When Experience Matter: The Export Performance of Developing Countries’ SMEs

Trond-Arne Borgersen

Abstract
This article argues that experience matters in international markets. It presents a model of foreign trade with market entry costs where export behaviour differs between otherwise identical firms, only due to their differences in export history. The entry costs make export participation patterns non-linear and experience matter for export behaviour. Both firm- and industry characteristics are important determinants of export supply responses. As a result of different forms of internationalization in developed and developing countries, market entry costs are more pronounced for developing countries, and for their SMEs in particular, than they are for developed countries. When experience matters there are pronounced trade policy implications at the aggregate level, which are also apparent when addressing the export strategies of individual firms. In the export led growth strategies that dominate structural adjustment programs both of these aspects are ignored, an thus become part of the reason for their failure.

Key words: Export participation, sunk-market entry costs, SMEs, international market experience.

Introduction
The effects on Africa of the current period of globalization can be characterised by the term marginalization. Even though marginalization is far from homogenous across countries, a general principle can be observed: Africa’s factor advantages in the world economy based on cheap unskilled labour and inputs for primary production are no longer a tenable basis for economic competitiveness (Stren and Halfani, 2001). The structural adjustment programs (SAPs) aimed at taking advantage of these competitive advantages have been a devastating failure (Gibson, 2004).

Exports are in general argued to enable economies to enrich their foreign reserves, provide employment, create backward and forward linkages, and ultimately, increase the standard of living. In microeconomic terms, exporting can give individual firms a competitive advantage, improve their financial position, increase capacity utilisation and raise technology standards (Leonidou and Katsikeas, 1996:p. 518). Unfortunately, export supply responses are, actually, not well understood (Roberts and Tybout, 1997b: p.v). The rationale for export led growth is usually reasoned within macroeconomic or industrial frameworks, where the gains of exporting are easy to detect. This line of reasoning, however, gives less insight when it comes to understanding the export behaviour of individual firms (Albaum et al, 1994). Roberts and Tybout (1997b) even argue that the effect of macroeconomic conditions and policy variables
on exports have been unpredictable, something which can be traced back to neglect of the microeconomic characteristics of export industries.

Based on the view that firm-level factors are more important determinants of exports than factors related to industry, a line of research has developed that concentrates on the export behaviour of individual firms. The importance of firm characteristics seems especially true for industries dominated by small and medium sized enterprises (SMEs), as they represent a myriad of different production technologies and their industry characteristics are hard to detect. Still, in developing countries, and especially in Sub-Saharan Africa (SSA), very little systematic research on firm-level export behaviour has been undertaken (Ibeh, 2003). In SSA export led growth strategies are at the core of economic policy while a majority of firms are SMEs. This makes the understanding of factors that trigger exports particularly weak. Differences between SMEs’ in developed and developing countries make this a gap that should be at the centre of attention for research. Basically, the formulation of SSA export promotion strategies, therefore, requires a better understanding of the factors that deter, or stimulate, exports from SMEs (Mpinganjira and Stanton, 2003).

This paper argues that a first step towards a proper understanding of these factors is to recognise the obvious role of international market experience. To create successful export strategies international market experience of exporters, or the lack of it, must be taken as a starting point. A theoretical basis for such a stand is set out in the market entry cost approach, which has gained importance in international trade theory over the last decade. The market entry costs show how both experience and firm-level factors matter for export behaviour and export structures. When international market experience matters there are severe policy implications, something which has not been taken into account in SAPs, and this is part of the reason for why export led growth strategies have contributed to the marginalization of Africa.

The rest of the article is organized as follows. The next part describes the internationalisation process, and argues that imports and exports are relevant forms of internationalisation for developing countries’ SMEs. The third part presents a model for a firm’s export participation pattern when irrecoverable market entry costs are present. In the fourth section, the main findings of micro-based research on export in developing countries are summarised, and the relevance of international market experience pinpointed. The last part concludes and highlights policy implications.

