



Development  
Progress

Working Paper

01

# Unearthing productive employment: a diagnostic tool for sub-Saharan Africa

Pedro Martins



## Key messages

- The type of economic growth matters for employment creation and poverty reduction.
- Productive employment should be the key focus of economic policy.
- A wide range of policies will be required to seize opportunities and tackle challenges.

This and other Development Progress materials are available at [developmentprogress.org](http://developmentprogress.org)

Development Progress is an ODI project that aims to measure, understand and communicate where and how progress has been made in development.

ODI is the UK's leading independent think tank on international development and humanitarian issues. Further ODI materials are available at [odi.org.uk](http://odi.org.uk)

Work plays a fundamental role in people's lives. Not only is it a critical source of income, but it also empowers people, gives them a sense of purpose and strengthens social cohesion. Decent and stable work provides the security necessary for individuals and their family members to thrive in society. In fact, labour is often the only asset available to the poor, with its earnings providing the main path out of poverty. Generating productive employment opportunities for vulnerable groups of society is therefore essential to promote inclusive economic and social development.

There is a growing consensus that employment should be viewed as a

central policy objective, rather than as a by-product of the economic process.<sup>1</sup> Although strong and sustained economic growth is necessary to create more and better jobs, the relationship is not always straightforward. The type of growth also matters. Growth concentrated in employment-intensive sectors and in areas where the poor and vulnerable live is likely to yield large development payoffs. Therefore, it is important to assess where progress has been made and to identify key opportunities and obstacles to the creation of productive employment.

Most countries in sub-Saharan Africa face considerable employment challenges.

Maasai women make, sell and display their bead work in Kajiado, Kenya. Photo: © Georgina Goodwin/World Bank

---

# The main objective of this Working Paper is to develop a practical and useful methodology to identify key bottlenecks and opportunities to achieving full and productive employment for all.

Labour markets are often segmented, and labour productivity is generally low. Vulnerable employment is common, as illustrated by high levels of self-employment and large informal sectors. Precarious work conditions and the persistence of underemployment – i.e. the inability to derive a decent income from labour, because of either low wages or limited working hours – are key obstacles to reducing poverty.

Nonetheless, there are also remarkable emerging opportunities. The youth bulge can provide a crucial economic stimulus – i.e. a demographic dividend – if certain enabling conditions are met. These include adequate provision of relevant skills and ensuring the availability of productive employment opportunities. The vast resource wealth of the continent also provides unique prospects, especially if these windfalls are used strategically to diversify production structures. Finally, rising wage costs in China may provide an impetus for the manufacturing sector in Africa, although there will be a need to tackle infrastructure and finance bottlenecks.

The main objective of this Working Paper is to develop a practical and useful methodology to identify key bottlenecks and opportunities to achieving full and productive employment for all. The methodology assesses where progress has been achieved and where to target efforts to enable a more socially inclusive and sustainable growth path. In practice, it builds on the well-known ‘growth diagnostics’ framework by incorporating important qualitative dimensions. The key messages are as follows:

- The *type of economic growth* matters for employment creation and poverty reduction.
- *Productive employment* should be the key focus of economic policy.
- A *wide range of policies* will be required to seize opportunities and tackle challenges.

## Growth diagnostics

The ‘growth diagnostics’ methodology proposed by Hausmann et al. (2005; 2008a) has had a significant impact on policymaking. Its main motivation is to assist in the identification of ‘binding’ constraints to economic growth, while recognising that the success of particular economic policies and reforms is contingent on national contexts. This constitutes a crucial departure from the often-ideological approaches to development – such as the

Washington Consensus and import substitution strategies – and is a much-needed complement to econometric studies (e.g. cross-country growth regressions).

The diagnostics approach acknowledges that individual growth processes cannot be generalised to provide one-size-fits-all policy advice, and therefore advocates the use of structured and comprehensive country case studies to help identify a small number of high-impact policy areas. This pragmatism stands in stark contrast to current forms of development policy engagement, which usually lead to the formulation of an extensive list of policy reforms to be implemented simultaneously. In fact, clear prioritisation and sequencing are likely to yield larger payoffs and more efficient outcomes.

