What constitutes successful African enterprises?

A survey of performance variations in 210 African food processors

By Michael W. Hansen et al.

Abstract: While a substantial literature on African SMEs has emerged in recent years, studies of their performance and the antecedents of that performance are few and disperse. This in spite of the fact that understanding what makes local African SMEs fail or succeed is essential both from a strategic management perspective and from an industrial development perspective. Based on a unique data set of 210 food processing enterprises in Tanzania, Kenya and Zambia, the paper examines variations in performance of African SMEs and analyzes what causes these variations. Based on a review of the extant literature on performance of African enterprises, a model for analyzing performance variations is developed. Essentially, it is hypothesized that performance is determined in the interaction between capability, strategy and business environment factors. The paper finds that African SMEs on average are highly profitable and have surprisingly high growth rates. There are however large variations in performance. Through a cluster analysis, three generic types of African SMEs are identified, laggards, followers, and gazelles. The gazelles are typically medium-sized, skill intensive Kenyan companies engaged in production of relatively processed products. The laggards are typically small capital intensive companies involved in grain milling and adopting a cost differentiation strategy. Through an OLS regression, it is suggested that the key drivers of performance are related to internal capabilities, in particular managerial leadership and human resource skills. The key constraints of higher performance are mainly related to external factors such as corruption and deficient supply industries. Foreign linkages (and donors) play a negligible role for performance, but especially the larger African enterprises see unfair foreign competition as a growing problem. Strategy factors seem to modify the influence of internal and external contingencies; for instance are high performing Kenyan SMEs relatively more often adopting differentiation strategies due to increasingly sophisticated industrial infrastructures and market demand, whereas high performing Tanzanian SMEs relatively often are adopting network strategies as these help them circumvent institutional voids. Among the policy implications are that industrial policy in South-Sahel Africa should focus more on training of managers and labor, target medium sized gazelle companies, and reduce transaction costs of contractual relations.
**Introduction**

The future of Africa development lies to a large extent in the hands of its indigenous SMEs. These are the firms that will create most of the private sector jobs that a rapidly growing labor force is craving. These are the firms that will meet surging African demand for products and services. These are the firms where local entrepreneurial talent will grow and realize it self. And these are the firms that will become the future champions of African industry. Much has been said about the MNCs and their potential catalytic effect on development (Mol et al, 2015; Morrisey, 2012), but without local counterparts, MNCs will be exclaves and leave few spillovers on the local economy. Likewise, a lot has been said of the development role of the African entrepreneur (Liedholm & Mead, 2013), but if entrepreneurs never succeed in breaking through the enterprise barrier and build viable and sizable organizations, their role in economic development will remain limited.

In short, SMEs are destined to become the backbone of African private sector development. For that reason, it is essential that academia contributes to an understanding of what makes the African Mittelstand succeed. What are the factors that make some companies overcome the lethal combination of limited internal capabilities and deficient external business environments? And what are the winning strategies of the African that allows some SMEs to succeed where other fail? Is it ability to position themselves against industry peers; Is it ability to attract capital and technology through international linkages; Or is it ability to draw on ethnic or political networks?

In recent years, the literature has devoted a growing interest in African enterprise development. Much of this literature is informed by economics or economic geography (see e.g. Bigsten et al 2004; Bigsten & Söderbom, 2006; Biggs & Shah, 2006; Fafchamps, 2004; Rodrik, 1998; Gibbon, 2005; McCormick, 1999; Altenburg & Von Drachenfels, 2006; Hallberg, 2000; Morris et al., 2012; Morrisey, 2012; UNIDO, 2013; Page, 2013) and rarely is a firm level perspective applied (as argued by Ougudonto, 2007; Uchenna & Mair, 2014; Ozcan & Santos, 2014; Acquaah, 2012; Mellahi & Mol, 2015; Tvedten et al, 2014). To the extent that a firm level literature on African enterprise development exists, it tends to focus on MNCs (see e.g. Quelch & Austin, 2012; Samuel, 2014; Kolk & Lenfant, 2010; Hansen, 2014) or on small entrepreneurial enterprises (see Kiggundu, 2002; McDade & Spring, 2005; Liedhom & Mead, 2013; Langevag & Gough, 2012; McIntyre and Dallago 2003; Felldstad et al, 2006). What is notably absent in the literature is a focus on the growth strategies of African local SMEs. In order to help fill this lacuna in the literature, this paper will present one of the most comprehensive studies of African manufacturing
SMEs to date. Based on a survey of 210 food processors in Zambia, Tanzania and Kenya, the paper seeks to contribute to our understanding of SME performance and its antecedents in an African context.

The paper is organized as follows: First we review the literature on performance of African SMEs with a view of developing an analytical framework that will guide the subsequent analysis. Second, the methodology behind the study will be outlined and strengths and limitations of this methodology assessed. Third, main findings will be presented and implications for industrial policy will be discussed.