**Internationalization of SMEs in Developing Countries**

The internationalization process is a main challenge for all firms in the tradable sector. While most agree that internationalization is inescapable, its actual form is still considered uncertain (Haathi, 1998). How it affects individual firms over time is thus unclear. Meissner and Gerber developed a model of internationalization where the process occurs gradually. The model - as described by Pleitner et al (1998) - falls within the class of incremental change models, as the degree of internationalisation evolve from ‘simple’ to more ‘advanced’ forms.
Meissner and Gerber relate internationalization to the level of capital investment and the intensity of management in firms. Different dimensions of the two imply different forms of internationalization. As both the level of investment and the intensity of management evolve as the market mentality and the structure of business interaction develops, the form of inter-nationalization can be related to the depth of the market economy in a society (LeClair and Schneider, 1968). Foreign trade - through imports and exports - represents the first stages on the internationalization ladder. For developing countries, and especially for their SMEs, these are the relevant forms of internationalization as neither license, joint venture, foreign distribution nor foreign manufacturing are important. The problem of SMEs to handle inter-nationalization should therefore be addressed in relation to their problem of exporting.

**Figure 1:** The internationalization process of Meissner and Gerber

Over the last decade foreign trade theory has been extended by including the reasoning of industrial organisation. By taking into account the entry costs firms have to incur in international markets for instance, foreign trade models have obtained a non-linear structure. Roberts and Tybout (1997) argue this non-linearity to be particularly relevant for developing countries as they face higher entry costs in international markets. Developing countries’ firms need estimates on the cost of retooling for foreign markets, including research on foreign markets, developing packaging systems, learning procedural norms, and establishing distribution networks (Roberts and Tybout, 1997b: p. 10). These costs can be endogenous or exogenous to firms (Jaensson et al, 2003), as well as formal or informal (Roberts and Tybout, 1997). While tariffs represent a typical formal entry cost, the process of acquiring knowledge of foreign markets before entering can induce more informal costs. Likewise, while increased commitment to export from management is an endogenous cost, the necessary advertising to establish a brand name
and to buy one's way into distribution networks in foreign markets is an exogenous cost. As some of these costs are sunk, export is an investment activity which affects both entry and operating decisions in international markets. In addition, as countries move up the internationalization ladder and into licensed or joint venture production increased use of internal distribution channels reduces the importance of market entry costs, making foreign trade positions less vulnerable to their implications.

**A Model of ‘Entry, Exit and Surviving the Short Run’: The Export Participation Pattern**

Consider an industry where domestic and foreign firms produce a homogenous merchandise. To operate in international markets firms must incur a market entry cost (F) which is sunk, and a maintenance cost (M) in subsequent periods, both measured in foreign currency. Firms are marginal and treat the exchange rate as exogenous. Both formal and informal, as well as endogenous and exogenous market entry costs are included in (F). Production costs are linear homogenous in output, allowing a firm’s foreign and domestic market adaptations to be analysed separately. Here focus is on the export behaviour of domestic firms and on the domestic industry’s export supply response.

Net export revenues can be expressed as:

\[
E_t = u_t \left( \pi_t \left\{ e_t, n_t \right\} - F + DA \right),
\]

where \( u_t \) is a binary state variable that keeps track of the firm’s activity decision. This is for a firm that exports \( (u = 1) \) while \( (u = 0) \) for one that does not. The export history is represented by \( A \), where \( A=1 \) if the firm was an active exporter in the last period and \( A=0 \) if not, and where \( D=F-M \). The operating profits from exports \( \pi_t \) decrease in the number of firms \( n_t \) and increase in the real exchange rate \( e_t \), (which is defined so that a higher value implies a weaker currency,) as in the case with period by period Cournot competition.\(^{i}\) Net revenues depend both on a firm’s current export behaviour and its export history. For a non-active firm net revenues are zero \( (E_t = 0) \), while for an active exporter they depend on export _history_. For an active exporter with experience, net revenues equal

\[
E_t = \pi_t \left\{ e_t, n_t \right\} - M ,
\]

while for an exporter without such experience they equal

\[
E_t = \pi_t \left\{ e_t, n_t \right\} - F .
\]

