>provide a<br/>granular<br/>overview of<br/>skills gaps</li> <li>National labour<br/>statistics<br/>usually have<br/>significant time<br/>gaps (5 years)<br/>and may not be<br/>recent</li> </ul> |
| Export<br>Participation<br>- Value Chain<br>Activity | Identifies evolution<br>of forward and<br>backward linkages<br>and participation in<br>export through GVCs  | <ul> <li>International<br/>input-output<br/>tables</li> <li>Calculations are<br/>very complex</li> </ul> | <ul> <li>Combines goods<br/>and services</li> <li>Captures trade in<br/>value-added</li> </ul>   | <ul> <li>Data<br/>aggregated</li> <li>Calculations are<br/>complex</li> <li>Interpretation<br/>is complex</li> </ul>   |
| Mincerian<br>Wage<br>Equations                       | Examines earnings<br>of individuals,<br>possibly linked to  | • Household<br>surveys   | • Detailed micro-<br>level data  | <ul> <li>Link to<br/>meso- and<br/>macro-level<br/>dimensions<br/>difficult to<br/>establish</li> </ul>  |

#### **Table 2 Continued**

Source: Gelb et al. (2019), and author's elaboration.

# Identifying economic and political constraints to developing key sectors

Many countries have been the subject of analyses around binding constraints to economic transformation and job creation. It is important to synthesize this available information. The framework in McMillan et al. (2017) distinguishes between general constraints that apply across all sectors and specific issues that constrain the development of the promising sectors and value chains. Constraints can be distinguished further between economic, political, and institutional constraints. This is an appealing way to categorize constraints, given the focus on understanding how to develop sectors.

Table 3 uses this framework to synthesize 30 studies in Mozambique (see also the appendix). A reasonable consensus appears on the broad constraints, with skills being one important constraint, but not the only one. It would be useful to undertake such a review at country-level focusing on constraints to job creation.

 Table 3:
 Summary of economic and political constraints identified in the literature review

|                             |                               | Economic constraints |                |                         |             |       | Political constraints |                |               |      |
|-----------------------------|-------------------------------|----------------------|----------------|-------------------------|-------------|-------|-----------------------|----------------|---------------|------|
|                             | No. of<br>studies<br>reviewed | Skills               | Infrastructure | e Investment<br>climate | Finance     | Other | Rule<br>of<br>law     | Institutions   | Corruption    | Othe |
| General<br>constraints      | 17                            |                      |                |                         |             |       |                       |                |               |      |
| Sector-specific constraints |                               |                      |                |                         |             |       |                       |                |               |      |
| Agro-business<br>& Forestry | 6                             |                      |                |                         |             |       |                       |                |               |      |
| Construction                | 3                             |                      |                |                         |             |       |                       |                |               |      |
| Gas & Coal                  | 4                             |                      |                |                         |             |       |                       |                |               |      |
| Key:                        |                               |                      |                |                         |             |       |                       |                | -             |      |
| 80-100%<br>reviewe          |                               | all stu              | dies           | 50-79% of all s         | tudies revi | iewed |                       | 0-49% of all s | tudies reviev | ved  |

Source: Balchin et al. (2017).

There may be a lack of studies on constraints behind sector growth, and the lack of knowledge could also relate specifically to how young people access the sector. It could be that young people experience particular challenges even though the sector as a whole is doing well. Interviews, surveys, and analysis of data could be helpful. The lack of experience and proven soft skills could be factors that constrain firms from employing young people, but in certain sectors such as garments assembly, basic skills can be taught relatively quickly.

## Identifying general enabling and targeted policies for youth employment

McMillan et al. (2017) classify a range of public policies that can be used to support sector growth and economic transformation, summarised in Table 4. Investment climate reforms are, for example, one type of general enabling interventions. However, these are often not enough by themselves, and need to be undertaken in conjunction with other interventions, such as infrastructure investments, support to the financial sector, industrial development policies, among others. A reading of the literature is that policies that countries that have successfully transformed always involve targeting a specific set of activities, perhaps with the exception of Hong Kong and to some extent Chile.

