

Many countries are looking to their export sectors as a source of future growth, but how do domestic companies make a success of selling their output abroad? Research by **Emanuel Ornelas** and colleagues finds evidence of 'sequential exporting' – firms experimenting in nearby foreign markets before seeking to become big exporters.

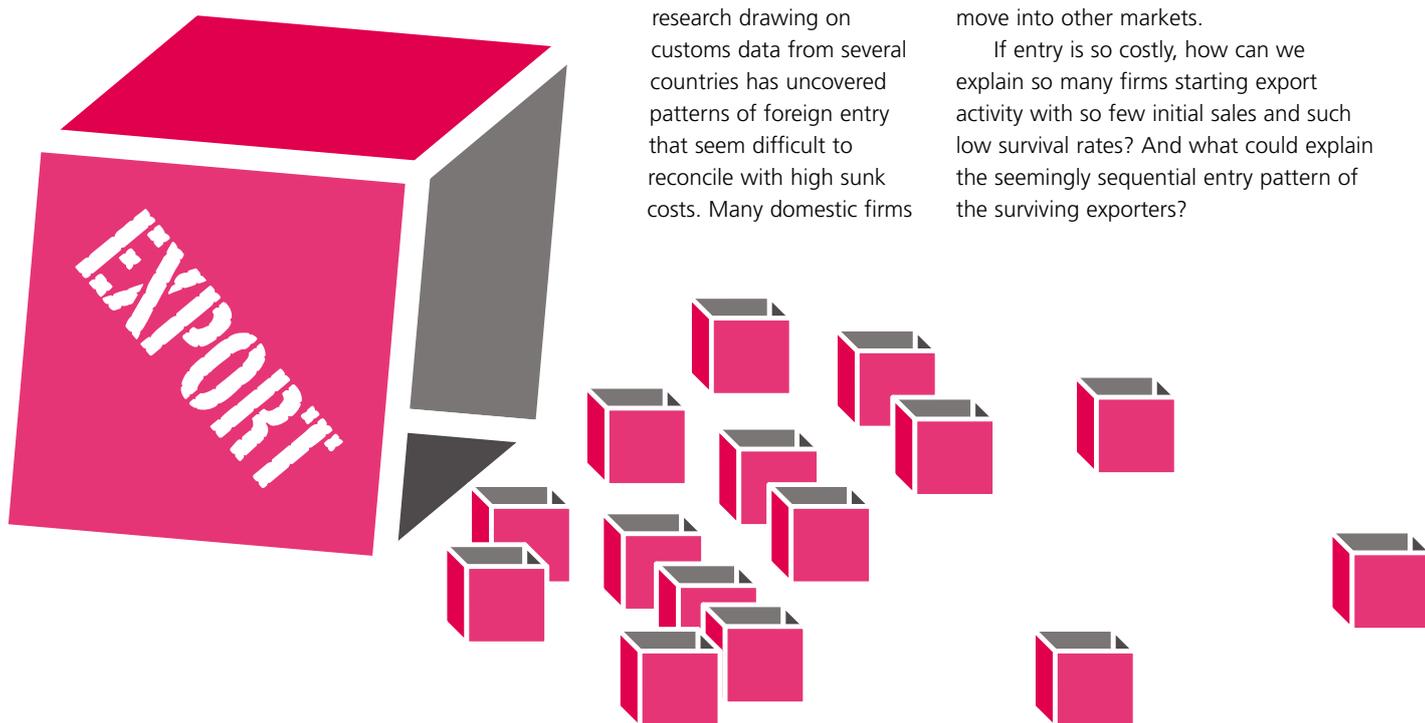
Sequential exporting: how firms break into foreign markets

How do firms break into foreign markets? Trade theory tends to emphasise the substantial 'sunk costs' that they have to incur to start exporting. The implication is that only the most efficient firms can afford to export.

Yet recent empirical research drawing on customs data from several countries has uncovered patterns of foreign entry that seem difficult to reconcile with high sunk costs. Many domestic firms

enter foreign markets every year; they often start selling small quantities to a single neighbouring country; and almost half of them stop exporting within a year. At the same time, new exporters that survive the first year tend to expand exports to their initial markets and also move into other markets.

If entry is so costly, how can we explain so many firms starting export activity with so few initial sales and such low survival rates? And what could explain the seemingly sequential entry pattern of the surviving exporters?



Our research conjectures that a central force behind this behaviour is the uncertainty that firms face about their own ability to export profitably. Because the drivers of export success are different for each firm (they are 'firm-specific'), they can only be uncovered when a firm actually starts exporting. But because they are uncertain and entry is costly, new exporters tend to start small to avoid adding negative variable profits to the potentially lost sunk costs.

At the same time, because what drives export success for an individual firm tends to have 'global scope' beyond the first market it enters, substantial entry costs lead new exporters typically to enter a single destination first and then to develop their export potential. If their performance is good in the first market, firms will gradually expand there and pursue 'sequential exporting' to other destinations.

Researchers in international business have long recognised that export profitability is uncertain and firm-specific. For example, an early study shows how the distinct knowledge and competencies associated with export success (which are typically related to product adaptation, marketing and distribution) are only acquired by firms once they start their foreign operations (Johanson and Vahlne, 1977).

Previous research has also illustrated how a company with global scope can apply knowledge from its initial foreign operations to new export destinations. Analysing firms in four emerging export sectors in Argentina, a recent study documents how such export-specific knowledge can be used when accessing different foreign markets (Artopoulos et al, 2011).