**Literature review**

The hitherto most comprehensive studies of performance of African enterprises were based on the World Bank RPED survey of African manufacturing enterprises and their business environment (Biggs and Srivastava, 1996; Bigsten et al., 2000; Fafchamps, 2004; Biggs, 2006). Among the findings of these studies were that failure rates of African manufacturing enterprises are very high and that most face closure within the first five years (Marlow, 2009). Moreover, it was found that African industrial structures are characterized by a ‘missing middle’ with dominant large (often foreign) firms and a large undergrowth of small, typically informal enterprises. These amputated industrial structures was partly attributed to the weak resource configurations of local enterprises (lack of human skills, managerial capability, brands, technology and capital), partly related to difficult business environments (unstable institutions, weak contractual environments, corruption and failing related and supporting industries) (Biggs et al, 2006). Typically, this literature focused on either internal resource constraints or external challenges of the business environment but rarely analyzed how combinations of internal and external factors interact to influence performance. Moreover, as the early literature was largely driven by economists, strategic management perspectives were more or less absent (Tvedten et al, 2014). In the following we will review the more recent literature on African enterprise development with a view of developing a model for performance of African SMEs that takes into account the interaction of business environment, internal and strategy factors:

**External drivers of performance**

Much of the literature on performance of African enterprises emphasizes the overwhelming difficulties of African business environments related to weak formal institutions (or strong informal institutions); corruption; underdeveloped supply industries; lack of financial intermediaries; entry barriers in global markets and value chains, etc. However, the African business environment also offers rich opportunities
for enterprise development e.g. related to high market growth, low competition, increasingly stable macro-economic and political conditions, and improved market support institutions. Generally, the literature focuses on four business environment factors that may affect African enterprise development: 1. Institutions; 2. Infrastructure; 3. Competition; and 4. Supporting and related industries.

**Institutions**

With North (1990), the institutional perspective on development was coined and the private sector development literature was quick to get inspired by this literature. It was argued that price signals and competition is not enough to generate growth of the private sector; market support institutions are equally important. Hence, institutions affect enterprise performance, partly via formal institutions, partly via informal institutions (Peng, 2003). Institutional voids are commonly described (e.g. lack of clear property rights, unpredictable regulations, lack of transparency, lack of judicial institutions to enforce contracts, in-efficient bureaucracies) but equally important are the informal institutions (e.g. cultural and ethnic ties or networks) (Khanna and Palepu, 2010). Numerous studies confirm that institutions have huge impacts on African enterprise performance (see e.g. Svensson, 1998; Bohn and Deacon 2000; Fjeldstad, 2006). It is suggested that business transactions and performance in Africa to a relatively high degree are shaped by non-market factors related to political contacts and ethnic networks (Biggs et al, 2006). Moreover, it is argued that rent seeking and nepotism adversely impacts business performance (Cooksey, 2011). One consequence of institutional voids is that the transaction costs of contracts are becoming very high which harms SMEs disproportionally. SMEs are typically not able to mobilize the resources needed to find and screen possible business partners, to negotiate contracts or to monitor and enforce contracts. As argued by Biggs et al, (2006), enforcement of contracts is made difficult due to “antiquated laws and procedures, insufficient human and material resources, poor management, and corruption” (Biggs et al 2006; 3046). Similarly Fjeldstad et al (2006) find that problems related to obtaining licenses and permits, taxation issues and corruption are among the top impediments of SME growth in Africa. Especially corruption imposes an extra cost on business and may function the same way as a tax does. A smaller company may have greater difficulties offsetting the costs of this ‘tax’ and will not be able to escape it the way a larger company can (or for that sake, a company operating in the informal sector). Svensson (2003) finds that among Ugandans companies, costs of corruption amounts to, on average 8% of total costs.
**Infrastructure**

Infrastructure is another factor often emphasized by the literature as seriously impairing enterprise growth in Africa. In-efficient transport infrastructures increases costs of transport, undermines reliability of delivery, force companies to have large inventories, and add to costs of exports. Moreover, unstable energy suppliers and power outages cause large losses in productivity and undermined reliability of production. Numerous studies have pointed out the potential gains in terms of market integration and reduced input costs to be achieved by improving transport and communication infrastructures in Africa (Prud’homme, 2004; DFID, 2014).