Therefore, it is important to consider complementarity between policies. For example, Rodrik (2013) calls for complementary policies that improve both 'fundamentals' such as education and infrastructure and policies that target growth in high-productivity sectors. This is also highlighted in an Institute of Development Studies (IDS) special issue (IDS, 2017), with Kilimani (2017) arguing that beyond human capital and a business environment, greater support for labour-intensive sectors and public works is required, with strong arguments for more integrated and coherent policy across education, labour markets, financial services, and infrastructure to address the youth employment challenge.

|   | <b>General Enabling Interventions</b>   | Targeted Interventions  |  |  |  |  |
|---|---|---|--|--|--|--|
| Public actions to<br>support structural<br>change                 | <ul> <li>Business environment/<br/>investment climate reforms (e.g.,<br/>registration, land, tax, contracts)</li> <li>Financial sector development</li> <li>Strengthening State Business<br/>Relations (SBR)</li> </ul>                           | <ul> <li>Export push policies</li> <li>Exchange rate and tariff<br/>protection</li> <li>Selective industrial policies</li> <li>Spatial industrial policies</li> <li>National development banks</li> </ul> |  |  |  |  |
| Public actions to<br>support within-sector<br>productivity growth | <ul> <li>Building fundamentals (e.g.,<br/>infrastructure, education)</li> <li>Investments in basic production<br/>knowledge</li> <li>Managerial good practices as<br/>public goods</li> <li>Innovations</li> <li>Promoting competition</li> </ul> | <ul> <li>Management training</li> <li>Attracting FDI</li> <li>Export diversification</li> <li>Developing GVCs</li> <li>Increasing agricultural productivity</li> </ul>                                    |  |  |  |  |

 Table 4:
 Typologies of public actions used to promote sector growth and economic transformation

Source: McMillan et al. (2017).

Table 5 provides an application of this framework in the case of Tanzania.

| Table 5: Public actions for economic transformation in Tanzania       |  |  |  |  |  |
|---|--|--|--|--|--|
|   | Improving fundamentals (cross-<br>sectoral)  | Targeted interventions (sector-<br>specific)   |  |  |  |
| Public actions to<br>support structural<br>change                     | <ul> <li>Investment climate reform (e.g.,<br/>improved customs procedures,<br/>lower export taxes and lower<br/>tariffs on inputs).</li> <li>Financial sector development<br/>leading to PPPs.</li> <li>Better public-private co-<br/>ordination.</li> </ul>   | <ul> <li>(Regional) export push policies.</li> <li>Coordinated and coherent<br/>industrial policy.</li> <li>Industrial parks and SEZs for<br/>sectors such as textiles, leather,<br/>building materials, plastic cards,<br/>equipment, electronics assembly,<br/>cashew, confectionary, coffee.</li> <li>Attracting FDI in light<br/>manufacturing (e.g., leather,<br/>wood, and garments).</li> </ul> |  |  |  |
| Public actions to<br>support within-<br>sector productivity<br>growth | <ul> <li>Energy, transport, and irrigation<br/>infrastructure (especially local).</li> <li>Skills and innovation policies,<br/>e.g., to address lack of tertiary<br/>education through vocation and<br/>training centres and addressing<br/>science, technology, engineering,<br/>and maths skills.</li> </ul> | <ul> <li>Value chain development and<br/>transport corridors (e.g., long-term<br/>finance to facilitate entry of SMEs<br/>into regional and global value<br/>chains; PPPs; contract farming and<br/>cluster formation for agriculture<br/>productivity).</li> <li>Technical assistance to the leather<br/>sector.</li> <li>Kaizen projects for the wood<br/>sector.</li> </ul>                         |  |  |  |

#### Table 5: Public actions for economic transformation in Tanzania

Source: Balchin et al. (2016).

More education is not necessarily the most immediate or effective solution for job creation. ILO (2020 argues there is an excess of tertiary graduates in a number of African countries, which has led to a fall in the returns to tertiary education over the last decade. However, it may still be important to focus on the appropriateness of the competencies acquired through education as these are frequently cited by young people as a major obstacle in finding decent jobs:

- Educational participation in Africa remains low by international comparison.
- The quality of education in Africa is poor.
- There are large skills mismatches.