When entry costs exceed maintenance costs, that is when \( F>M \), export history affects net revenues as new entrants are less profitable than established exporters. Also, because of the entry costs a depreciation (appreciation) not necessarily induces immediate entry (exit) into (from) international markets. The decision of whether to enter or exit a market is based on an intertemporal evaluation (Dixit, 1989), and without entry (exit) the export supply response to a depreciation (appreciation) depends on the behaviour of established exporters. To derive the export supply response we need to determine two
exchange rate triggers, one in which it is optimal for an idle firm to enter \( (e^I) \), one for which it is optimal for an established exporter to exit \( (e^O) \), and two value functions (Dixit, 1989). The values of the triggers depend on a number of firm, industry and economy wide characteristics, but the idea can be easily derived.

Consider first the options of an active firm. It can choose to still be active, in which its value equals current net revenues \( (E_t) \) plus the expected present value of staying active \( (\delta V^I) \), where \( (\delta) \) is the discount factor and \( (V^I) \) the expected value of future revenues. If the firm decides to cease exporting, its value equals the discounted scrap value of an inactive firm \( (\delta V^O) \). The exchange rate that triggers exit \( (e^O) \) is the one where the value of the firm as an active exporter equals its value as inactive. An idle firm must decide whether to stay out or to enter and begin exporting. By staying out its value equals \( (\delta V^O) \), but if it enters its value equals current net revenues \( (E_t) \) plus the expected value of future revenues \( (\delta V^I) \), but where the entry costs affect net revenues compared to in the case with an established exporter. The exchange rate that triggers entry \( (e^I) \) is the one where the value of a firm as an inactive exporter equals its value as active. Given the two exchange rate triggers \( (e^I) \) and \( (e^O) \) we can derive the export supply function. Domestic firms enter international markets and become exporters until the ‘entry restriction’ is satisfied, that is until

\[
\pi_i(e^I_i, n_i) + \delta(V^I_i - V^O_i) = F. 
\]

Likewise, firms exit international markets until the ‘exit restriction’ in (5) is fulfilled

\[
\pi_i(e^O_i, n_i) + \delta(V^I_i - V^O_i) = M. 
\]

As \( (F>M) \) the exchange rate that triggers exit is lower than the exchange rate that triggers entry. Also, the entry costs imply that a firm may still find it profitable to export even if current net revenues are negative. If the firm ceases to export it has to incur the entry costs again if it wants to re-enter, and staying in the market may, for some time, therefore be more profitable than leaving. The option value to leave is \( \nabla(n) \), where \( \nabla(n) = \delta(V^O_i - V^I_i) \), and equals the discounted net value of being an active exporter versus not being active, that is the ‘value of waiting’ according to Dixit (1989). Hence, in the presence of irrecoverable market entry costs a firm should keep exporting even if current net revenues are negative, as long as they exceed the present value of the option to leave.  

In Figure (2) export \( (X) \) is a function of the real exchange rate and firms are assumed to either export one unit of goods \( (X = 1) \), or not to export \( (X = 0) \). Neither established exporters nor new entrants find it profitable to export when the exchange rate \( (e_t) \) is below the exchange rate that triggers exit \( (e^O_t) \), i.e.
for \((e_t < e_t^O)\). For these exchange rate values established exporters leave international markets. If the exchange rate exceeds the entry trigger \((e_t > e_t^I)\) both established exporters and new entrants, who now are willing to incur the market entry costs, are encouraged to export. For exchange rates between the triggers, which are referred to as the hysteresis band by Baldwin (1988), it is profitable for established exporters to keep exporting, but unprofitable for new entrants to begin. For new entrants, this is because their entry costs are higher than the operating costs incurred by established exporters. Within the hysteresis band, export history separates export market participation between otherwise identical firms, as both active and inactive exporters coexist within the ‘hysteresis band’, complicating export supply responses.