**Competition**

The competitive environment facing SMEs in Sub-Saharan Africa may be fundamentally different from that of industrialized countries. In industrialized countries, there is typically a fine grained industrial division of labor, where a rich undergrowth of SMEs are working mainly in B2B markets, servicing larger firms, often MNCs with highly specialized inputs and services. In developing countries such as those of Sub-Saharan Africa, SMEs are mainly competing head on in end-markets and the level of interfirm trade is miniscule. Operating in such competitive environment makes SMEs extremely vulnerable to trade and investment liberalization and renders them dependent on government formulated reservations and tariff barriers (Altenburg et al., 2006). On the other hand, as international and even national market integration often is limited, competition will be relatively low in many segments. Infant industry protection adds to the relatively uncontested nature of many markets in Sub-Saharan Africa.

**Related and supporting industries**

It has long been argued that one of key impediments to growth and development in African economies is the lack of dense industrial infrastructures that makes supporting and related firms available upstream and downstream in the value chains. This is what Hirschman (1958) coined ‘linkages’. As a consequence of the lack of potential linkages to suppliers, agents, service providers etc., African enterprises will often have to embark on ‘total value chain integration’ strategies where they organize more or less entire value chains (Hansen et al, 2015). The need to organize more or less the entire value chain significantly halts firm expansion and growth and leads to a strategic diversion away from the company’s core business (Prahalad & Hamel, 1990).
Internal drivers of performance

The literature mentions various resource constraints and factors as decisive for SME performance. Among the most important are 1. Technology and capital; 2. Human resource; 3. Managerial capability; 4. Dynamic capabilities.

Technology and capital

A classical constraint on African enterprise development is lack of capital and/or lack of access to capital. Lack of capital prevent SMEs from capturing new market opportunities and reduce prospects of survival. Much of the private sector development literature focuses on, how SMEs can access credit and finance to support survival and growth strategies.

Another classical constraint of enterprise development emphasized by the African enterprise literature is access technology. Technology can lift productivity and assist companies to move into higher value added activities. However, import tariffs on capital goods, lack of technological service provider industries and lack of skills to service and maintain technology are seen as major impediments to enterprise development. As a consequence, much of the literature on SME development in Africa focus on how SMEs can locate and access technology and/or how MNC technology transfer to African SMEs can be facilitated.

Human resources

Also (lack of access to) skilled labor is often mentioned as a key driver of performance in African enterprises. African SMEs are constrained in terms of accessing qualified staff due to their limited search capabilities and the low scale of their business. Moreover, educational institutions fail to produce an adequate amount of specialized skills needed in the business sector. While large enterprises will be able to develop their own training programmes, SMEs will not be able to institute internal training programmes or for that matter, to pay for employees to participate in external training programmes (Fening et al, 2008).

Managerial factors

The importance of characteristics of owners/ managers for enterprise development is emhasized by several studies. For instance, it has been argued that strategic management skills and education of owner are crucial for performance of African SMEs (Cooper and Gason, 1992; Oludele, 2015). A related issue concerns leadership i.e. how owners and managers sets standards and objectives for staff and
motivates the organization toward improved performances through demonstration, performance measures and sanctions, which also appear to affect performance of African SMEs (Fening et al, 2008). In regard to management and ownership, the impact of gender of managers and owners on performance is a particularly disputed theme (Fjeldstad et al, 2006; Liedholm and Mead, 2006; Oludele, 2015).

Dynamic capabilities

One of the defining characteristics of African markets is the extreme uncertainty rooted in political and macro-economic instability, weak institutions and infrastructures, and absence of rich industrial infrastructures. To survive and thrive under such uncertainty demands that firms are exceptionally adaptable and flexible, partly in order to seize new opportunities as they emerge, partly to quickly reconfigure strategy and organization in face of externally generated constraints (Teece, 2000).

Strategy drivers of performance

Obviously, the determinism implicit in both capability based and business environment accounts of African SME performance is unsatisfactory as SMEs evidently adopts individual responses to similar internal and external pressures and opportunities. Hence, strategy may mitigate or enhance the influence of internal and external performance contingencies. As argued by several studies, there is a dearth of strategic management research in Africa, although it also is noted that recently, a strategic management research specifically focusing on African enterprises has surfaced (Mol et al, 2015; Tvedten et al 2014; Hansen et al., 2015). Among the numerous conceivable strategies that may modify the influence of internal and external factorsm the literature in particular mentions three: 1. Network based strategies; 2. Cost focus strategies; 3. International linkage strategies.

Network strategies

Forming networks to other firms will often be a function of the quality of the formal institutional environment; the more the formal environment fails, the more important becomes business networks. Networks are from a contractual perspective the replacement of a public governance system with a private governance system. Networks reduce transaction costs of inter firm relations, it increases trust and reduces search, bargaining and enforcement costs, and it moves the enforcement of contracts to an extrajudicial sphere (Biggs et al, 2006). One problem however, is that while networks will enhance performance of ‘network insiders’, it will increase costs of ‘network outsiders’ (Biggs et al, 2006).
Cost focus strategies

Generic strategies aimed at addressing competitive challenges from industry incumbents and newcomers are key to strategic management in any company (see e.g. Porter 1980) and they are of course also relevant to African SMEs. In an African context, cost based competition can be expected to be particularly widespread as labor costs are very low and as weak resource positions of most SMEs will make niche or differentiation strategies very difficult to develop. Conversely, differentiation strategies are expected to be rare as firms lack resources and as it is difficult for buyers and customers to control and reward producers that claim differentiation advantages.