Further evidence suggests that access to good quality and relevant skills development remain a large issue especially for youth in rural areas. Informal apprenticeships account for more than 90% of training received by young people in some African countries. Targeted active labour market programmes can be helpful in raising employment prospects of young people, especially in the short run (see e.g., the experience of a pilot Employment Tax Incentive in South Africa, although the roll out programme proved less effective).

#### Political economy around immediate targeted actions

The final, fourth step, is really important, but does not always receive sufficient attention in data-dominated economic analyses. It is widely accepted that political economy challenges at both national and sector levels hamper effective industrial policy (see Lopes & te Velde, 2021). The discussion on the policy matrix in the foregoing subsection suggests that targeted policies are crucial, but of course they also carry more risk and involve failures compared to general enabling policies. It is possible to get it wrong.

The literature discusses several conditions that are crucial for effective industrial policy and sector growth. According to the contributions in Jouanjean and te Velde (2013), they include: (1) mechanisms that enable transparency, ensure the likelihood of reciprocity, increase credibility of the state among the capitalists and establish high levels of trust between public and private agents; (2) mutual interests, pockets of efficiency, and learning for productivity; (3) embeddedness, discipline, and accountability; and (4) commitment, focus, experimentation, and feedback.

In a review of successful Asian countries, Ansu et al. (2016) examine successful economic transformation experiences worldwide, and distinguish four requirements that appear universally relevant to institutional functions (as opposed to forms, which are unique and context specific) for effective economic transformation policy: (1) constructing a consensus among key actors that establishes economic transformation as a nation-building project, with shared commitments extending well beyond a single

electoral term; (2) giving at least one public agency sufficient autonomy, budgetary control and political authorization to override interdepartmental co-ordination problems and engage in a practical way with credible private sector organizations; (3) creating institutional arrangements that can coordinate a sufficient set of powerful public and private actors so as to ensure both an appropriate level of technically justified public support to promising sectors or firms; and also that this support is conditioned on mutually enforceable performance standards; and (4) enabling discovery of approaches that work for transformation in the particular country context by means of explicit experimentation, good feedback, and timely correction.

Several Asian and a few Latin American countries have embraced arrangements of this kind, but examples of their adoption have been quite rare in Africa. ACET and ODI (2018) translate these conceptual aspects into crucial practical functions behind a good-quality industrial policy regime, such as a high-quality process behind industrial policy formulation; a problem-solving and facilitatory approach; attention to local capability-building; supportive clustering policy; joint learning with the private sector to address initial and emerging constraints; and providing selective and conditional support to building firm capabilities.

Whilst these institutional features are generic applying to all sectors, or a range of sectors, much of the dynamism behind industrialization, economic transformation and job creation happens at the specific sector level. To describe and explain sectoral transformation patterns, Balchin et al. (2019) examine experiences of successful sector transformation, including: air transport and logistics services in Ethiopia; the automotive industry in South Africa; the revival of the cocoa sector in Ghana; and sector-based strategies in Mauritius. It also considers five cases where sectors did not transform, or where a promising initial transformation was not sustained. These cases of relative failure are cashew nuts in Mozambique; pineapples in Ghana; maize subsidies in Malawi in the years 2005–2008; and President Kikwete's rice initiative in Tanzania.

The review argues that positive sector dynamics depend crucially on:

- correct identification of the economic opportunities (e.g., consistent with the analytical techniques that have been discussed above);
- conducive political-economic conditions at the sector level (e.g., a centralized economic planning in the hands of an aspiring developmental state; effective alignment of interests, facilitated through dedicated sector-specific structures and support organizations; a consensus view across elites and the wider public and private sectors around a strategic direction for the economy);
- credible commitments to investors (e.g., credible state backing to various sectors, clear international commitments);
- reasonably good provision of public goods (e.g., provision of complementary infrastructure and skills that are of high quality and appropriate to the sector);

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- specific efforts to tackle investment co-ordination problems at targeted level (e.g., co-ordination amongst interrelated investors; problem-solving attitudes); and
- taking advantage of a moment of unusual opportunity (e.g., an election and change in power).

