

Using SET data to identify economic transformation opportunities in low income countries

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Key messages

- Data available on the [SET data portal](#) show that productivity differentials exist both between, and within sectors in low-income countries, which points to significant opportunities for promoting economic transformation.
- Data show the recent pattern of economic growth in Africa has involved little structural change across sectors.
- Labour productivity differentials between sectors decrease as levels of income increase, suggesting further opportunities for economic transformation in LICs
- Firm-level productivity data suggest large productivity differentials between firms within sectors.

Introduction

Using data available to download from the [Supporting Economic Transformation \(SET\) data portal](#), this briefing shows that labour and total factor productivity differentials exist at all levels in the economy, both between sectors and with sectors. This suggests there are **significant opportunities for promoting economic transformation**.

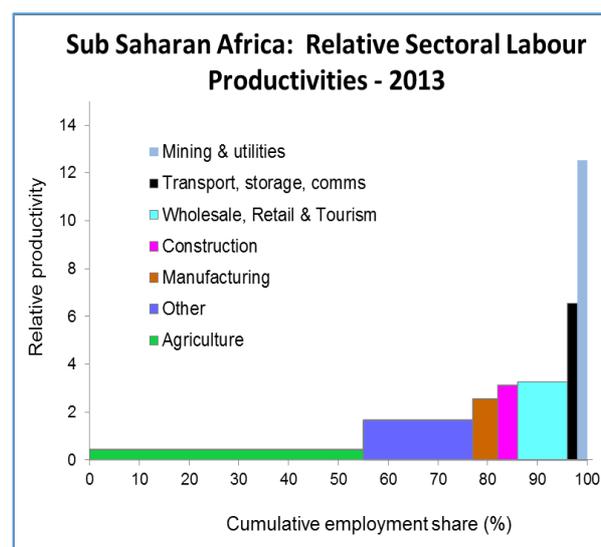
We follow McMillan et al (2017) in defining economic transformation as the continuous process of (a) moving labour and other resources from lower- to higher-productivity sectors (structural change) and (b) raising within-sector productivity growth. Within-sector productivity growth entails the adoption of new technologies and management practices that increase the efficiency of production. It can come about as a result of the increased efficiency of existing firms or as a result of the reallocation of resources away from the least productive firms towards more productive firms. This data briefing first discusses productivity differentials between sectors and then productivity differentials between firms within sectors.

Productivity differentials between sectors

The SET programme has developed **practical ways to measure economic transformation**, taking into account the quality of available data. A

framework is proposed that allows researchers to decompose labour productivity growth into a within-sector component and a between-sector component. The SET data portal includes data for such decompositions for more than 25 countries.

Figure 1. Relative labour productivity gap SSA



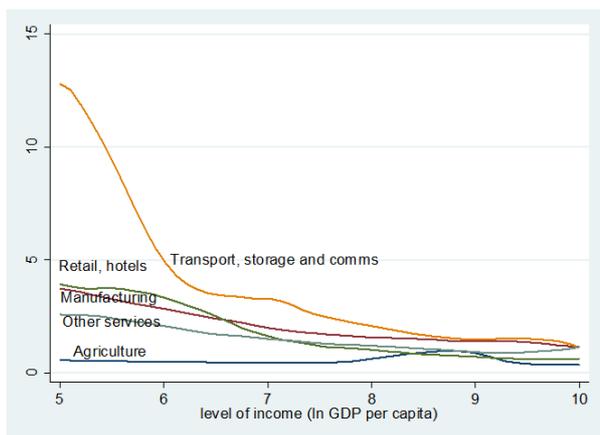
Sources: SET data portal used in SET/NCE (2016)

Whilst the recent pattern of economic growth involves little structural change (employment in Africa is still mostly in agriculture and has seen little change), Figure 1 suggests there are many opportunities for

economic transformation if countries are able to transform the economy and shift labour from low-productivity agriculture into sectors with higher productivity such as manufacturing.

Further data analysis (Balchin et al, 2016) show that the productivity differentials between sectors decrease as levels of income increase (see Figure 2). The existence of large gaps at low levels of income suggests significant opportunities for structural change (i.e. movements across sectors) to raise productivity. This means that, at lower levels of incomes, countries can increase productivity by moving across sectors, whereas at higher levels of income, the increase in productivity may be associated more with improvements within sectors. This could include functional and process upgrading in value chains.

Figure 2. Relative labour productivity for different sectors levels converges at higher levels of income



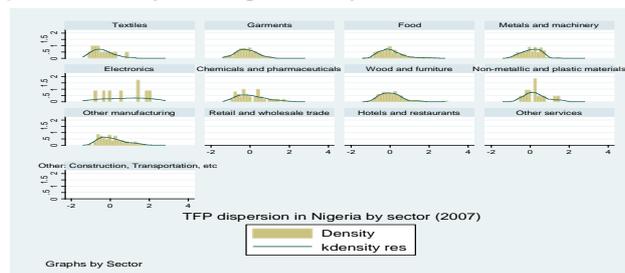
Source: UN and ILO database, data available from <http://set.odi.org/>

Productivity differentials within sectors

Economic transformation also occurs when resources are shifted from low-productivity firms to high-productivity firms. Generally, the scope for such shifts are greater in developing countries than in developed countries, because there is less pressure and competition (e.g. more protection) in developing countries, and hence fewer penalties for being less productive. The SET data portal includes total factor productivity at firm level using World Bank Enterprise Survey data for 20 countries (available at <http://www.enterprisesurveys.org/>). This follows Saliola and Seker (2012) in estimating productivity.

Figure 3 shows that low and high productivity firms co-exist in the same sector in Nigeria. The SET data portal has similar figures for more than 20 other countries.

Figure 3. Dispersion in total factor productivity in Nigeria, by sector



Sources: SET data portal used in Nigeria country file (2016)

In other work, Woodruff (2014) shows that there are also large productivity differentials within large garments firms in Bangladesh, associated with different production lines.

In conclusion, data by the SET programme can point to significant productivity differentials at all levels of the economy. This knowledge can be used in discussions with policy-makers to emphasise that there are significant opportunities to promote economic transformation. Methods based on SET data and techniques to inform readers on how to start this endeavour will be the subject of a forthcoming data briefing.

References

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