The framework also encourages the use of a wide range of assessment tools to analyse the structure of the economy and uncover symptoms of binding constraints on growth. These tools often entail the use of macroeconomic data and firm-level surveys to provide a clearer and more holistic understanding of key bottlenecks. Finally, the framework provides a flexible structure that can easily be adapted to different country contexts and employment challenges.

Figure 1 replicates the ‘*decision tree*’ often used to facilitate the search for binding constraints to growth. The starting point of the analysis is the reasonable assumption that, in many developing countries, low levels of private investment and entrepreneurship constrain economic growth. The objective is then to understand which factors are inhibiting private investment.

Moving down in the decision tree, economic activity may be constrained by low returns to investment and/or the high cost of finance. In the first case, this may owe to either low social returns or low private ‘appropriability’ – i.e. the gap between social and private returns. Low social returns are usually caused by missing complementary inputs, relating to (i) poor geography, such as isolation and landlockedness; (ii) insufficient human capital, which leads to low levels of productivity; and (iii) inadequate infrastructure, resulting in high transport and telecommunication costs. Low appropriability can be a consequence of both government and market failures. Potential government failures may comprise insecure property rights, corruption, inefficient tax structures, high (expected) expropriation risks and macroeconomic instability. In terms of market failures, these may include information and coordination externalities.

Finally, the high cost of finance can limit the rate of capital accumulation, and therefore economic growth

– for any rate of return on investment. This is usually reflected in high effective rates of interest (relevant for investment decisions), and caused by (i) lack of access to international credit markets or unattractive investment conditions; (ii) low domestic savings; or (iii) poor intermediation in domestic financial markets. The implementation of this framework therefore requires careful judgement and a systematic approach to assessing the binding constraints to growth.

The conventional growth diagnostics methodology also has some important *limitations*.<sup>2</sup> For instance, since the analysis is usually time specific and static, it often neglects the evolving dynamics of the constraints. Lack of data may also undermine the assessment of binding constraints, especially in terms of providing accurate information on signals such as shadow prices. Moreover, and perhaps more importantly, some authors have criticised its narrow focus on capital accumulation and economic growth, to the neglect of other important dimensions of the development process, such as poverty, income distribution, employment and sustainability.