These deeper institutional factors are crucial in determining whether a sector continues to develop or not, and hence whether it could provide employment potential. In sector failures, interests stack up against providing credible commitments or co-ordinating activities, and when this is the case, all workers including the young will suffer. It is therefore important that country studies ask questions, not only about what policies to put in place to support sectors, but also how to support these sectors. There will of course be additional questions around how to ensure young people's interest are addressed within sectors, but keeping a sector going, and hence offer job opportunities for the young, will not only depend on protecting the interest of young workers, but also on supporting key actors in the sector. It is important to understand the political narratives around young people at country level. For example, an article by Gebremariam in IDS (2017) argued that the Ethiopian Government changed the narrative from seeing young people as threats to reframing them as entrepreneurs and seeds of democracy and development.

### 3. Political economy: Examples and questions

This section elaborates on the political economy of promoting jobs for young men and women. Economic analyses provide answers on *what* to target, e.g., which sectors, or which firms and groups of individuals, to maximize job impacts for young men and women. Evidence using input-output analysis suggests that employment impacts are likely to differ by sector (see Table 6). There are differences between, for example, manufacturing, where direct impacts are important (e.g., garments) and infrastructure or financial services investments, which have stronger induced/ second-order job impacts.

| Sector   | Direct Jobs Impact | Indirect Jobs Impact  | Induced/Second-<br>order Job Impact |
|--|--------------------|-----------------------|-------------------------------------|
| Manufacturing  | Very important     | Potentially important | Less important                      |
| Tourism  | Medium important   | Very important        | Less important                      |
| Infrastructure (e.g.,<br>energy, roads),<br>financial services | Less important     | Temporary             | Very important                      |
| Agriculture  | Very important     | Less important        | Less important                      |

Source: Jouanjean and te Velde (2013).

Such summary tables based on in-depth economic analysis should be complemented by policy analyses, as well as policy economic analysis to inform *how to* make appropriate policy happen to promote sectors. Below we provide examples to inform the types of questions country case studies could be asking around political economy, referring to cases in Balchin et al. (2019).

#### Political economy relations that support collaboration

Positive sector dynamics rely on positive political-economic relations, which can be described as broad institutional arrangements that bring actors together. It relates to how state and other actors such as businesses collaborate effectively around a shared objective of developing a particular sector. One example is how effective alignment of interests facilitated through dedicated sector-specific structures and

support organizations has helped to develop South Africa's automotive industries. Another example is around how relevant players in Mauritius developed a consensus view across elites and the wider public and private sectors towards a shared strategic direction for the Mauritian economy, upgrading the economy from sugar, to textiles and garments and a service-led economy. Positive interaction was lacking in well documented failed cases of agro-processing across several African countries, e.g., in Mozambique, where there was a lack of consensus among different actors about necessary reforms in the cashew nut sector, in Ghana where there was little government interest in pineapple production, leaving pioneer investors in the sector to attempt, ultimately without much success, to address the growing infrastructure and learning requirements of remaining internationally competitive, or the weakening political support of the maize sector in Malawi. Successful political economy institutional arrangements do not normally have a common form, but share the function of fostering collaboration through (formal and informal) dialogue.

#### A credible public sector commitment leading to consistent policy

Private sector investment depends on a stable policy environment backed by credible commitments and the above institutional arrangements are more likely to result in credible commitments to investors covering long periods over time. Investors do not like, and often need, to insure against policy reversals. In Mauritius, high-level political backing for a consensus view on the desired future direction of the economy was crucial over a period of decades. It included support provided to sectors through targeted support for innovation. In Ethiopia, state investments in air transport were backed by a long-term policy vision designed by a regime that is relatively secure. The multi-year policy visions in South Africa provided a credible platform for long-term planning in the automotive sector. The opposite happened in Mozambique where the government's credibility behind cashews was undermined by poor communication, the perception that the policy reforms were driven by the World Bank and the knowledge that processing could be profitable only with government protection. The power of food-importing businesses undermined the credibility of the presidential rice initiative and the East African Community's common tariff rules in Tanzania. Support for maize subsidies were not sustained in Malawi. Thus, it is important to assess the ability of a country's public sector to follow a policy consistently over time. This could be in the form of stable economic policies that are maintained beyond electoral cycles and not undermined by other actions.