Internationalization strategies

One common way to cope with internal resource constraints could be to link up to foreign firms through joint ventures or strategic alliances. This may potentially provide market outlets, technology, capital and knowledge and may help the SME overcome many of the barriers they face. Thus, it is likely that SMEs that embark on strategies aimed at fostering linkages to foreign firms will perform better than firms that do not.

Analytical framework

On the background of this brief literature review, we will argue that performance of African SMEs is driven by the interface between firm capability factors, business environment factors, and strategic factors. This logic largely reflects the contingency approach to studies of African enterprises advocated by Tvedten et al, 2014. According to this logic, structural factors related to the business environment and firm resources and capabilities conditions firm performance, however the contingencies are mitigated or amplified by business conduct, i.e. strategy. In the following we will develop constructs and measures:

Performance

It is frequently argued that performance (rather than e.g. management, organization or strategy) should be seen as the ultimate dependent variable in business research. However, the business literature on performance is hampered by measurement problems: Different countries have different ways of reporting performance and many especially developing countries do not collect performance data in a systematic way. When data are there, there may be large reliability problems as companies may manipulate performance data for tax and PR purposes (Hoskisson et al, 2002). Partly as a consequence
measurement problems, performance studies is quite ambiguous as to how to measure performance: among the most frequently used measures are EBIT, growth of employment or turnover, employee morale, survival, market share, managerial performance, or IRR (Venkatraman & Ramanujam, 1986). As performance is a multidimensional construct where different performance measures may have different antecedents, it is argued that performance studies should employ complementary measures simultaneously (Ramsey and Bahia, 2013; Venkatraman and Ramanujam, 1986). In line with this, we will in this paper measure performance in four ways: 1. EBIT; 2. Benchmark against industry peers; and 3. Growth in turnover; 4. Growth in employment. EBIT is a key financial measure that reflects the reported ability of the firm to generate profits. Industry peer benchmarking is a subjective measure, an assessment by managers of their company’s performance vis-à-vis industry average. Growth has been suggested to be the most appropriate performance measure for SMEs and has been used in numerous studies of African enterprises (Barkham et al, 1996; Yusuf and Saffu, 2005; Feiling, 2008). It should be noted that the four performance measures can be expected to be closely related, partly because they are all are likely to be indicators of the same underlying construct (success?), partly because they are causally related; for instance, it has been argued that firms that are able to grow also are more likely to survive and profit (Storey, 1994; Oludele, 2015).

As seen from the above literature review, much of the literature on African enterprise development emphasizes the challenges and problems related to growth and performance. The overall impression we are left with is that it is exceptionally difficult for African enterprises to break through the enterprise barrier. If they succeed, they face huge issues related to growing as they are squeezed between an extremely cost efficient informal sector and large, well connected incumbents.

**H1: Financial performance will generally be relatively low among African SMEs and they will be struggling to grow.**

**Performance drivers**

Throughout the literature, challenges and problems of the African business environment are emphasized as explanations for the lack of enterprise development in Africa. These challenges and problems are mainly related to weak infrastructures, institutional voids (and strong influence of informal institutions), and under-developed markets related to low internal and external market integration and weakly developed input and service provider industries.
**H2: Performance will be relatively strongly related to deficiencies of the African business environment e.g. inadequate infrastructures, weak institutions and underdeveloped markets for inputs and services.**

When African firms nevertheless succeed it is because they have developed capabilities and strategies that allow them to circumvent the difficult business environment. In particular larger companies can be expected to be better at offsetting business environment challenges due to their stronger financial, technological and human resource base as well as their possibly stronger political contacts. But also smaller companies can be expected to achieve high performance, e.g. by building dynamic capabilities related to flexibility and adaptability to rapidly changing conditions.

**H3: Companies possessing capabilities and resources related to navigating the difficult African business environment will have relatively better performance**

SMEs react differently to similar contingencies and therefore external and internal performance drivers may be partly modified by strategy factors. For instance, even a poisonous contractual environment may be circumvented by network strategies where trust and repeated interactions facilitates interfirm collaboration within the network. Networks furthermore allow participants to pool together resources thus compensating for some of individual companies' resource deficiencies. Another coping strategy is to develop international linkages that facilitate market, technology and capital access. Some companies may also try to improve performance by escaping the cut throat price competition characterizing many African markets by adopting differentiation strategies where they seek to carve out niches in markets based on unique product qualities.