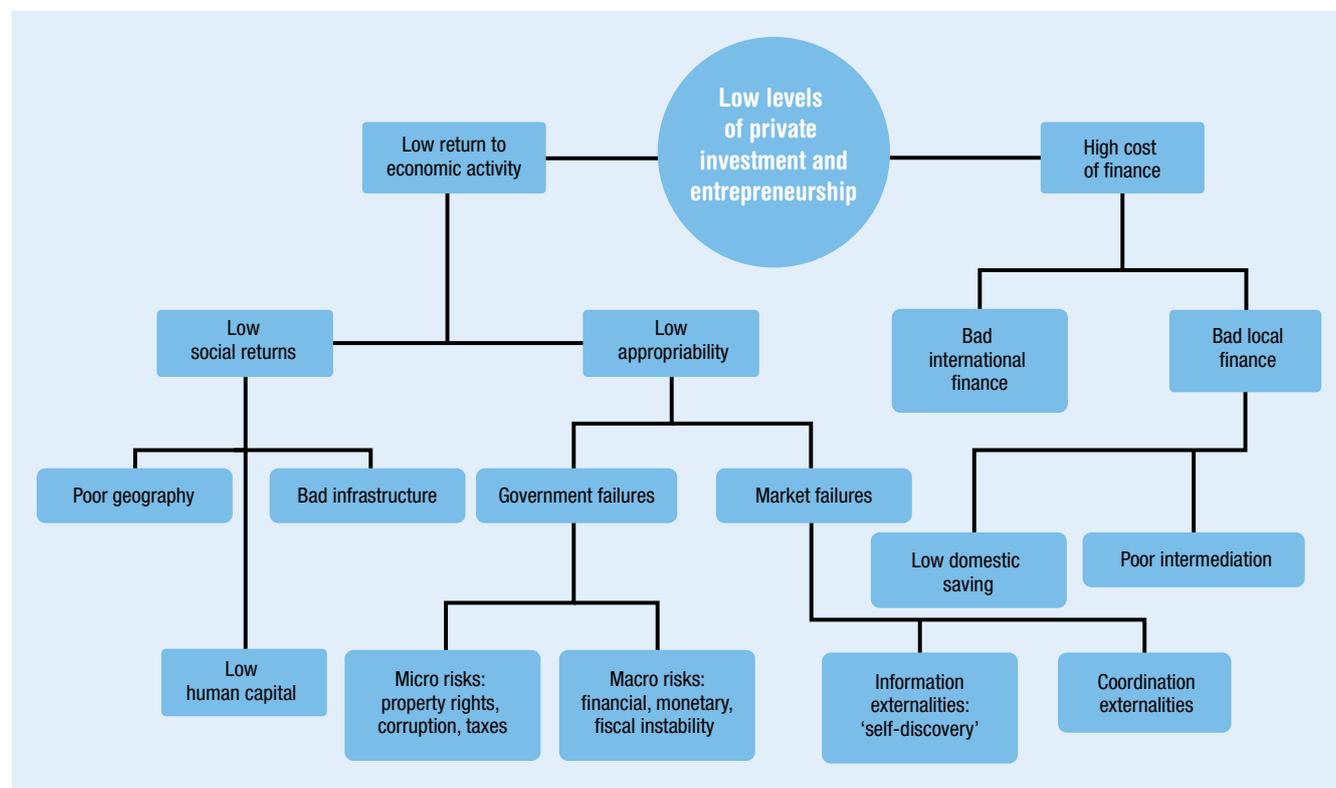
We therefore seek to expand the focus of the traditional growth diagnostics approach in order to address some of these pertinent concerns – with a focus on productive employment.

## Is growth enough?

Over the past decade, many countries in sub-Saharan Africa have registered remarkable economic growth rates, owing partly to high commodity prices and improved economic policies. However, this performance has not always been followed by commensurate improvements in human wellbeing. While African countries require strong economic growth to be able to meaningfully reduce poverty levels and foster human development, the quality of their growth patterns is likely to be just as important in achieving these goals – if not more. In fact, economic growth needs to be broad based (across sectors) and inclusive (of the labour force) if it is to reduce poverty sustainably and effectively.

Table 1 shows that, despite impressive economic growth, poverty outcomes can vary significantly. For instance, Mozambique and Tanzania have recently experienced high growth rates – at around 7% per year – but their poverty trends have been quite disappointing. In Mozambique, the poverty headcount ratio has remained virtually unchanged, while in Tanzania it has fallen only marginally. Ethiopia and Ghana have been more successful at reducing poverty, despite significantly lower gross domestic product (GDP) growth per capita. Even then,

**Figure 1: Growth diagnostics decision tree**



Source: Hausmann et al. (2005)

**Table 1: Economic growth and poverty reduction**

Country	Period	Average annual GDP growth (%)		Poverty headcount ratio		Average annual change in poverty headcount ratio	Growth elasticity of poverty <sup>†</sup>
		Total	Per capita	Start	End		
Ethiopia	1999–2004	5.4	2.7	44.2	38.9	-1.1	-0.9
Ghana	1998–2006	4.9	2.5	39.5	28.5	-1.4	-1.4
Mozambique	2002–2008	7.7	5.0	54.1	54.7	+0.1	-0.0
Tanzania	2000–2007	6.8	3.9	35.6	33.4	-0.3	-0.3

Note: <sup>†</sup> Computed as the ratio of the annual percentage change averages for poverty and per capita growth.  
Source: Calculated from World Bank (2011)

the growth elasticity of poverty – i.e. the pace at which poverty is reduced for a given level of economic growth – appears to be fairly low, especially when compared with the rates successful Asian economies have registered.<sup>3</sup>

The difficulty in translating high economic growth into significant and sustainable poverty reduction highlights the need to investigate the key mechanisms shaping the growth–poverty nexus. Employment plays a key role in this regard, since labour earnings are critical to generate decent incomes for the poor – see Islam (2006) and World Bank (2012). Productive employment also promotes other important goals, such as social cohesion, citizen empowerment and personal dignity.