Similar reasoning applies to firm-specific characteristics of demand. For example, trade facilitation agencies, such as SITPRO in the UK, stress the importance of uncovering foreign demand for would-be exporters, indicating that the key uncertainty is about persistent components of demand, some of which may be present in multiple countries.

Developing our conjecture theoretically provides a number of novel implications for the dynamic behaviour patterns of exporting firms, which we test empirically. Using firm-level data on all Argentine manufacturing exports between 2002 and

2007, we find strong evidence that firms' first foreign destination plays a crucial role in explaining future patterns of foreign entry. It is in that first market where firms learn the most.

Specifically, as long as a firm continues to be an exporter, its growth on entry (at both the intensive margin – sales in the market – and the extensive margin – the number of markets served) is significantly higher in its first foreign market than in markets it enters subsequently. The outcome is similar for exit: a firm is more likely to stop right after entering its first foreign destination than it is to leave markets entered subsequently.

But if 'export experimentation' is indeed key, the differential effect of the first market should not apply universally to all exporters. For example, if the firm were to start exporting again after a break, there would no longer be a fundamental uncertainty to be uncovered.

Similarly, if a firm starts exporting by serving multiple markets, it must be because it is relatively confident about its export success – so on average the role of self-discovery should not be as pronounced for such firms as it is for single-market entrants. Uncertainty about export profitability should also be less marked for producers of homogeneous goods, for which global reference prices are available.

In turn, our theory about sequential exporting suggests that we should observe rapid first-market export growth, early entry into additional markets and frequent early first-market exit primarily among first-time, single-market exporters of differentiated products. This is indeed what we find empirically.

Hence, while firm-specific uncertainty is but one possible force shaping firms' export strategies, our evidence indicates that it plays an unequivocal role in explaining sequential exporting. Notice that our mechanism does not deny the possibility of a firm's productivity (and other characteristics) also shaping its export behaviour. Even if a firm becomes more efficient, which will raise the appeal of exporting, uncertainty about potential profitability in foreign markets could still trigger sequential exporting.

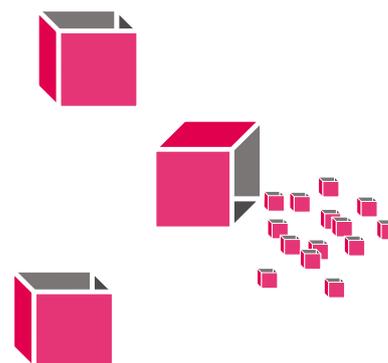
The policy implications of a process of sequential exporting driven by self-discovery are far-reaching. Consider the impact of trade liberalisation in nearby

Uncertainty about their potential profitability in foreign markets leads firms to pursue 'sequential exporting'

and distant countries for domestic firms.

When a nearby country lowers its trade barriers, it attracts exports from previously purely domestic firms. As these new exporters learn about their ability to serve foreign markets, some fail and give up exporting, whereas others are very successful and decide to expand into other foreign destinations. As a result, trade liberalisation in the nearby country promotes entry not only there but also in distant non-liberalising countries, albeit with a lag.

Similarly, the reduction of trade barriers in a distant country, by raising the value of profitably exporting there, also enhances the value of export experimentation in nearby markets, spurring entry into the latter even in the short run. Once some of the entrants realise a high export potential from their experience in the neighbours' markets, they move on to the market of the liberalising distant country.



Thus, our findings suggest the existence of a 'trade externality': lower trade barriers in a country induce the entry of foreign firms into other markets. For example, trade liberalisation in a distant but large country A (say, China) can induce firms from country B (say, the UK) to start exporting to nearby country C (say, Germany). This possibility could provide a novel motive for international coordination of trade policies, one that strengthens the rationale for institutions like the World Trade Organization (WTO).

If the trade externality is stronger at the regional level, this possibility could also help to explain the pattern of free trade agreements throughout the world. Indeed, the impact of trade agreements could be very distinct from what existing studies indicate.

For example, a regional trade agreement can boost export experimentation by lowering the costs of accessing the markets of bloc partners. As a result of more experimentation, a greater number of domestic firms would eventually find it profitable to export to countries outside the bloc. This would generate 'trade creation' that is very different from the concept that economists often emphasise: in addition to promoting intra-bloc trade, a regional trading bloc can also stimulate exports to non-members.

If the agreement were of the multilateral type, tracking down its effects becomes even trickier. Indeed, third-country and lagged effects of trade liberalisation may help to explain the difficulty in identifying significant trade effects of multilateral liberalisation, thus corroborating well-entrenched beliefs that the WTO (and its predecessor, the General Agreement on Tariffs and Trade) have been crucial in promoting world trade.

The process of sequential exporting suggests that lower trade barriers in one country can induce the entry of foreign firms into other markets

This article summarises 'Sequential Exporting' by Facundo Albornoz, Hector Calvo Pardo, Gregory Corcos and Emanuel Ornelas, CEP Discussion Paper No. 974 (<http://cep.lse.ac.uk/pubs/download/dp0974.pdf>).

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Further reading

Alejandro Artopoulos, Daniel Friel and Juan Carlos Hallak (2011) 'Lifting the Domestic Veil: The Challenges of Exporting Differentiated Goods Across the Development Divide', National Bureau of Economic Research Working Paper No. 16947

Jan Johanson and Jan-Erik Vahlne (1977) 'The Internationalization Process of the Firm - A Model of Knowledge Development and Increasing Foreign Market Commitments', *Journal of International Business Studies* 8: 23-32



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