**H4: Companies can circumvent resource and business environment challenges to performance by adopting coping strategies.**

**Methodology**

This study is based on a survey of 210 food processing companies in Tanzania, Zambia and Kenya, conducted between 2014 and 2015. The sample companies were all companies that were successful in the sense that they had surveyed several years of operation in the African business environment. Respondents responded to a lengthy questionnaire containing question related to organization and management, strategies, performance, and drivers of performance. The questionnaire was largely the
same in all three countries. As mailed or emailed surveys turned out to be infeasible, onsite interviews with the sample companies were conducted by teams from the three countries.

Data was processed using SPSS Classify K-test cluster analysis and OLS regression. Drawing on LeBreton, Ployhart, and Ladd (2004), the regression analysis was conducted in two steps: First, we examined the total contribution of each of the three clusters of independent variables while controlling for all other factors and second, we analysed which factors within the three clusters that were more effective in explaining variance. The model for the regression is

\[ P = \alpha_0 + B\alpha_1 + C\alpha_2 + S\alpha_3 + \epsilon \]

where \( P \) is a matrix of the five performance measures, \( B, C \) and \( S \) are matrixes of business environment, capabilities and strategy factors and \( \epsilon \) is a matrix of idiosyncratic error terms. \( \alpha \)'s are the coefficients to be estimated. The Equations are estimated using OLS. We checked and corrected for heteroscedasticity and examined interaction effects.

The study is unique in several respects: It is probably the most comprehensive study of performance in African enterprises since the RPED study. The study focuses on the same sector in three countries, allowing for more valid cross country comparison. The study specifically focuses on performance. Thus, it is not alone through statistical inference that conclusions regarding performance are derived, but also through responses by managers’ as to what drives performance of their company.

Of course, there are limitations of the study. One is related to the reliability of responses. For a company with 10 employees, questions about core competencies or strategic positioning may be difficult to relate to although interviewers were there to explain the concepts. Moreover, data on performance five year back in time may not be readily available. There may also selection biases. For instance, the study
focuses on successful enterprises and thus excludes the many companies that failed. There is furthermore an overweight of Tanzanian companies and companies in grain milling which is probably not fully reflective of the actual distribution of companies in the three countries.

### Analysis

#### Industrial development in the three countries

In all three countries, economic growth has over the last 5 years been relatively and consistently high, exceeding 5%. Zambia is relatively richer than Kenya and Tanzania. Exports are significant, however they have declined relative to the economy in Kenya whereas Zambia and to a lesser extent Tanzania has seen growth in exports, in both cases fueled by minerals exports. In all three countries the manufacturing sector, which include food and beverages, is infant: Where manufacturing in the Asian developing economies such as Vietnam and Bangladesh is 15-20% of GDP, it is around ten percent in the three case countries. In fact, there is evidence of ‘premature de-industrialization in the three countries, i.e. that these countries, at a stage where we would expect continued industrialization, reduce their manufacturing sector (UNIDO, 2015). The dominant manufacturing sector is by far food and beverages:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Zambia</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average (calculated):</td>
<td>6.02 6.74</td>
<td>7.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing/ GDP (Rank: 1 to 189)</td>
<td>2007: 14% 2014: 11%</td>
<td>2007: 8% 2014: 6%</td>
<td>2007: 9% 2013: 8%</td>
<td>World Bank Development Indicators</td>
</tr>
</tbody>
</table>
In Kenya it accounts for 40% (2011), in Tanzania 57% (no date) and in Zambia 69% (2008-2010). (AfDB, 2014).

A profile of the sample

The sample consists of 210 companies, most from Tanzania. The vast majority are SMEs and only 17% have more than 150 employees. The companies are to different degrees labor intensive; measured through wage/turnover, 30% have a wage bill beyond 30% relative to turnover.

The most common strategy is cost focus, although in Kenya this is only second most important. Hence, more firms in Kenya are pursuing differentiation strategies, reflecting the more advanced industrial sector there. International linkages are not important to the companies, however in Zambia it seems that more companies find this important, possibly because many Zambian food processors are supplying foreign firms e.g. in extractives. Donors, apart from a couple of Tanzanian small firms, do not appear to be the strategic target of many companies. The larger firms have more foreign linkages and are less likely to pursue a cost strategy.

The medium sized firms are pursuing cost strategies whereas the smallest are pursuing niche strategies.
The respondents were asked to report on their most important competitive advantage. The sample companies clearly find their competitive advantages in human resources, technology and products. Dynamic capabilities, e.g. flexibility and adaptability, also appear important which could be a reflection of the highly challenging business environment of these countries. Large firms emphasize technology and human resources, small firms emphasize downstream capabilities such as marketing excellence.