Demographic pressures and youth underemployment further accentuate the need for an ambitious employment agenda. Economic policies should not only strive to create better economic opportunities (e.g. ‘good’ jobs) but also ensure equal access to these opportunities – particularly for the poor, women, young people, ethnic minorities and migrants. This would enable these groups to better participate and benefit from the growth process. The framework presented below aims to bring these issues into the heart of mainstream economic analysis.

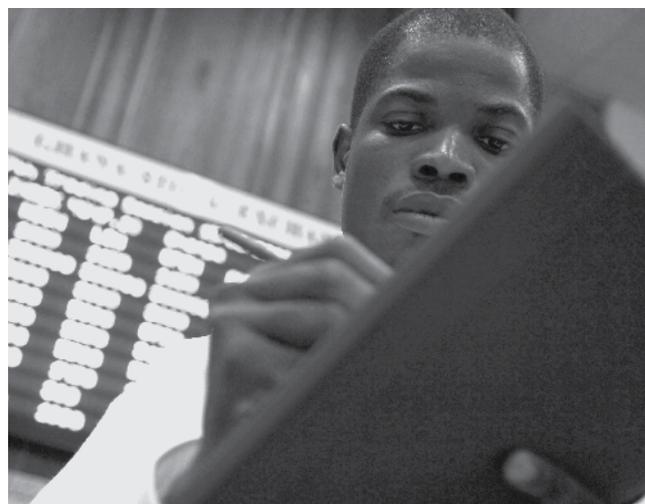
## Employment diagnostics

Our main point of departure is the fact that we are not interested merely in promoting high rates of economic growth, but also in stimulating an equitable and sustainable growth pattern, which requires employment-friendly policies. Hence, we aim to move from a pure growth perspective – with an exclusive focus on the rate of GDP growth (*quantity*) – to a more qualitative approach that seeks to generate broad-based inclusive growth. We therefore develop a framework that is concerned with both the *quantity* and the *quality* of economic growth (i.e. job-rich growth).

This refocus has important *implications* for the design and implementation of the diagnostics approach. First, the starting point of the analysis (and its central concern)