**Figure 2:** The non-linear export function in the case of irrecoverable market entry costs

The non-linear export function shows how structural breaks in export participation patterns can follow temporary exchange rate shocks. Consider an initial equilibrium with the exchange rate within the hysteresis band, and the behaviour of a firm that initially does not (does) export. A temporary appreciation (depreciation) that moves the exchange rate below (above) the exit (entry) trigger induces exit (entry) from (to) the export market. When the exchange rate depreciates (appreciates) back to its initial level, firms do not re-enter (exit) as the exchange rate that triggers entry (exit) is higher (lower) than the initial value. A corrective depreciation (appreciation) is necessary to bring back the initial equilibrium, where the firm does not (does) export. Without such additional movements in the exchange rate there will be structural changes in the relationship between exchange rates and exports, even if the shock is temporary. Baldwin (1988) describes this foreign trade structure as path-dependent as temporary shocks can have persistent effects. As production technology affects the position of the triggers, firm-characteristics are important for export participation patterns, and different production technologies can create differences in participation patterns.
Export Performance and Effects of International Market Experience

Empirical tests of the sunk-cost model have so far led to mixed signals. However, most of this research has been conducted in the same macroeconomic or industrial framework in which export supply responses in general have been analysed. Such frameworks are unsuitable for analysing the effects of market entry costs, as they imply testing implications of, rather than the existence of entry costs. Lack of data also hampers research (Söderbom, 2000). In fact, only a few concise micro based studies of export behaviour in developing countries exist.

One of these is a World Bank project that examined microeconomic foundations on export booms in Colombia, Mexico, and Morocco, undertaken by Das et al (2000), Roberts and Tybout (1997, 1997b), and Sullivan (1995). In each country, plants were followed through time and their decisions to begin or cease exporting were subjected to detailed analysis. The results state that export responses are shaped by the cross-firm dispersion in unit production costs, the extent of product differentiation, and, critically, the prevalence of previous export experience (Roberts and Tybout, 1997b: p.23).

Roberts and Tybout (1997b) show how export booms often are associated with many new firms breaking into foreign markets. Breaking into foreign markets involves significant start-up costs, but the costs decline as more firms become exporters. Temporary shocks can have permanent effects and rapid export growth requires convincing producers that future profits from exporting more than cover the costs of entering foreign markets. To predict the aggregate industrial export response to any given stimulus the industry characteristics must be known and all of this is in accordance with the sunk-cost model. Roberts and Tybout (1997) analyse Colombian exports between 1981 and 1989 more specifically, and Sullivan (1995) does the same for Morocco for the period 1984 to 1990. Both confirm previous export experience as a primary determinant of current export participation of firms. Das et al (2000) study the chemical industry in Colombia and find that both firm heterogeneity and entry costs matter for export even though a portion of aggregate exports remain unexplained.

The World Bank coordinated RPED (Regional Program on Enterprise Development) in Africa is another project supplying comprehensive data on export behaviour at the micro level, and is the basis for Bigsten et al (2004). Studying the export behaviour of manufacturing firms in Cameroon, Kenya, Ghana and Zimbabwe from 1992 to 1995 they find evidence that past exporters are more likely to remain active in export markets. The RPED is also the basis for Söderbom (2000), who analyses whether exporting in Ghana, Kenya and Zimbabwe are more accurately described by theories stressing firm-level mechanisms or theories predicting close links between industry characteristics and export. Söderbom shows that due to the fixed costs of entry, export participation is likely to depend on the export history of firms. Teal (1999) analyses differences in manufacturing export between Ghana and Mauritius and argues that the fixed costs of entry require a certain scale of production for exporting, and that large firms are more likely to export than small firms. A higher propensity of large firms to export is also supported by Söderbom and Teal (2000) who write about the difference between large and small firms as to the existence of market entry costs.
Gumede (2004) analyses export behaviour in South-African SMEs on the basis of the National Enterprise Survey, and again pinpoints the relevance of market entry costs. Gumede argues that SMEs involved in enterprise linkages are in a better position to enter international markets, as these linkages can help overcome the higher costs of information that smaller enterprises bear in international markets.