**Performance**

*Performance measures*

The paper employs four measures of performance; EBIT, benchmarking against industry peers, and growth in turnover and employees. Moreover, a fifth measure seeking to cluster firms around these four performance measures is developed (see below).

The EBIT of the sample companies was quite high, on average 19% in 2012. In fact, in 2012, app. half of all companies had EBIT above 20%. This demonstrates that African companies, once they are off the ground, can generate high earnings. One explanation for high financial performance can be lack of competition caused by low market integration and high industry entry barriers. Another explanation could be adverse selection, i.e. that only activities that have prospects of generating very high earnings will be initiated in the exceptionally risky African business environments.

The companies also reported on their growth. In the 5 year period between 2007 and 2012, the sample companies have, on average, more than doubled their turnover (124%) and increased their employment with on average 65% and some companies have seen astonishing growth rates of 3 or 4 times during the 5 year period. The higher turnover growth reflects that it is easier to expand sales/turnover than employment.

As can be seen from the correlation matrix below, turnover growth and in particular employee growth are strongly correlated with financial performance and EBIT. This is in line with what is suggested by the literature (Oludele, 2015). It cannot of course be established whether rapid growth leads to high
financial performance, whether it is the reverse, or whether there is a common underlying factor that affects both performance measures.

There are clear performance variations between the three countries. On average, Zambian companies have lower EBIT and in 2012 and relatively few Zambian companies had supernormal earnings (i.e. above 20%). Tanzanian companies were relatively often able to produce supernormal earnings but had problems growing compared to the two other countries. We will later discuss what can explain these country variations. It seems that especially medium sized companies are capable of producing supernormal earnings and these have also seen the largest growth since 2007.

Performance variations

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<tbody>
<tr>
<td>Financial Performance in Ascending Categories</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.072</td>
<td>.161</td>
</tr>
<tr>
<td>Performance in Ascending Categories</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.314</td>
<td>.031</td>
</tr>
<tr>
<td>Estimated Profit Margin 2012 in Equal Categories</td>
<td>Pearson Correlation</td>
<td>.072</td>
<td>1</td>
<td>.181</td>
</tr>
<tr>
<td>Growth in Turnover between 2007 and 2012 in Categories</td>
<td>Pearson Correlation</td>
<td>.161**</td>
<td>-.047</td>
<td>1</td>
</tr>
<tr>
<td>Growth in Employees between 2007 and 2012 in Categories</td>
<td>Pearson Correlation</td>
<td>.207***</td>
<td>.196**</td>
<td>.286**</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
The respondents were asked to benchmark themselves against industry peers. As seen, the sample is somewhat biased toward companies that perceive themselves as operating above industry average and relatively few reported performance below industry average. There is a very clear correlation with size: Large companies are significantly more likely to report above average performance than smaller companies.

Small and medium sized companies grew more than larger companies. Tanzanian companies have significantly lower growth than Kenyan and Zambian companies, especially in terms of turnover.

**Who are the high performers?**

We ran a cluster test (SPSS Classify k-means cluster analysis) based on the four performance measures, in order to identify main groups of companies in terms of performance. The sample clusters itself around three clusters which we will label ‘the laggards’, ‘the average performers’ and ‘the gazelles’. Around 1/3 of all companies can be labelled as ‘gazelles’. The gazelles are characterized by high turnover growth, high EBIT and high relative performance vis-a-vis industry peers. The laggards are characterized by the opposite of the gazelles. As seen from the figure, the gazelle companies are typically medium-sized, labor intensive (or rather, high wage companies), producing highly processed goods such as jams and snacks, and typically located in Kenya. The laggard company is typically small, having a relatively small wage bill, involved in grain milling and from Tanzania. We will later explore the trajectories that lead to gazelle performance.
The drivers of performance in African SMEs

In order to analyze the antecedents of African SME performance, two things were done. First, a multiple regression analysis was conducted to identify which factors explain variance in performance in the sample of 210 food processing enterprises. Second, it was examined how the respondents evaluated various factors potentially influencing performance. Together, these two types of analyses give a comprehensive picture of performance and its determinants.

Performance drivers based on regression analysis

An OLS regression analysis to test the model was conducted. The analysis was undertaken in three steps; first the ability of individual business environment, capability and strategy factors were identified. Second, a regression analysis controlling for other factors were conducted in order to assess relative importance of business environment, capability and strategy factors. Finally, a test of interaction effects was conducted\(^1\).