#### Provision of appropriate public goods

In addition to an appropriate and stable regulatory business environment, positive sector dynamics involve reasonably good provision of public goods. In the example above, this includes coordinated public infrastructure investments in Ethiopia,

including special economic zones to attract manufacturing, investments in the construction of automotive industrial parks and targeted transport infrastructure in South Africa, and improved telecommunications and power supply in Mauritius. There are many instances where African governments do not invest sufficiently in public goods. Poor rural roads and weak extension services affected the maize sector in Malawi negatively. Failure on the part of district governments to maintain medium-size irrigation works hampered the presidential rice initiative in Tanzania. It is important to assess whether the public sector provides financial support for good quality infrastructure (road, energy, education) appropriate to sectors of interest (which goes beyond regulation).

#### Investment facilitation through coordination and problemsolving approaches

Traditionally, many African countries intervened heavily in markets through state ownership and screening of private sector investment. A more promising route towards developing sectors for job creation is investment facilitation. Specific efforts to tackle investment co-ordination problems helped successful cases such as in Ethiopia, which involved co-ordination and sequencing of investment in public infrastructure alongside the airline's own capital investment in key areas such as cargo and maintenance facilities. Also in Ethiopia, high level officials sought to attract Chinese investment in garments through mission in China, actively trying to bring together investment opportunities and Chinese interests. And in South Africa, the government devised well-coordinated policies-including import duty credits and productive asset allowances-for subsidising investment in exporting cars. Consistent support was provided to investors, and sometimes directed to specific first-mover firms. For example, tax incentives available to all investors and tariffs helped attract Original Equipment Manufacturers (OEMs) to South Africa. On the other hand, there was a lack of effort to coordinate investments to boost raw cashew nut production after export liberalization in Mozambique. Support was provided and then withdrawn. In Mozambique, the government removed export restrictions without investing in firm capabilities. In Malawi, subsidies were not sustained long enough, or supported with sufficient complementary measures.

#### Summary

Table 7 summarizes key political economy issues. These issues can be examined at the country-level and applied to specific sectors (relevant for job creation for young men and women) which are identified by economic analyses. One common feature of African countries is the lack of structural change, i.e., movement of labour from low productivity to high productivity sectors. This hampers sustained job creation, and hence a focus on job creation (including for young men and women) requires a

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focus on developing new sectors. But *how* can this be done is not always discussed. We suggest case study authors consider the deeper political economy issues in Table 7 and do not stop with describing policy desirables such as skills, infrastructure, or a good investment climate.

| Issue                             | Measurement  | Positive Examples  | Negative Examples  |
|-----------------------------------|--|--|--|
| Political<br>economy<br>relations | Institutional<br>arrangements to foster<br>collaboration (e.g., state<br>business relation, social<br>dialogue)    | Good quality interactions<br>amongst actors around<br>targeted sectors<br>(Ethiopian airlines, South<br>African automobiles,<br>Mauritius) | Malawian maize,<br>Tanzanian rice  |
| Credible<br>commitments           | Long-term policy<br>consistency (versus<br>policy reversals),<br>stretching beyond short-<br>term electoral cycles | Long-term policies<br>behind Ethiopian airlines<br>and South African<br>automobiles  | Undermining of policy<br>stance on Mozambican<br>cashews, Tanzanian rice<br>and Malawian rice        |
| Appropriate<br>public goods       | Targeted public goods<br>support (roads, transport,<br>energy) around sectors of<br>interest                       | Ethiopian SEZs, industrial<br>parks in South Africa  | Poor rural roads and<br>weak extension services<br>affected the maize sector<br>in Malawi negatively |
| Investment<br>facilitation        | Co-ordinating role of<br>state in facilitating<br>investment in key sectors  | Ethiopian garments<br>sector, complementary<br>trade policy support<br>for South African<br>automobiles                                    | Withdrawal of/failure to<br>support maize in Malawi,<br>cashews in Mozambique                        |

Table 7: Political economy issues to develop targeted sectors: Summary

# 4. Conclusions and implications for country case studies

Young people hold a quarter of jobs in Africa, which is twice the world average. Africa is a young continent, and the only one where the labour force is expected to grow significantly over the coming few decades. Finding jobs for the young people is very much linked to a general employment challenge. The jobs crisis is not a simple supply-side or education and skills challenge, as in most African countries the share of youth unemployment actually increases with levels of education. This suggests that a higher level of education is not a guarantee for employment, and we need to consider which sectors are better at pulling in employment opportunities.

