

# Using data to assess the contribution of development finance institutions to economic transformation

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## Key messages

- DFI investment portfolio data can be combined with national sectoral productivity data to assess the potential economic transformation contribution of DFI investments by sector and over time.
- DFI tend to invest in higher-productivity sectors. Although this can vary between individual DFIs, on aggregate the relationship holds true and seems to be stronger over time.

## Introduction

Recent studies have analysed the investment activities of development finance institutions (DFIs), attempting to understand if these are, or could be, contributing to economic transformation (see Lemma, 2018). DFIs frequently report their portfolio activities, including the sectoral composition. Employment and gross value added (GVA) data can be used to compute sectoral productivity level at sector level and over time. When combined, such data help us understand if DFI investments are targeting sectors that have higher productivity or activities to increase productivity levels within a sector.

## DFI investments by sector

DFIs are specialised development banks, usually majority government-owned, funded by national or international development funds, whose investments support private sector activities in developing countries. They carry out investment activities using a range of tools (equity, loans, guarantees, insurance, etc.). These are targeted towards the private sector of developing countries. Economic transformation refers to the continuous process of (i) moving labour and other resources from low- to high-productivity sectors (structural change) and (ii) raising within-sector productivity growth (McMillan et al., 2017). Economic activity in sectors exhibiting higher rates of productivity helps reduce the productivity gap exhibited, in the same sectors, between higher- and lower-income countries, in turn contributing to higher rates of growth (Rodrik, 2013). Hence, DFI investments that occur in sectors that contribute to higher productivity can help promote faster rates of growth in lower-income countries. Higher growth rates also tend to produce more inclusive growth outcomes (World Bank, 2009).

Previous research by Jouanjean et al. (2013) finds DFIs do promote economic transformation through investments in more productive sectors. Lemma (2018) specifies indicators DFIs can use to assess whether their investments could impact economic transformation. Of these, one proposed indicator posits that DFI investments can help support higher-productivity sectors and increase productivity in lower-productivity sectors.

Using currently available SET data (SET, 2018), we can look at changes over time in the sectoral distribution of DFI investments to assess the potential transformative contribution of the current investment portfolios of selected DFIs. The dataset aggregates the current sectoral portfolio composition of investment for five DFIs, bilateral and multilateral.<sup>1</sup> The dataset then combines labour force and GVA data for 2016<sup>2</sup> to produce labour productivity data at the sectoral level.

Figure 1 compares the aggregated average DFI currently active portfolio by sector (as a percentage of the total currently active portfolio by country) with the sectoral average contribution to labour productivity (as a percentage of total labour productivity). Both measures are averages for SET countries. The data analysis shows DFI investments are skewed towards the financial sector, but, apart from this, tend to broadly follow what are identified as more productive sectors – that is, manufacturing, higher-value services, etc.<sup>3</sup>

The data can also be used at the country level to identify productive sectors for investment. Figure 2 shows the example of Tanzania and Rwanda. For Tanzania, it shows DFI investments are high in the retail and tourism sector and manufacturing sectors (i.e. IFC investments in a glass manufacturer), which both exhibit low levels of labour productivity in the country – meaning DFI investments, by

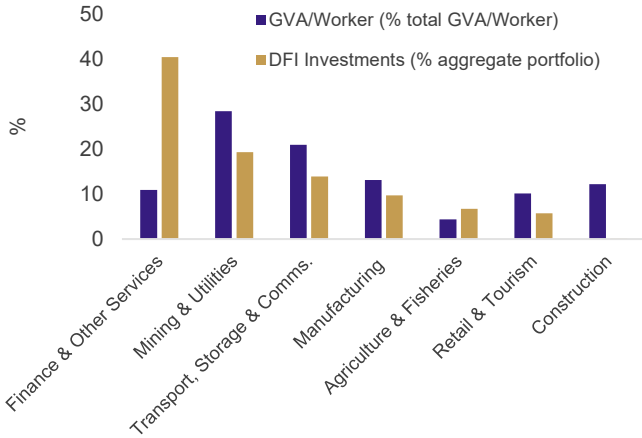
<sup>1</sup> The five DFIs are IFC, CDC, DEG, Proparco and FMO.

