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Trading up: The benefits of exporting for small firms

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Small and medium-sized enterprises (SMEs) provide the majority of jobs in developing countries, yet they have low productivity and exports. International trade can spur the growth of SMEs.

International trade has traditionally been viewed as an economic activity that mainly benefits large companies. However, a growing body of research suggests that exporting may offer substantial gains for smaller firms as well. Exporting allows firms to reach bigger markets and learn new skills that increase their profitability, and raises consumption for firm owners, workers, and their families.

SMEs employ a large proportion of the labour force in developing countries. Compared to large firms, however, few SMEs export – direct exports represent just 3% of total SME manufacturing sales, compared to 14% for large enterprises (World Trade Organisation, 2016).

Recent research has found that exporting provides important gains for small firms. An innovative project in Egypt found that exporting raised rug firms' profits by 26%, with similarly dramatic rises in productivity (Atkin et al., 2017). By learning new skills from intermediaries and foreign buyers, exporting firms increased the quality of their products as well as their efficiency.

Demonstrating the importance of this process of "learning by exporting" and the resulting increases in profitability makes the case for increases in trade finance and better policies to facilitate trade for SMEs.

Policies to boost SME trade need to address the often high costs and barriers to finding and matching buyers and sellers. Such policies can lower costs by facilitating connections between buyers and sellers, increasing access to information about regulations and export opportunities, and introducing measures to ensure quality of goods and services.

KEY MESSAGES

1. **Exporting benefits small and medium-sized enterprises (SMEs) and their owners by increasing profits.** The profitability of small firms increases by 26% when they are given the opportunity to export to sophisticated foreign buyers. The families of the exporter also benefit as a result of higher household incomes, which is reflected by a 24% increase in household meat consumption.

2. **Small firms can learn important new skills from exporting.** Knowledge and skills are transferred from buyers and intermediaries to domestic firms when they start exporting. International trade thereby generates lasting productivity gains for SMEs that would otherwise not be realised. This increases the overall gains from trade and justifies increased trade facilitation.

3. **Reducing the costs of matching domesticfirms with foreign buyers or sellers would boost trade.** The cost and time involved in finding foreign customers and starting an initial trade relationship makes up a substantial proportion of trade costs. Reducing these costs should be a key policy goal for governments and export promotion agencies hoping to increase the growth of SMEs and push SMEs into global value chains.

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KEY MESSAGE 1

Exporting benefits both SMEs and their owners' families by increasing profits.

Researchers David Atkin, Amit Khandelwal, and Adam Osman (2017) recently implemented the first randomised controlled trial (RCT) on exporting to map the effects on SMEs. The researchers provided a randomly drawn group of small rug manufacturers in Egypt with the opportunity to export by matching them with foreign buyers (see box on page 3). The opportunity to export raised the overall performance of these firms, as measured by monthly profits, by 16–26%.[1] This increase is large when compared to other policy interventions aimed at increasing profits, such as access to credit (Banerjee, 2013).

> *"The opportunity to export raised overall performance of these firms, as measured by monthly profits, by 16–26%."*

Exporting not only benefits the firm itself, but also the family of the firm owner. Follow-up research done by Atkin et al. (in progress) shows that household consumption also rises when exports increase. For example, the number of times a family eats meat per month rises by 24% as a result of engaging in international trade. In this setting, meat consumption is a simple but informative measure of wellbeing and living standards, as Egyptian families pride themselves on the ability to serve meat at least a few times a month.

Supporting SMEs to engage in more international trade can therefore have important implications for firm profits, as well as for the wellbeing and income of owners, workers, and their families. This provides an important justification for government efforts to make it easier for SMEs to trade internationally, and to remove the costly barriers that restrict such activity.

1. The setup of the research intervention was such that the authors could not rule out that trading with equally sophisticated domestic buyers could yield equal results. However, as such buyers are scarce in developing countries, foreign trade is still likely to be more beneficial.