Jaffee and Henson (2004), on the other hand, find that evidence is mixed as to whether product standards, and the market entry costs they represent, act as barriers or catalysts for export for African agro food exports. They argue tighter standards exacerbate necessary reforms, and thus instead of hampering (export), actually increasing firms’ propensity to export. For SMEs, with their rather weak financial positions, the ability to initiate cost demanding reforms is, however, weak. In addition, the variety of market entry costs they face create difficulties when it comes to addressing the entry problem as such; all in all making the trade hampering effect of market entry costs dominate industries where SMEs dominate. However, at the same time the different type of entry costs also results in a number of relevant factors for overcoming the entry problem. In addition to direct export experience, all features that directly or indirectly can help to reduce the costs of entry should be included when discussing how to stimulate exports from SMEs. Research on export behaviour at the firm-level has identified three categories of factors that influence export performances, namely external environmentally related factors, organisation-or firm specific factors, and decision maker factors (Ibeh, 2003). There are elements related to all of these that can affect the costs of entering international markets, be it through the formal or the informal, the exogenous or the endogenous parts of the market entry cost.

**Figure 3**: Factors influencing export performance

The external environmentally related factors that influence export performance can take a number of forms. In fact, the market entry costs are themselves part of the external environment. The entry costs can be both formal and informal, and tariffs are an example of the former. However, the informal market entry costs may be particularly important for SMEs, for instance, the costs related to acquiring information on
foreign markets. In one way or another, smaller enterprises bear higher costs for information (Gumede, 2004: p.387). In addition to the fact that the costs might be higher for SMEs, they might also differ more between SMEs as the necessary additional foreign market know-how that has to be invested depends on the existing competence of management and employees in SMEs regarding foreign markets. In fact, the informal costs might differ substantially. Mpinganjira and Rugimba (2003) claim that the weak business environment in Malawi increases the costs of doing business, and thus hampers the competitiveness of Malawi exports. Weak competition domestically reduces the local entrepreneurial ability and thus their ability to overcome the problem of entering international markets. Differences between countries, or regions or sectors with regard to domestic and local competition can produce a different ability to enter foreign markets and different needs for market information. Informal market entry costs can in addition to originating in SMEs home countries also be due to developments in different international markets. Both increased product differentiation, which makes it necessary to establish brand names through advertising, and increased market concentration, which makes it necessary to buy one’s way into distribution networks, increases the informal exogenous entry costs SMEs face in international markets. When entry costs are informal, and differ between firms an additional dimension is important as export supply responses can be described by “strong” rather than “weak” hysteresis mechanisms (Borgersen, 2005b).

However, there are still important formal exogenous entry costs that hamper exports, such as the increase in product upgrading that has become necessary to fulfil health, safety or environmental regulations as a bi product of the last rounds of WTO negotiations. In addition, old problems related to weak export infrastructure, as lack of ports and other transport facilities still hamper trade as an exogenous entry cost for developing countries’ firms (Roberts and Tybout, 1997).

Another important external element related to the difference between SMEs from developed and developing countries, is the link between SMEs and their capital sources. This represents a substantial informal market entry cost, being partly exogenous and partly endogenous as it depends on both firm and financial market characteristics (Borgersen, 2005). Borgersen (2003) argued that close links to professional capital markets are necessary for an optimal adaptation to international markets in the case of non-linearity. As SMEs in developing countries rely on informal sources of capital their ability to handle non-linearities is weaker than that of SMEs from developed countries where capital is supplied professionally. Weak links to financial intermediaries hamper both entry and operating decisions, and makes it difficult for SMEs from developing countries to acquire the gains of international markets.

When it comes to the internal elements that are identified and which affect the endogenous entry costs, a number of factors both related to firm characteristics and firm competencies matter. Some features are rather basic. Teal (1999), for instance, showed how small firms in general were less eager to export than large firms, and Wiedersheim-Paul et al (1978) showed directly how previous experience of extra regional expansion influences export behaviour. However, it is also shown that to begin exporting requires a commitment to do so, and Aaby and Slater (1989) conclude that management commitment and attitudes towards exporting are good predictors of export behaviour. To switch focus from domestic to international markets is part of the endogenous entry costs a firm has to incur. Others have found significant effects on
export behaviour from firm competencies such as technology intensity (Burton and Schlegelmilch, 1987),
product development and quality (McGuiness and Little, 1981), distribution and delivery quality (Styles
and Amber, 1994). Trying to retool for foreign markets to address these elements is part of the
endogenous formal market entry costs one has to incur. On the other hand, export cooperation and
networking (Hansen et al, 1994), and the existence of network arrangements (Zafarullah et al, 1998),
have been shown to mitigate some of the experience and size related difficulties of exporting by reducing
the informal endogenous market entry costs. In fact, Jaensson et al (2003) argue the need for human
capital and network capital to co-exist for successful internationalization amongst SMEs.