We proposed a 4-step framework to identify and create opportunities to create jobs for young men and women:

- 1. Identifying promising sectors and activities with high growth and (youth) employment potential;
- 2. Identifying economic and political constraints to developing key sectors relevant for youth employment;
- 3. Identifying general enabling and targeted policies for youth employment; and
- 4. Understanding the political economy around immediate actions to support youth employment.

Each country team will examine specific questions, using appropriate methods, but it is important to consider the wider issues above whilst conducing the research. Specifically, it is important to explore the following questions.

#### Promising sectors and activities with high growth and (youth) employment potential

• Which sectors generate the most jobs, for men and women, and which sectors provide job opportunities for young people in particular? Which sectors have seen the greatest increases in job creation? (a complementary paper by Mendez-Parra (2021) examines job creation potential through input-output models).

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- What is the competitive and comparative advantage of each sector, using RCA, Hausman product space, or other trade-related measures?
- Which (global) value chains are operating in the country and what are the capabilities and experience of firms linked to these chains? What levels of productivity, skill levels, and earnings do firms and individuals have, and how does it link to the type of activities and locations in which households and firms are involved?
- How does location matter for the volume and quality of employment, and do special economic zones and other initiatives lead to agglomeration effects with productivity and employment spill-overs?

### *Identifying economic and political constraints to developing key sectors relevant for youth employment*

- What general and specific barriers exist at economy and sector level?
- What are the economic constraints, and what are the political or deep institutional constraints behind some sectors compared to others?
- And how do these constraints affect young men and women in particular?

#### General enabling and targeted policies for youth employment

- What general enabling policies can help specific sectors or activities?
- What targeted policies can help specific sectors or activities? Either by developing sectors that employ young people directly or indirectly through sector transformation, or preparing and moving resources into activities that can employ young people in the future through structural transformation.
- Do policies need to be targeted at young people directly for them to benefit most?

#### Political economy around immediate actions to support youth employment

• Are political-economic conditions conducive at the sector level? For example, is centralized economic planning in the hands of an aspiring developmental state, and is there effective alignment of interests, facilitated through dedicated sector-specific structures and support organizations? Or is there a consensus view across elites and the wider public and private sectors around a strategic direction for the economy?

- Has the public sector been able to provide credible commitments to investors, e.g., credible state backing to various sectors, or are there clear international commitments?
- Has the public sector provided public goods, e.g., through the provision of complementary infrastructure and skills that are of high quality and appropriate to growth sector?
- Has the public sector been engaged in specific efforts to tackle investment coordination problems at targeted level, e.g., co-ordination amongst interrelated investors with problem-solving attitudes?
- Have specific political events or other shocks helped or constrain progress in job creation?

#### Notes

1. See, for example, Balchin et al. (2016), who use SET work in Tanzania utilizing the International Food Policy Research Institute's Social Accounting Matrix (SAM).