© Egyptian family walking through market. Getty | Edwin Remsberg

© Woman weaving rug in Cairo. Getty | Chris Mellor

MEASURING THE EFFECT OF TRADE THROUGH A RANDOMISED CONTROLLED TRIAL

Despite research suggesting that exporting is associated with higher sales, productivity, wages, and increased innovation, it is hard to pinpoint the exact effect of exporting for SMEs. Distinguishing between, on the one hand, exporting causing firms to perform better and, on the other hand, better firms choosing to export, is challenging. Finding this causal relationship requires a robust method that controls for the so called "selection bias", by which the most productive firms are also the ones who start trading in the first place (Melitz, 2003). On top of that, it is difficult to get the data needed to capture small changes in the types of products firms produce and the quality of these products. This means that researchers struggle to identify which efficiency improvements come from exporting alone.

Randomised controlled trials (RCTs) are considered the "gold standard" for uncovering causal relationships and getting around the problems outlined above. The use of this methodology in trade literature has so far been limited, as it is difficult to randomly allow some firms to export and not others. Atkin, Khandelwal, and Osman (2017) overcame this inherent problem, conducting the first-ever RCT on exporting.

The researchers first selected a small set of Egyptian rug manufacturers at random. They then partnered with a US-based non-governmental organisation (NGO) and an Egyptian intermediary to secure export orders from foreign buyers through trade fairs and direct marketing channels. The random assignment of these initial export orders dealt with the bias that better firms tend to go into exporting.

Even with the randomisation, careful measurement is needed to understand the effects of exporting. The researchers tracked performance through periodic surveys of both treatment firms (those who received the opportunity to export) and control firms (those who did not receive the opportunity). The authors recorded not only the prices and quantities of rugs produced and the inputs going into the rugs, but also detailed product specifications for the rugs and quality levels along 11 dimensions, as recorded by an external quality assessor.

Even then, it was difficult to record small differences in the specifications of rugs made for different clients, and thus to control for specifications when comparing quality and productivity across treatment and control firms. To solve this issue, the authors set up a lab where weavers from each firm produced identical-specification rugs for the domestic market under controlled conditions. This level of detail allowed the authors to control for changes in the product mix due to exporting with much more accuracy than is possible in typical datasets.

Thanks to the randomisation procedure, the causal effects of exporting were then identified by comparing the average outcomes between the treatment and control firms.

KEY MESSAGE 2

Small firms can learn important new skills from exporting, increasing the gains from trade.

Engaging in international trade enhances firms' productivity as they gain new skills and capabilities. By engaging with more sophisticated foreign buyers that have information about skillsets and techniques they are not familiar with, exporters learn techniques that increase their productivity, efficiency, and/or output quality. Firms are particularly likely to absorb and implement knowledge that allows them to satisfy demanding buyers (De Loecker, 2007 and 2013). Learning by exporting may be especially powerful for SMEs in developing countries, where small producers have limited knowledge of frontier techniques and domestic markets lack this type of expertise.

Atkin et al. (2017) found strong evidence of the learning-by-exporting mechanism in their experiment with Egyptian rug manufacturers. The increase in profitability came, to a great extent, from developing the ability to produce the higher quality rugs needed to meet the demands of foreign buyers – for example, using weaving techniques that ensure the rug lies flat on the floor. With these more advanced skills, the rug manufacturers who had the chance to export produced not only higher quality rugs but also, for a given quality level, produced them faster than the non-exporters. When all firms were asked to produce identical domestic market rugs under controlled conditions, the exporters even produced domestic-specification rugs at dramatically higher quality levels and in less time than their non-exporting peers.

> *"With these more advanced skills, the rug manufacturers who had the chance to export produced not only higher quality rugs but also, for a given quality level, produced them faster than the non-exporters."*

Where did this new knowledge come from? Drawing on correspondences between foreign buyers and the intermediary, as well as logbooks of discussions between the intermediary and the producers, it appears that foreign buyers and the intermediary passed on information about particular skills and techniques gleaned from previous experience.

This "learning-by-exporting" mechanism means that exporting not only boosts firms' profits and growth in the short term through greater demand and/or higher prices, but also raises firms' productivity and capabilities. This increases the gains generated by trade (Alvarez et al., 2013), which in turn raises the returns on investments that facilitate trade for SMEs.