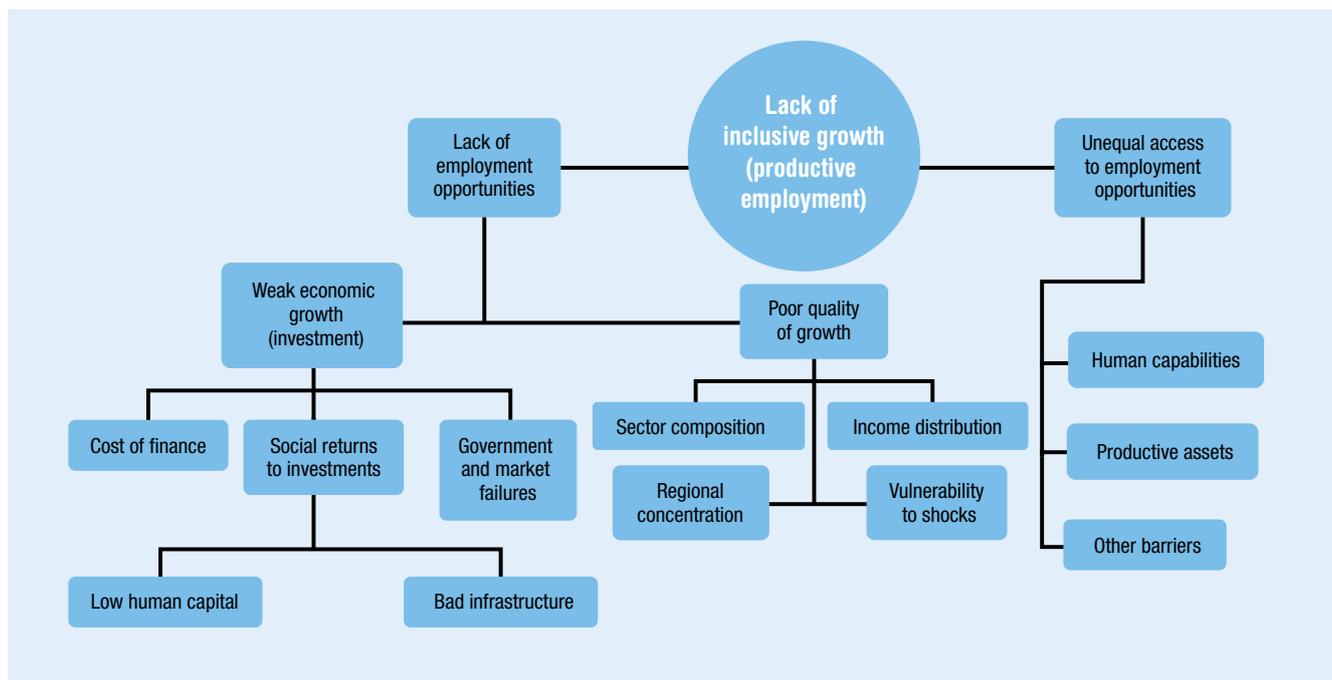
shifts from low private investment and entrepreneurship to the lack of productive employment. Low private investment may well be at the core of the employment problem, but it may also be the case that reasonable levels of private investment, and thus GDP growth, are bypassing important segments of society. In this case, there is a lack of inclusiveness (active participation) in the economic process. Second, human capital is not viewed as a complementary factor, as in the original growth diagnostics framework. Human capital becomes a crucial element in our analysis, from both the firm-level and the individual perspectives.

We now introduce the key defining features of an employment diagnostic tool (Figure 2). This builds on ILO (2010) and ADB (2011). At the top of the decision tree is the concern that many countries are not experiencing periods of inclusive growth. This is the critical policy problem that will be addressed through an employment lens. We then move down to the next level in order to investigate the causes of such a lack of inclusiveness. There are two main hypotheses: either the economy is not generating a sufficient number of good employment opportunities – i.e. jobs with decent pay and working conditions – or some groups of society have not been able to gain access to these.



Traders work on the floor of the Ghana Stock Exchange. Photo: © Jonathan Ernst/World Bank

**Figure 2: Employment diagnostics (quantity, quality and access)**



Source: Author's elaboration

*Lack of (productive) employment opportunities* can be caused by either weak economic growth or poor quality of growth. If a country has not experienced high and sustained economic growth in the recent past – which could be assessed against a certain threshold – then this is likely to be a binding constraint. This would suggest the analysis needs to include the traditional growth diagnostics framework. However, for countries that have experienced high and sustained per capita growth rates, the binding constraints are likely to be found elsewhere. This would warrant an investigation of the quality of the growth process, namely, its failure to generate more and better employment opportunities. We could assess the qualitative aspect of growth by evaluating whether economic growth has been concentrated in particular economic sectors or regions, whether the gains from growth have accrued to all groups of society and whether economic growth has been vulnerable to exogenous shocks.

However, the binding constraint may not necessarily relate to the lack of productive employment opportunities in the economy. In some cases, lack of inclusiveness may have its roots in *unequal access to (productive) employment opportunities*. We would therefore need to investigate why some groups of society are not able to participate fully in the economic process. This assessment might start by looking at human capabilities, especially the education level and health status of the workforce. Lack of appropriate skills and poor health are often important factors limiting people's ability to secure good jobs. Exclusion may also owe

to lack of access to productive assets (e.g. land and credit) and infrastructure (e.g. roads and telecommunications). This usually hinders the ability of self-employed workers to increase their earnings. There may also be other barriers to participation, such as social norms (e.g. gender and age), geography (e.g. remoteness), economic conditions (income poverty) and even political considerations.