#### References

- ACET and ODI. 2018. *Manufacturing in Africa, Factors for Success*. London: Supporting Economic Transformation (SET).
- Ansu, Y., D. Booth, T. Kelsall, T. and D.W. te Velde, 2016. "Public and private sector collaboration for economic transformation". Paper presented at African Transformation Forum 2016. Kigali, 14–15 March.
- Balchin, N., T. Kelsall, B. Kilama, A. Lemma, M. Mendez-Parra, D. Mmari, D.W. te Velde, S. Wangwe and L.Worrall. 2016. Supporting the Preparation of Tanzania's Second Five Year Development Plan (FYDP II) 2016/17–2021/22. Supporting Economic Transformation Programme. London: Overseas Development Institute.
- Balchin, N., P. Coughlin, P. Papadavid, D.W. te Velde and K. Vrolijk. 2017. "Economic transformation and job creation in Mozambique". SET Paper.
- Balchin, N., D. Booth and D.W. te Velde. 2019. *How Economic Transformation Happens at the Sector Level: Evidence from Africa and Asia.* London: Overseas Development Institute.
- Binat, M.S, D.W. te Velde, M. Mendez-Parra, E. Wilkinson, and H. Nomm (2018), "Opportunities for Commonwealth development: creating jobs, sharing prosperity and increasing resilience", ODI paper
- Dabla-Norris, E., S. Guo, V. Haksar and M. Kim. 2015. *The New Normal: A Sector-Level Perspective on Productivity Trends in Advanced Economies*. Staff Discussion Note. International Monetary Fund ,Washington, D.C., March.
- Gelb, S., A. Lemma and D.W. te Velde. 2019. "Promoting economic transformation through business environment reform". Study for the DCED.
- Filmer, D. and L. Fox. 2014. *Youth Employment in sub-Saharan Africa*. Washington, D.C.: Agence Française de Développement and The World Bank.
- Fox, L., P. Mader, J. Sumberg and J. Flynn. 2020 "Africa's 'youth employment' crisis is actually a 'missing jobs' crisis". Brooke Shearer Paper. Brooking.
- Hidalgo, C.A., Klinger, B., Barabasi, A.-L. and Hausmann, R. (2007) 'The product space conditions the development of nations', *Science* 317: 482–7.
- Institute of Development Studies (IDS). 2017. "Africa's youth employment challenge: New perspectives". *IDS Bulletin*, 48(3). https://doi.org/10.19088/1968-2017.121
- International Labour Organization (ILO). 2020. *Report on Employment in Africa (Re-Africa) Tackling the Youth Employment Challenge.* Geneva: International Labour Organization.
- Jouanjean, M.A and D.W. te Velde. 2013. *The Role of Development Finance Institutions in Promoting Jobs and Structural Transformation A Quantitative Assessment*. ODI Working and Discussion Papers. Overseas Development Institute, London.

- Kilimani, N. 2017. "Youth employment in developing economies: Evidence on policies and interventions". In IDS (2017), 'Africa's youth employment challenge: New perspectives'. *IDS Bulletin*, 48(3). https://doi.org/10.19088/1968-2017.121
- Lopes, C. and D.W. te Velde. 2021. *Structural Transformation, Economic Development and Industrialization in Post-Covid-19 Africa.* INET Discussion Paper. At https://www. ineteconomics.org/perspectives/blog/structural-transformation-economic-developmentand-industrialization-in-post-covid-19-africa
- McMillan, M. and D. Rodrik. 2011. "Globalization, structural change and productivity growth". At http://www.hks.harvard.edu/fs/drodrik/Research%20papers/Globalization,%20Structural
- McMillan, M., J. Page, D. Booth and D.W. te Velde. 2017. *Supporting Economic Transformation: An Approach Paper.* London: Overseas Development Institute and SET.
- Mendez-Parra, M. 2021. Multipliers. INCLUDE-AERC-ODI Framework Paper.
- Rodrik, D. 2013. "Unconditional convergence in manufacturing". *Quarterley Journal of Economics*, 121(1): 165–204.
- Saliola, F. and M. Seker. 2011. *Total Factor Productivity Across the Developing World*. Research Note. The World Bank, Washington, D.C.
- Sutton, J. and D. Olomi. 2012. "An enterprise map of Tanzania". International Growth Centre. http://personal.lse.ac.uk/sutton/tanzania\_final.pdf

### Appendix

## Identifying and reviewing promising sectors - The example of Mozambique

This appendix provides an example of a country that has already benefitted from a range of sector and country studies aimed at identifying barriers to and policies for sector growth. With such a situation, it is important to synthesize existing studies, which could reveal a consensus around the range of policies required. If there is a reasonable consensus on the sector focus, the next step is to understand how to develop such a sector.

Balchin et al. (2017) synthesizes 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. The studies identify both commonalities and differences in views on the most promising sectors and value chains, as well as gaps. Table A1 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. Similarly, mechanical engineering is given relatively little attention in the literature, despite it being recognized 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. Table A1 discusses each of the promising sectors in greater detail.