LEARNING THROUGH PARTICIPATION IN VALUE CHAINS

Besides engaging in international trade, another way in which SMEs can learn new skills and techniques is by participating in global and regional value chains. Like exporting, participation in global value chains requires interactions with foreign clients either upstream or downstream in the production chain. More efficient or advanced techniques and capabilities can be learned from other foreign firms in the value chain. This means domestic SMEs can upgrade their own capabilities and increase their efficiency (Gereffi et al., 2014).

Global value chains tend to be highly dynamic and internationally competitive. Firms therefore face increasing pressure from a growing number of producers to increase the skill content of their activities or develop new competencies (Humphrey and Schmitz, 2002). An IGC-funded project by Gereffi et al. (2014) found that the potential for skill upgrading in East Africa, particularly through regional integration, is high and could provide important opportunities for countries like Rwanda and Uganda to increase their productivity in key manufacturing and service sectors.

KEY MESSAGE 3

Reducing the costs of matching domestic firms with foreign buyers or sellers would boost trade.

The barriers small firms must overcome to begin trading internationally are often so high as to be prohibitive. Any firm looking to start exporting must first find foreign buyers to sell to, know how to create a successful trading relationship, and understand what regulations to comply with. Atkin et al. (2017) enabled SMEs to export by matching them directly with buyers.[2]

The costs of matching buyers and sellers are commonly referred to as "matching frictions". They constitute up to half of total trade costs (Allen, 2014). For small firms, it could be an even higher share. Therefore, supporting small firms in their efforts to find buyers by reducing such costs is a key goal for governments and export promotion agencies.

There are several reasons why these costs can be high, and why they may particularly affect smaller firms. A number of actions can be taken by policymakers to lower them:

- **Facilitate connections between buyers and sellers:** SMEs often lack information about where their potential international buyers are, what the buyers want to buy, and how to reach them. Similarly, foreign buyers can find it difficult to find information about domestic producers, limiting the amount of trade that occurs. One solution is to increase the amount of information available by publicising export opportunities to domestic SMEs and providing information about viable SME suppliers to buyers. This could, for example, be achieved by facilitating direct interaction between SMEs and buyers, or through an online platform.

- **Increase access to information about regulations and export opportunities:** It is often very costly for potential exporters to gather information about regulations and export opportunities in foreign markets. The cost of doing so is often so high that firms are unable to sell beyond a fairly localised market (Jensen and Nolan, 2017). The cost also increases with distance, with trade decreasing as it becomes more expensive to learn about distant markets (Allen, 2014). To make it less costly for SMEs to get information from other countries, governments can make information available through online marketplaces, organise trade fairs, sponsor trade delegations, or subsidise the cost of travel for SMEs.

- **Introduce measures to increase trust and assure quality:** It can be difficult for SMEs to get foreign orders even when they have the right information, as foreign deals require a high level of trust on both sides (Startz, 2016). Sellers may be unsure that buyers will fulfil their end of the deal, and buyers can have doubts about whether sellers are as capable as they claim in delivering high quality products. To increase trust, governments can promote reputation mechanisms that reliably rate sellers and buyers. A country may even choose to promote the quality or capabilities of an entire industry abroad, or increase the use of international certifications. Innovative marketing techniques could also increase trust and facilitate contracting (Anderson et al., 2014).

© Woman at a craft fair for traders in Nepal. World Bank

2. Atkin et al. (2016) do not carry out cost-benefit analysis of the export facilitation intervention studied in their paper. In their particular context, matching firms with buyers was relatively time consuming and costly. In ongoing work, the authors are exploring alternative ways to find buyers at a lower cost.

The government body most often involved with implementing the solutions listed above is an export promotion agency. The box below explains the role of these agencies and how they can help facilitate trade.

THE ROLE OF EXPORT PROMOTION AGENCIES

An export promotion agency or unit can play an important role in helping firms looking to export and increasing trade. Usually, these organisations are part of a larger government agency or state-controlled and can use a wide array of tools to facilitate trade. The services they usually offer are: 1) country image building through advertising, promotional events, and advocacy, 2) export support services such as exporter training and information on trade finance, logistics, and customs, 3) marketing through trade fairs or exporter and importer missions, and 4) market research and publications. In terms of lowering the costs of matching local firms with foreign buyers, export promotion agencies can work to reduce general frictions across the entire industry or support individual firms directly.