We adapt the general approach of the World Bank (2004), and advocate the following key steps when performing an employment diagnostics analysis:

- *Inquiry*, which entails the identification of the key drivers and constraints to inclusive growth;
- *Hypothesis*, which presents a few hypotheses about the most important binding constraints;
- *Diagnostics*, which provides a systematic and rigorous evaluation of the hypothesis; and
- *Policies*, which proposes specific policies and reforms to address the binding constraints.

## The diagnostic tool in practice

The implementation of an employment diagnostic tool will require the use of suitable data, indicators and methodologies in order to capture relevant signals. In terms of data, most household surveys provide nationally representative information on a range of work-related issues. In particular, labour force surveys provide a very rich set of information at a significant level of

disaggregation. Enterprise surveys are focused on firms, and are usually limited to the formal sector in urban areas. Although these exclude micro enterprises (the majority of firms in most countries), they can still provide useful insights on wage employment and key constraints to business. Disaggregated national accounts data for GDP growth statistics are widely available.

With regard to methodology, these vary according to the specific issue being investigated. Basic statistics and analytical tools – such as the World Bank’s Software Platform for Automated Economic Analysis (ADePT) and Job Generation and Growth Decomposition tool (JoGGs) – can provide useful insights. Other methodologies could provide even more information (e.g. econometric analysis).

Table 2 presents a list of possible indicators for each dimension. In the initial stage of the analysis, it might be useful to evaluate which branch of the decision tree is likely to contain the key binding constraints. For instance, we could analyse *GDP per capita growth* rates and compare them with historical trends or a particular threshold (say, an average of 5% per annum). If the observed rates are perceived to be quite low, the case would warrant a traditional growth diagnostics analysis. Only in cases where economic growth has been decisively robust and sustained could we skip this branch.

In terms of the *quality of growth*, we could start

by evaluating the sectoral composition of growth (as disaggregated as possible) in order to identify its main driving forces. Analysing which sectors are growing faster, why that is the case and their intrinsic characteristics (e.g. employment intensity and productivity potential) would provide valuable insights for policymaking. National accounts would need to be complemented by consistent employment data (by economic sector) to produce statistics on labour productivity and employment elasticities. The main objective is to investigate each sector’s contribution to overall economic growth, employment creation and labour productivity growth.

In addition to the ability of economic growth to generate employment opportunities, information on the quality of employment will be crucial. This is particularly important in sub-Saharan Africa, since most people cannot afford to be unemployed. Hence, it is vital to gather information on underemployment (both time and income related), vulnerable employment (e.g. own account and contributing family work) and informal employment. Geographic disparities across regions or the rural–urban divide should also be investigated along these lines.

Information about the distribution of income, such as the share of income accruing to the poorest 20% or 40% of the population, would enable us to uncover specific groups not benefiting from the growth process. Wage data

**Table 2: Selection of indicators**

Key dimension	Possible indicators
<b>Lack of productive employment opportunities</b>	
<b>Quantity of growth</b>	
Cost of finance	International finance (borrowing, foreign investment, development assistance) Domestic finance (savings rate, credit, real interest rate) Financial intermediation (spreads)
Social returns to investments	Physical infrastructure (roads, electrification, irrigation, telecommunications)
Government and market failures	Inadequate public service delivery (limited resources, poor targeting)
<b>Quality of growth</b>	
Sector composition	Value added, employment, sectoral elasticities and labour productivity
Regional concentration	Geographic disparities for a range of indicators (employment, poverty)
Income distribution	Income share of the bottom 40% and Gini coefficient Wage differentials and productivity–wage gap
Vulnerability to shocks	Economic vulnerability (GDP volatility, EVI, debt ratios, export structure)
<b>Unequal access to productive employment opportunities</b>	
Human capabilities	Education (average years in schooling, literacy rates) Health (undernourished children) Other social services
Productive assets	Access to land, credit and infrastructure
Other barriers	Employment data disaggregated by gender, age, income, geography, etc.