As seen from the regression matrix, internal factors seem particularly apt at explaining performance

<table>
<thead>
<tr>
<th>Regression Analysis</th>
<th>Dependent Variables</th>
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<tbody>
<tr>
<td>Independent Variables</td>
<td>EBIT</td>
</tr>
<tr>
<td>External Factors</td>
<td>adj R^2</td>
</tr>
<tr>
<td>Sig</td>
<td>0.11</td>
</tr>
<tr>
<td>Country: Kenya</td>
<td>Coefficients</td>
</tr>
<tr>
<td>Sig</td>
<td>0.804</td>
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<tr>
<td>Country: Zambia</td>
<td>Coefficients</td>
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<tr>
<td>Sig</td>
<td>0.003</td>
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<tr>
<td>Internal Factors</td>
<td>adj R^2</td>
</tr>
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<td>Sig</td>
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<tr>
<td>Company Size</td>
<td>Coefficients</td>
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<tr>
<td>Sig</td>
<td>0.432</td>
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<tr>
<td>Capital Intensity</td>
<td>Coefficients</td>
</tr>
<tr>
<td>Sig</td>
<td>0.001</td>
</tr>
<tr>
<td>O-Adv: Human Resources</td>
<td>Coefficients</td>
</tr>
<tr>
<td>Sig</td>
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<tr>
<td>O-Adv: Physical Assets (Technology)</td>
<td>Coefficients</td>
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<td>Sig</td>
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<tr>
<td>Strategy</td>
<td>adj R^2</td>
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<tr>
<td>Sig</td>
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<tr>
<td>Cost Efficiency</td>
<td>Coefficients</td>
</tr>
<tr>
<td>Sig</td>
<td>0.611</td>
</tr>
<tr>
<td>Differentiation Strategy</td>
<td>Coefficients</td>
</tr>
<tr>
<td>Sig</td>
<td>0.857</td>
</tr>
<tr>
<td>International Linkages</td>
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<td>Sig</td>
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*Significant for p<0.05*

*Significant for p<0.1*
variations measured via EBIT, financial performance and whether or not it is a gazelle company. However, performance measured through turnover and employment growth was not explained by internal factors. Especially, size of the company and wage intensity appeared to be strong predictors of performance. In other words, the larger the company and the higher the wage bill relative to turnover, the better performance. A larger company has easier access to credit, it probably has more experience, and it can cross subsidize its various activities. The high performance of less capital intensive companies could reflect that a high wage bill relative to turnover is indicative of an operation that is highly dependent on skilled labor and specialized managerial resources. External factors related to country business environment also influence financial performance, however, it seems, to a lesser degree than internal factors.

Surprisingly, even if growth factors were related to financial performance as demonstrated in the above correlation matrix of dependent measures, the external and internal factors do not explain to a significant level, variation in growth. However, strategy factors appear to explain growth. Hence, whether or not a company grows is related to strategic choices; in particular it appears that companies adopting a differentiation strategy will be positioned to generate high growth.

Companies’ own reporting of performance drivers

Growth drivers

In accordance with the regression analysis, the reporting by companies also suggests that internal factors are important to performance; in fact internal factors appeared to be the most important driver behind growth with 78% of the companies stating that these are important. The internal factors are, in order of importance, a strong brand, human resources, and technology. Also management vision and leadership appeared central to the growth of the company; almost as many companies found this factor important. Business networks were important growth drivers, especially in Tanzania. This supports the above hypotheses that networks are relatively important in environments with particularly weak institutions as is the case
with Tanzania. Also market environment factors such as growth in market demand and to a lesser extent competition factors seemed important to the companies. Political factors were seen as less important to company growth.

Barriers to growth

According to the respondents, the by most often cited important impediment to firm growth lies in the market environment. This is in particular high costs of capital, followed by poor infrastructure and limited access to technology. These market environment factors hit SMEs particularly hard whereas large companies are hit by another market environment related factor, namely the level of competition from domestic and foreign producers.

The second most cited important growth impediment is institutional and political factors, mainly corruption and political interference in business. Especially in Tanzania, institutional and political factors appeared important impediments, and less so in Kenya. Also business networks factors e.g. related to high input costs or lack of competent suppliers are commonly mentioned, especially in Tanzania.

Among the institutional factors impeding growth, infrastructure is, not surprisingly, seen as the main institutional impediment by the companies. But also corruption ranks quite high, although in Zambia it appears less important.
Competence of regulators is seen as a big problem especially in Tanzania. In Zambia lack of government support is the main concern.

The respondents we asked whether they feel they have influence on policy and regulation. The level of dis-enfranchisement in Tanzania seems higher than is the case in the other countries which can be partly explained by the fact that Tanzania has relatively many SMEs.