There has been a large proliferation of national export promotion agencies in the last two decades. Although many agencies have been criticised for their lack of efficiency, research suggests that, if run well, they can be very effective in increasing exports (Lederman et al., 2010). The IGC has worked with the export promotion agency in Ethiopia to reform its processes to better target key firms and more efficiently facilitate matching with foreign buyers, with promising results. We have found that it is crucial that the agencies are properly structured and have a clear goal in helping firms in the long term, not just in "putting out fires" (Sutton, 2017). By providing strategic assistance to firms early on and guiding firms looking to export, trade can be greatly increased.

© Bananas shipped to the UK. Flickr | Port of Dover

Policy recommendations

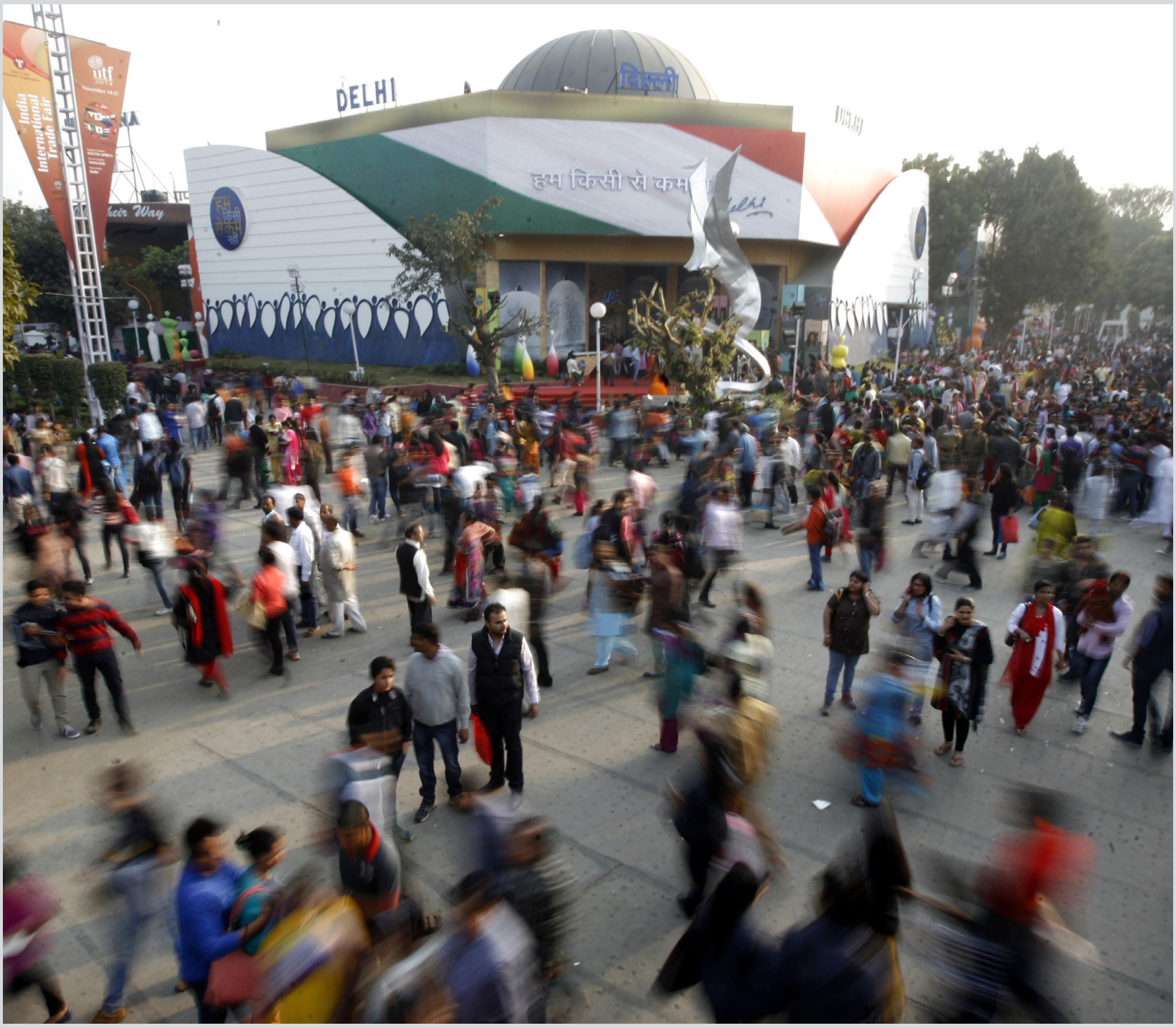
Given the importance of SMEs in developing countries and the role access to export markets can play in boosting their growth, facilitating market access for SMEs by reducing costs and removing barriers has the potential to bring important welfare benefits (Startz, 2016).[3] The following actions could help governments achieve these benefits.

