Aim High, Shoot Low? The Impact of Product Characteristics on Product Survival in Latvia’s Export Markets

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Benkovskis et al (2022) investigates factors that contribute to the survival of export relationships at both the firm and product levels using a large firm-level database for Latvia. The study finds that some characteristics of exporting firms, such as a higher productivity level, larger size, lower indebtedness and higher profitability are associated with a longer duration of export relationships. The paper also reveals the role of product characteristics for export product survival, in particular focusing on products’ absolute and relative complexity, as well as proximity to firms’ existing product basket. Exporting complex products improves the survival of trade relationships. However, exporting products that are more complex or distant from the firm’s previous export bundle reduces the chances of survival.

Introduction

Previous studies have found an extremely short average duration of an export relationship, i.e. export companies generally fall out of international markets quite rapidly. For example, in Latvia two out of five new exporters withdraw within the first two years following their entry (Figure 1a). The pace of product failure is even faster (Figure 1b). The weak resilience of exporting companies and exported goods has fueled our interest in potential economic policy measures that would contribute to a longer duration of exports.
Aim High, Shoot Low? The Impact of Product Characteristics on Product Survival in Latvia’s Export Markets

Using a large dataset of Latvian firms Benkovskis et al (2022) explores factors defining the survival of export relationships, with a special focus on product characteristics such as complexity. We examine the difference in the impact between absolute and relative complexity of a new export product, the former representing the complexity of the product per se, while the latter is its complexity compared to the firm’s existing export bundle.

Determinants of firm-level export survival

As to firm-level export survival, the study confirms some of the findings in the existing literature. There is evidence of higher survival rates for firms that:

- are larger and more productive, which is in line with the theoretical framework suggested by Bernard et al. (2011), where positive firm-specific supply shocks increase the duration of exporting;
- are younger, less indebted and more profitable;
- enter the foreign market with a larger number of products and/or to a larger number of countries, as entry diversification reduces the probability for a firm to be hit by a large negative demand shock or signals that the firm is operating at a more advanced technological level;
- enter the foreign market with a higher value of exports, signaling a firm’s confidence in the entry.

The main contribution of the paper is its focus on the effect of product characteristics on export survival both at the firm and at the product level. At the firm level we find that the absolute complexity of a product exported by a newly exporting firm does not affect the survival of the exporting relationship. Although complex products are likely to be highly differentiated and not easily replaced by competing products, such exports are likely to fail, if an exporting firm does not possess sufficient technological capabilities to ensure that the quality of the product is high. As the result, the overall effect on survival is neutral. An exporting firm’s survival would therefore hinge on the complexity of its exports relative to its capabilities.
Determinants of new product survival

While we do not have information on the product basket of Latvia’s firms that would allow us to infer their technological capabilities, we are able to leverage the information contained in their overall export basket. The paper explores this aspect in the context of product-level export survival.

The estimation results of our study indicate that the absolute complexity of a product tends to improve its survival. The positive effect of a product complexity could reflect both demand factors (complex products face more stable demand) and supply factors (complex products require better firm-level technology and competencies). In any case, these results suggest that shifting the composition of exports towards more complex products may improve their survival, positively affecting both extensive and intensive margins of export growth. In other words, “aiming high” can be a useful strategy for enterprises.

At the same time, the study reports a negative relationship between product complexity relative to the existing export product basket and the survival of new products. Such a finding is in line with a view that firms face higher marginal costs for products that are further away from their core capabilities. Moreover, the results also indicate that moving further away from the existing export bundle in terms of product similarity and proximity reduces the survival of a new export product.

Conclusions

Our findings both contribute to the theoretical international trade literature and provide policy-relevant implications.

As to the former, our findings suggest that theoretical models of international trade can be extended to incorporate product complexity and proximity to an exporting firm’s existing capabilities as product attributes. Such an extension may add an extra dimension to the relationship between international trade, reallocation of resources and aggregate productivity.

Regarding the implications for trade policies, we provide empirical evidence of the importance of core capabilities in export duration. Our findings provide useful insights for policy makers seeking to boost their countries’ export performance. We highlight the importance of identifying and strengthening core capabilities of exporting firms to improve export performance through longer product survival in export markets. Furthermore, a country should aim to upgrade its export content toward more complex products in an incremental manner rather than trying to leapfrog to products that are much more sophisticated than its current export content.

To sum up, these findings indicate the risk of “aiming too high” by exporting complex products that go beyond firms’ technological and non-technological capabilities. They point to an “aim high, but shoot low” strategy where firms increase complexity of their export basket gradually within their capabilities, so that the survival of complex exports is not endangered.

References


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