<sup>2</sup> Determined by the latest available sectoral GVA data.

<sup>3</sup> Please note that finance GVA cannot be disaggregated from other service sectors owing to data limitations for SET countries.

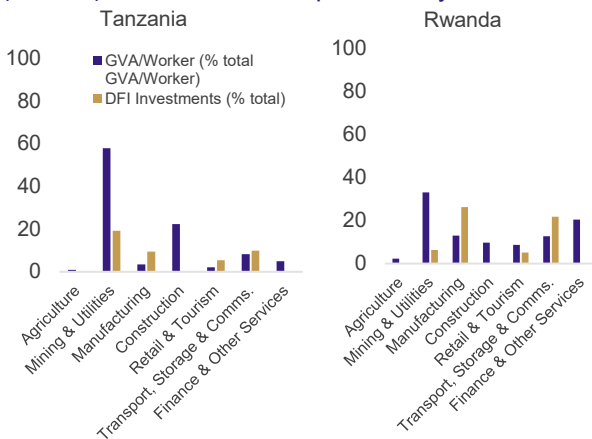
stimulating economic activities in these sectors, could be contributing to reducing the productivity gap between lower- and higher-productivity sectors.

Figure 1: DFI active portfolio (current) vis-à-vis sectoral productivity, average across all SET countries



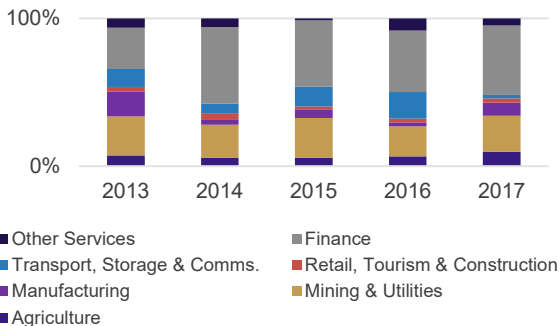
Source: SET, 2018

Figure 2: Tanzania and Rwanda DFI active portfolio (current) vis-à-vis sectoral productivity



Source: SET, 2018

Figure 3: DFI investments by sector as a percentage of total DFI investments



Source: SET, 2018

For Rwanda, there is significant DFI investment in manufacturing (i.e. IFC supporting beer production), which could stimulate growth in the sector. In both cases, DFIs are investing in potentially higher-productivity sectors.

Finally, the data can also show comparisons over time. Figure 3 shows aggregated DFI investments, by sector, in each SET country. It shows how higher-productivity manufacturing investments declined between 2013 and 2016 but picked up again in 2017; moderate-productivity financial sector investments have remained relatively stable; and investments in transport and communications, the third highest-productivity sector, have increased.

## Conclusion

Three conclusions arise from these results. The first is that, while the financial sector does not exhibit significantly high levels of labour productivity, investments in it are (theoretically) indirectly funding investments in other, more productive, sectors. Current DFI portfolio reporting does not always report the final sectoral allocation of these funds. The second is that sectoral GVA reporting, which is commonly used in national accounts systems, show there are large productivity differences among sectors. For example, some of the reported productivity seems quite high – for example in the mining and utilities sector. This owes to the high value of mining products (ore), which skews the measure. On the other hand, DFI investments tend to occur in the energy sector rather than the mining sector, but the nature of GVA reporting means the effective labour productivity of energy is hard to aggregate and quantify between countries, while its indirect contribution to growth can be significant. The third is that DFIs largely do tend to invest in higher-productivity sectors – a relationship that seems to be getting stronger improving over time. This can vary between individual DFIs, but on aggregate the relationship holds true.

## References

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