Source: Author’s elaboration



Construction workers on site. Photo: © Arne Hoel/World Bank

from labour force and enterprise surveys could be used to further inform the analysis, complemented by statistics on working poverty.

Finally, we could examine vulnerability to shocks through the use of both economic and environmental indicators. Measures of GDP volatility and economic vulnerability should be utilised – such as the UN’s Economic Vulnerability Index (EVI) – in order to assess whether exogenous shocks have a significant impact on the ability to raise labour earnings. This may include an assessment of resilience to terms of trade shocks, financial instability and natural disasters. Vulnerability to some of these will depend on the extent to which the economy is integrated and dependent on the global economic system.

In terms of *unequal access to employment opportunities*, we should investigate the nature of these barriers by analysing basic economic and social indicators. For instance, we could investigate whether the labour force has an adequate skill level to meet the specific demands of the economy. Analysis of the returns to education could potentially disaggregate data by gender, income and geography.

Moreover, we would use detailed employment data from labour force and household surveys to uncover signs of possible exclusion in the labour market. For instance, it is often noted that the poorest segments of the population tend to hold precarious jobs, which entail low pay and do not provide adequate job security. Better jobs – such as regular wage employment – are usually confined to the wealthier and better educated. Hence, it is essential to understand whether and how income, gender, education, geography and politics are hindering access to better employment opportunities.

Nevertheless, we need to bear in mind that increasing global interdependencies present a number of challenges and opportunities to developing countries. Therefore, domestic policy options should not be devised in isolation, but must consider the external environment. For instance, the analysis should take into account the impact of international policies and dynamics with regard to the movement of labour, goods and capital across borders.

## Conclusion

This Working Paper draws on a human-centred conception of progress to sketch out a diagnostic tool to identify key challenges and opportunities for the achievement of full and productive employment for all. It provides a flexible methodology to investigate where there has been significant progress and to enable a better understanding of where stronger policy efforts are needed.

The implementation of this diagnostic tool can have significant policy implications, as it may uncover binding constraints that cannot be tackled through conventional economic policies. For instance, the received wisdom is that countries ought to get the ‘fundamentals’ right in order to generate strong economic growth and consequently reduce poverty. These fundamentals are often associated with broad policy objectives such as macroeconomic stability, a conducive business environment, trade openness and aligned exchange rates. While many countries in sub-Saharan Africa have made significant progress in terms of achieving these goals, either economic growth has not ensued or it has failed to reach the poor.

This implies that getting the fundamentals right is not a sufficient condition for inclusive (employment-rich) growth. Given the specific characteristics of labour markets in these countries – large informal sectors, widespread underemployment and vulnerable work – targeted policy measures are needed to tackle key challenges and seize emerging opportunities.

For instance, poor infrastructure is often mentioned as the key binding constraint in African countries (AfDB, 2009), so stronger public investments in economic and social infrastructure will be required. Direct and indirect measures to support the agriculture sector may help raise agricultural productivity and the incomes of the rural poor, while pragmatic structural policies targeting employment-intensive sectors would help absorb a persistently growing urban labour force. Finally, social policies are also needed to build economic resilience and improve access to employment opportunities for vulnerable groups in society. Even countries that have been able to significantly

---

reduce poverty levels will need to sustain and consolidate recent achievements by strengthening efforts to promote deeper structural transformation, and thus create more and better jobs.

*The author would like to thank Rizwanul Islam, Terry McKinley and Emma Samman for their valuable comments and suggestions.*

## References

ADB (Asian Development Bank) (2011) 'Country Diagnostic Studies'. [www.adb.org/Projects/Country-Diagnostic-Studies/growth-diagnostic.asp](http://www.adb.org/Projects/Country-Diagnostic-Studies/growth-diagnostic.asp)

AfDB (African Development Bank) (2009) 'Review of Growth Diagnostics in Africa: Emerging Findings and Questions'. Presented at the World Bank Inclusive Growth Analytics.