| Identified Sectors   | Methodology Used  | Motivation for<br>Inclusion  | Source(s)   |
|--|---|--|---|
| Agro-business  | Literature review,<br>qualitative interviews,<br>and quantitative<br>analysis | Job creation,<br>diversification,<br>inclusive growth, and<br>value addition (simple<br>post-harvest handling)   | Dutch Ministry of<br>Economic Affairs<br>(2014)<br>UNCTAD (2014)<br>GDS (2005)<br>World Bank (2016d)<br>OECD (2013) |
| (A) Pigeon pea,<br>soybeans, sesame                                      | Literature review,<br>qualitative interviews<br>and quantitative<br>analysis  | Nutrition potential,<br>farmers income (and<br>rural job creation for<br>pigeon pea)   | USAID (2016)  |
| (B) Fruit-<br>processing, poultry,<br>soybeans, sesame<br>and cashew     | Literature review,<br>interviews  | Potential of value<br>chain development<br>into processing (linking<br>smallholder farmers<br>to processors through<br>contract farming and<br>out-grower schemes)   | Let's Work Partnership<br>(forthcoming)   |
| (C) Maize,<br>horticulture,<br>pigeon pea,<br>sesame seed and<br>poultry | Literature review,<br>qualitative interviews,<br>and quantitative<br>analysis | Small-scale job<br>creation (in poultry<br>pilot: 25 aggregator<br>workers over two<br>years, with remaining<br>1,775 being farmers;<br>maize mills pilot: 200<br>machinery operators<br>and 5,600 total staff)  | Technoserve (2016)  |
| (D) Cassava,<br>cashew, soybeans,<br>pigeon pea                          | Literature review<br>and secondary data<br>analysis                           | Cashew: job creation<br>(for smallholder<br>farmers in rural areas,<br>particularly woman)<br>and labour-intensive<br>processing (manual<br>shelling with hammer,<br>semi-mechanical<br>cutting, mechanical<br>cutting, impact<br>shelling)<br>Cassava: employment<br>(smallholder<br>production) and<br>processing (e.g.,<br>cassava-based beer)<br>Soybeans:<br>employment<br>(smallholders) and<br>rapid productivity<br>growth (if technical<br>skills attained) | Let's Work Partnership<br>(2016)  |

Table A1: Summary of promising sectors identified in studies on Mozambique

continued next page

| Identified Sectors  | Methodology Used  | Motivation for<br>Inclusion  | Source(s)  |
|---|---|--|--|
| (E) Fruits,<br>vegetables, oilseed,<br>nuts, cassava,<br>maize, rice, beans,<br>dairy, poultry,<br>livestock, honey | Interviews and questionnaire  | Job creation in rural<br>areas and allows<br>for some form of<br>processing (in the<br>long term beyond the<br>current 'washing and<br>putting in a box' type<br>of processing)  | InfoDev (2013)   |
| Construction  | Literature review,<br>qualitative interviews,<br>firm surveys, and<br>quantitative analysis | Can drive<br>transformation and<br>economic growth, as<br>well as job creation<br>(temporary demand<br>for unskilled, but also<br>need for technical<br>skilled workers) and<br>can provide on-the-job<br>skills (from farmers to<br>production workers) | ILO Lab (nd)<br>IGC (2012)<br>IGC (2015)<br>Let's Work Partnership<br>(forthcoming)<br>World Bank (2016d)    |
| Forestry  | Interviews and firm<br>questionnaire, product<br>space analysis                             | Job creation<br>and processing<br>(artisan crafts,<br>furniture, paper),<br>and as a potential<br>steppingstone towards<br>other sectors   | InfoDev (2013)<br>Wagstaff and<br>Maennling (2009)<br>World Bank (2016d)<br>GDS (2005)<br>World Bank (2016e) |
| Gas and coal  | Secondary data<br>analysis  | Economic growth<br>(through extractive<br>revenues coming in)<br>and job creation  | IMF (2016)<br>World Bank (2016c)<br>Friedrich Ebert Stiftung<br>(2013)<br>USAID (2013)<br>Coughlin (2015)    |
| Garments  | Product space analysis  | Potential<br>steppingstone<br>towards other sectors<br>and employment<br>generation (mainly in<br>production, but also in<br>more technical roles,<br>e.g., line supervisors)  | Wagstaff and<br>Maennling (2009)<br>GDS (2005)   |

#### **Table A1: Continued**

Source: Balchin et al. (2017).



#### Mission

To strengthen local capacity for conducting independent, rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

The mission rests on two basic premises: that development is more likely to occur where there is sustained sound management of the economy, and that such management is more likely to happen where there is an active, well-informed group of locally based professional economists to conduct policy-relevant research.

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