- Policies that reduce the matching frictions that make it difficult and costly for developing country SMEs to find foreign buyers and initiate relationships with them could be particularly effective at increasing export market access. Reducing these frictions should be a key priority for a developing country's export strategy.

3. Startz (2016) finds that removing all search and contract frictions increases welfare in the traded consumer goods sector by 29%, which is about half the gains from eliminating physical and regulatory trade costs.

- Policies aimed at reducing matching frictions should focus on making it easier for SMEs to find information about opportunities to sell abroad, publicising the capabilities of domestic SMEs to potential foreign buyers, facilitating face-to-face meetings through trade fairs and trade delegations, and creating innovative products to lower the cost of contracting with a new foreign partner.

- Export promotion agencies could play an important role in reducing matching frictions and increasing the growth of SME exports. It is important that these agencies are well structured and work strategically with targeted firms to assist them through the entire trade process.



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REFERENCES

Allen, T (2014). *Information Frictions in Trade*. Econometrica, 82, 2041–2083.

Alvarez, F. E., Buera, F. J., Robert, J. and Lucas E. (2013). *Idea Flows, Economic Growth, and Trade*. Working Paper 19667. National Bureau of Economic Research.

Anderson, S., Chandy, R. and Zia, B. (2014). *The Impact of Marketing (Versus Finance) Skills on Firm Performance: Evidence From a Randomized Controlled Trial in South Africa*.

Anderson, J. and van Wincoop, E. (2004). *Trade costs*. NBER Working paper, 10480. Cambridge Massachusetts.

Atkin, D., Khandelwal, A. and Osman, A. (2017). *Exporting and Firm Performance: Evidence from a Randomized Experiment*. Quarterly Journal of Economics, 132(2), 551–615.

Banerjee, A. V. (2013). *Microcredit Under the Microscope: What Have We Learned in the Past Two Decades, and What Do We Need to Know?* Annual Review of Economics, 5, 487–519.

De Loecker, J. (2007). *Do exports generate higher productivity? Evidence from Slovenia*. Journal of International Economics, 73, 69–98.

De Loecker, J. (2013). *Detecting Learning by Exporting*. American Economic Journal: Microeconomics, 5, 1–21.

Gereffi, G., Daly, J. and Abdulsamad, A. (2014). *Regional Vale Chains in East Africa: Summary Report*. Duke Centre of Globalization, Governance and Competitiveness.

Humphrey, J. and Schmitz, H. (2002). *How does insertion in global value chains affect upgrading in industrial clusters?* Institute of Development Studies, University of Sussex.

Lederman, D., Olarreaga, M. and Payton, L. (2010). *Export promotion agencies: Do they work?* Journal of Development Economics, 91, 257–265.

Melitz, M. J. (2003). *The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity*. Econometrica, 71, 1695–1725.

Startz, M. (2016). *The value of face-to-face: search and contracting problems in Nigerian trade*. Private Enterprise Development in Low-Income Countries (PEDL) Working paper.

Sutton, J. (2017). *FDI as drivers of growth – what can governments do?*. Presentation at IGC conference on FDI, SMEs, firm growth, and trade in East Africa, 29 March 2017, Nairobi. Accessible: www.theigc.org/wp-content/uploads/201703John-Sutton.pdf.

World Trade Organisation (2016). *World Trade Report 2016: Levelling the trading field for SMEs*. Geneva.

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