Discussion and implications

Returning to our hypotheses, we have generated insights that partly corroborate, partly questions the hypotheses:

The first hypotheses concerned the expected performance of African SMEs: \textit{H1: Financial performance will generally be relatively low among African SMEs and they will be struggling to grow.} This hypothesis could not be corroborated. With average EBIT around 20\% and average 5 year turnover growth well above 100\%, the sample suggests that African food processors are capable of performing very well and definitely better than the average industrialized country food processor. The high performance of African food processors suggests that difficult business environments and resource constraints do not destine African enterprises to stay stuck in low value added, low growth trajectories. While the observed high performance can be explained with selection bias, low competition business environments, or adverse selection, our study nevertheless suggests the significant possibilities associated with starting up manufacturing activities in these economies and the large potential of promoting manufacturing development. Especially the 1/3 of companies that could be labelled ‘gazelles’ were interesting from an industrial development perspective: These companies were able to simultaneously score high on all performance dimensions. These typically mid-sized companies, employing relatively skilled labor and operating in more advanced food processing activities should be the target of future industrial development policies in the three countries.

In spite of the fact that the sample companies were performing well, there were huge variations in performance and we therefore moved on to explore what explained these variations. The typical expectation of the literature is that African enterprise performance is particularly strongly affected by inadequate infrastructures and failing markets and institutions: \textit{H2: Performance will be relatively strongly related to deficiencies of the African business environment e.g. inadequate infrastructures, weak institutions and underdeveloped markets for inputs and services.} Indeed, we found that market environment problems related to infrastructures and access to capital and technology often were cited
as barriers to company growth, followed by institutional factors related to corruption and incompetence of regulatory authorities. But in spite of the fact that business environment factors explain variation in performances, the statistical analysis suggests that internal factors are relatively more effective in explaining variance. Thus, we corroborate the hypothesis that capability factors can overcome adversities of the business environments: \textit{H3: Companies possessing capabilities and resources related to navigating the difficult African business environment will have relatively better performance.} What stands out as the most valuable capabilities in these volatile African business environments are dynamic capabilities (flexibility and adaptability) as well as management capabilities. That these capabilities are seen as more important is somewhat surprising as the literature on African enterprise development typically point to capital and technology as the main performance determinants. The implications for industrial policy are important: Instead of focusing on providing access to technology and capital, focus of industrial development should be on developing the managerial and employee skills that allows firms to navigate in rapidly changing business environments.

The paper also hypothesized that strategy may moderate the influence of resource and business environment factors. \textit{H4: Companies can circumvent resource and business environment challenges to performance by adopting coping strategies.} Here we found while there definitely are huge variations in strategies adopted by the sample firms –for instance, Tanzanian firms are more likely to adopt network strategies, Kenyan firms to adopt differentiation strategies, and Zambian firms to adopt international linkage strategies – strategy does not appear to exert a strong influence on financial performance of companies. However, it appeared that strategy factors influenced the growth trajectories of companies.

Thus, the findings of this study provide new insights of great importance for the extant literature as well as for industrialization strategy. Of course, any generalizations should take into account the facts that this study is based only on surviving companies in the food processing industry in three specific South Sahel countries, and that another picture may have emerged had we studied different industries and countries.

**Conclusions**

Based on a unique data set of 210 food processing enterprises in Tanzania, Kenya and Zambia, the paper examined variations in performance of African SMEs and analyzed what causes these variations. Based on a review of the extant literature on performance of African enterprises, a model for analyzing performance variations in African enterprises was developed. Essentially, it was hypothesized that
performance is determined in the interaction between capability, strategy and business environment factors. The paper found that African SMEs on average are highly profitable and have surprisingly high growth rates. There are however large variations in performance. Through a cluster analysis, three generic types of African SMEs are identified, laggards, industry followers, and gazelles. The gazelles are typically medium-sized, skill intensive Kenyan companies engaged in production of relatively processed products, the laggards are typically small capital intensive companies involved in grain milling and adopting a cost differentiation strategy. Through an OLS regression, it was suggested that the key drivers of performance are related to internal capabilities of the firms, in particular managerial leadership and human resource skills. The key constraints of higher performance are mainly related to external factors such as corruption and deficient supply industries. Foreign linkages (and donors) play a negligible role for performance, but especially the larger African enterprises see unfair foreign competition as a growing problem. Strategy factors seem to moderate the influence of internal and external contingencies; for instance are high performing Kenyan SMEs relatively more often adopting differentiation strategies due to increasingly sophisticated industrial infrastructures and market demand, whereas high performing Tanzanian SMEs relatively often are adopting network strategies as these help them circumvent institutional voids. Among the policy implications are that industrial policy in South-Sahel Africa should focus more on training managers and skilled labor, target medium sized gazelle companies, and reduce transaction costs of contractual relations.
Literature


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End notes

This paper is the result of a collective effort by the SAFIC team. Dedicated research assistance has been provided by Amelie Schmidt, student assistant at CBDS/CBS.

To be included in coming draft.

In the US, the average industry EBIT was 16% and for the food processing industry 7%.

To be included in coming draft.