Also important for the export behaviour of SMEs is decision maker characteristics. In SMEs where
strategies and decisions are made by a few key persons, these are obviously of great importance. The
international orientation of decision-makers, defined by foreign education, birth or work experience can
make it easier to overcome the trade hampering effects of market entry costs, as decision makers have
some experience with foreign markets, cultures, or languages, and reduce the exogenous and informal
market entry costs. The external contacts of the decision maker (Miesenbrock, 1988), the contact
networks of the decision maker (Carson et al, 1995), previous experience of extra-regional expansion
(Garnier, 1982), importing experience (Welch and Loustarinen, 1993) can all reduce the market entry
costs and stimulate exports.

Summary and Remarks
The basic economics of the article is simple: the existence of irrecoverable entry costs in international
markets makes it difficult both to enter and operate in international markets. Due to the entry costs the
profitability of exporting differs between new entrants and already established exporters. This represents a
potential explanation for differences in firm-level export behaviour, as export history affects export
performance.

The implications of market entry costs are particularly relevant for developing countries as imports and
exports are their form of internationalization. In developed countries, where more advanced forms of
internationalization dominate, market entry costs are less of an obstacle for successful
internationalization. In developing countries, especially SMEs, face substantial entry costs, because of
their higher costs for market information. In addition to the informal costs, firms from developing countries
are also exposed to formal entry costs such as tariffs and necessary product upgrading to fulfil various
market standards. To handle the non-linearity following these entry costs is part of an optimal adaptation
to international markets, and insufficient ability to do so has contributed to the failure of SAPs. Their
export led growth strategies have simply ignored the main obstacles and necessary measures for export
growth when countries face a variety of different market entry costs.

In fact, the market entry cost approach has important implications for export policy where a natural
distinction between promoting new entry and supporting established exporters exists. Söderbom (2000)
argues that when there are substantial entry costs policies which are successful in facilitating firms to
enter international markets will have persistent effects on exports. Borgersen (2003) argues that export
led growth strategies should be accompanied by programs to link the tradable sector to the financial sector in order to create such an export base, implicitly arguing for a “big-push strategy”.

As entry costs decline with the number of exporters, subsidising the pioneers might be efficient. This is to develop an export infrastructure where the pioneers can assist in reducing the informal market entry costs for later entrants. The informal export infrastructure takes the form of local know-how that can spill over through decision maker characteristics or firm specific factors. Gumede (2004) argues explicitly that managers of exporting firms should link with other exporters, or designated bodies, that can assist with export market intelligence. Governments should first and foremost help establish export networks that can assist firms in retooling for foreign markets. Borgersen (2005b) claims that measures addressing differences in market entry costs between SMEs, as is the case with informal entry costs, shift export supply responses from one characterised by “strong” towards one characterised by “weak” hysteresis where (aggregate) export supply responses are more resilient towards exchange rates. However, even though such measures can reduce differences in entry costs between firms, formal market entry costs still exist, and policy measures to address them are crucial for export promotion programs aimed at SMEs. Lack of competence in local SMEs hampers their ability to do so by themselves. Söderbom and Teal (2000) argue the higher export propensity of large firms to be partly due to their more educated workforce. A higher skilled workforce can help firms to overcome problems related to market entry costs and compensate for lack of international market experience. This makes firm characteristics important determinants for export behaviour, and (human) capital intensive firms the successful exporters even in regions where comparative advantage is in labour intensive goods.

References


---

i Leonidou and Katsikeas (1996) survey the main models of export behavior. They argue that no comprehensive theory has yet emerged, but that the understanding of factors that can trigger export has increased.

ii A more thorough model description is given by Baldwin (1988).