Are Other African Countries Catching Up With South Africa?

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In this paper, we investigate whether other African countries are still lagging behind South Africa even in the 21^{st} century. This study investigates how the other countries in Africa are faring by comparing those African countries with South Africa, a more advanced economy, using the 2002 – 2019 sample period.

In comparing South Africa with other African countries, we look into individual companies rather than national economies. In other words, we compare the productivities of the individual companies of the two groups. We measure productivities using asset turnover, which is simple to use and is available for most of firms in the sample. Asset turnover is the volume of a company's sales or <u>revenues</u> relative to the size of its <u>assets</u>. The asset turnover ratio can be used as an indicator of the efficiency with which a company is using its assets to generate revenues. The higher the asset turnover ratio, the more efficient a company is at generating revenues from its assets. Conversely, if a company has a low asset turnover ratio, it indicates that the firm is not efficiently using its assets to generate sales.

The cross-sectional comparisons of asset turnover are interesting, but a time series of asset turnover is also interesting particularly in investigating the productivity convergence. Productivity convergence can be an important issue in Africa. Bernard and Jones (1996) report that there is no international evidence of productivity convergence. We examine whether the productivity measures move closer or farther away over time between the two groups. Is the productivity of the African countries converging to the leading country in the region, South Africa?

Our results show that South African firms outperformed other African firms during the sample period. The asset turnover ratios of South African firms were higher than those of other African firms every year. In addition, we find no evidence of the convergence in asset turnover between the two groups. Throughout the sample periods, there is a large discrepancy in asset turnover, and there is no sign of change in the discrepancy. We find some evidence that the productivities of both groups suffered from the worldwide financial crisis. The asset turnover ratios declined for both groups after 2007. The global financial crisis hurt both economies. Scott (2012) reports that the decline in exports and the fall in the prices of commodities in particular hurt African countries.

Innovation is the engine of economic growth (Solow 1957; Romer 1987, 1990) and one of the most important sources for firm growth (Kogan et al. 2017). Whereas innovation has been identified as a driver of the growth in economic productivity in the developed world, the innovative force remains relatively low in most African countries (Anyanwu 2012). In this study, we look into this issue by comparing corporate investments in R&D and intangible assets of South African firms and other African firms. As the firm sizes are different, we focus on the ratio of investments in R&D and intangible assets to total assets for fair comparison. Investments in R&D and intangible assets can indicate not only the current developments but also the future growth potentials of the two groups. We find that South African firms invest more in R&D than other African firms, and there is no evidence of trend reversal. Not surprisingly, we also find that South African firms carry considerably more intangible assets than other African firms, and there is no hint of trend reversal.

We also investigate the situation of the compensation for human capital of the two groups. Human capital development is critical to utilize technology, and technology is positively associated with productivity growth and provides complementary positive and significant effects on economic growth. Thus, human capital, typically referring to the stock of skills and knowledge, is one of the most crucial elements in technology development, and therefore in economic growth in the modern knowledge-driven economy. As Holmstrom (1989) argues, human capital is drawn

to firms that provide incentives, and salaries and benefits in particular. Therefore, it is important to look into the salaries and benefits of the firms in South Africa and other African countries.

Our empirical findings also show that South African firms offer a significantly higher level of salaries and benefits than other African firms. The results indicate that the levels of salaries and benefits offered by South African firms are substantially higher than those of other African firms with no exception throughout the sample period. There is no sign that other African firms narrow the gap vis-à-vis the regional economic powerhouse South African firms.

In addition, we look into the cash holdings of the two groups since corporate cash holding plays an increasingly more important role in financial management. Cash is becoming even a strategic asset to firms, which is the essence of financial flexibility offered by cash holding. In their seminal paper, Bates, Kahle, and Stulz (2009) document a trend of increasing cash holdings by US firms. Cash holding promotes managers' flexibility. Building up cash holding clearly attenuate supply-side financial constraints although cash holding is capable of exacerbating agency problems. Cash holdings are not harmful but beneficial to firm performance if they are used to reduce the firm's underinvestment problems and to fully exploit its growth potential. Therefore, cash is a valuable source of investment funding, and this should all the more be the case if firms have attractive growth opportunities during times of tight credit markets. Cash holdings create a higher value for firms with relatively more attractive growth opportunities in a contractionary economy because the supply of external finance becomes less available. Our findings are clear. Throughout the sample period, the portion of cash is consistently higher for South African firms. Thus, it appears that South African firms were strategically in a better position than other African firms.

Finally, the trend of corporate holding of property plant and equipment (PPE) also deserves our attention. Using international data, Fu et al. (2015) find a decline of capital investment in the U.S. firms as in other developed economies such as G7 and OECD countries. In contrast, such a decline is not evident for firms in the emerging economies. This is consistent with the hypothesis that more developed economies outsource their capital-expenditure-intensive manufacturing activities to developing economies while focusing on the more profitable, rewarding parts of the business, such as product development, design, and marketing which usually require less physical capital investment.

Our results on property plant and equipment (PPE) are intriguing. The South African firms consistently carry less PPE than other African firms. This is a stark contrast with what we found regarding R&D and intangible assets. With no exception, South African firms invest more in R&D and intangible assets, but less in PPE compared to other African firms. This indicates that South African firms are closer to the firms in developed economies than other African firms.

Thus, all these results suggest that South African firms are better positioned for growth in the increasingly knowledge-based business world than other African firms. It appears that South African firms are closer to advanced economies, and other African countries show no sign of improving at least during the sample period. Other African firms carry a lower investment in R&D and intangible assets than South African firms. They pay less to their employees than South African firms. In addition, other African firms carry less cash than South African firms. On the other hand, other African firms carry more fixed assets than South African firms. It seems that South Africa is better positioned for growth not only for now but also for the future.