Aghion, P. and Durlauf, S. (2007) 'From Growth Theory to Policy Design'. Commission on Growth and Development. Mimeo.

Felipe, J. and Usui, N. (2008) 'Rethinking the Growth Diagnostics Approach: Questions from the Practitioners'. ADB. Mimeo.

Fosu, A. (2011) 'Growth, Inequality, and Poverty Reduction in Developing Countries: Recent Global Evidence'. Working Paper 2011/01. Helsinki: UNU-WIDER.

Hausmann, R., Rodrik, D. and Velasco, A. (2005) 'Growth Diagnostics'. Revised version of paper presented at Forum Barcelona 2004.

Hausmann, R., Rodrik, D. and Velasco, A. (2008a) 'Growth Diagnostics', in N. Serra and J. Stiglitz (eds) *The Washington Consensus Reconsidered*. New York: Oxford University Press.

Hausmann, R., Klinger, B. and Wagner, R. (2008b) 'Doing Growth Diagnostics in Practice: A Mindbook'. Working Paper 177. Cambridge, MA: Center for International Development, Harvard University.

Heintz, J. (2008) 'Employment Diagnostics for Equitable Growth: Elements of a Framework for Prioritizing Policy Options'. Mimeo.

ILO (International Labour Office) (2010) 'Conceptual and Methodological Guide to Employment Diagnostic Analysis'. Geneva: Employment Sector, ILO.

Islam, R. (2006) 'The Nexus of Economic Growth, Employment and Poverty Reduction: An Empirical

Analysis', in R. Islam (ed.) *Fighting Poverty: The Development-Employment Link*. London: Lynne Rienner.

Rodrik, D. (2010) 'Diagnostics before Prescription'. *Journal of Economic Perspectives*, 24(3): 33-44.

Ronnas, P. (2010) 'Constraints and Challenges for Achieving Inclusive Job-Rich Growth in Mongolia – Initial Diagnostics'. Geneva: ILO.

World Bank (2004) 'Growth Paths: Country Specificity in Practice'. Concept Note for Growth Diagnostic Studies. Washington, DC: World Bank.

World Bank (2011) *World Development Indicators 2011*. Washington, DC: World Bank.

World Bank (2012) *World Development Report 2013: Jobs*. Washington, DC: World Bank.

## Endnotes

- 1 The World Bank (2012) suggests jobs should 'move centre stage' in development policy; the International Labour Office (ILO) has been advocating for a stronger policy focus on employment for many years.
- 2 See Aghion and Durlauf (2007), Felipe and Usui (2008) and Hausmann et al. (2008b).
- 3 For instance, Fosu (2011) estimates that the income elasticity of poverty (between 1981 and 2007) was about -1.3 for sub-Saharan Africa and -2.2 for East Asia and Pacific (using the international \$1.25 a day poverty line).

---

**Overseas Development Institute**  
203 Blackfriars Road  
London SE1 8NJ

The Institute is limited by guarantee  
Registered in England and Wales  
Registration no. 661818  
Charity no. 228248

**Contact us**  
[developmentprogress@odi.org.uk](mailto:developmentprogress@odi.org.uk)  
T: 020 7922 0300

Sign up for our e-newsletter  
[developmentprogress.org/  
sign-our-newsletter](http://developmentprogress.org/sign-our-newsletter)

Follow us on Twitter  
[twitter.com/dev\\_progress](https://twitter.com/dev_progress)

**Working Paper 1** Results of  
Development Progress research  
presented in preliminary form for  
discussion and critical comment.

**Disclaimer** The views presented  
in this paper are those of the  
author(s) and do not necessarily  
represent the views of ODI.

© Overseas Development Institute  
2013. Readers are encouraged to  
quote or reproduce material for  
non-commercial use. For online use,  
please link to the original resource  
on the Development Progress  
website. As copyright holder, ODI  
requests due acknowledgement and  
a copy of the publication.