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Prices and Quantities of New Products
Hungarian Firm and Product Level Data

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ABSTRACT

This paper analyzes the driving factors of growth of quantities and prices of the new products for Hungarian firms between 2001 and 2016. It investigates how price levels are correlated with firm and market characteristics, and the time path of the share of new products. Larger and more productive firms were able to sell their new products at higher prices, though larger competition had a dampening role. Pricing patterns differ for all products, higher share of foreign ownership leads to lower export and import prices. The share of new products is negatively affected by size corroborated by the negative effect of both productivity and foreign ownership. Productivity does not have any role in price and quantity growth rates.

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Keywords: trade, growth, productivity

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The results were computed by using firm balance sheet, production and sales survey, innovation survey and foreign trade data available in the data room managed and supervised jointly by CSO and CERS (until August 31, 2019 CERS HAS).

Új termékek árának és mennyiségének alakulása
Magyar vállalati és termék adatok alapján

Halpern László

ÖSSZEFOGLALÓ

Ez a tanulmány az új termékek árának és mennyiségének növekedését elemzi magyar vállalati adatok alapján 2001 és 2016 között. Megvizsgálja azt is, hogy az árak hogyan függenek a vállalati és a piaci jellemzőktől, valamint azt, hogy az új termékek aránya hogyan alakult. Nagyobb és termelékenyebb vállalatok magasabb áron adták el az új termékekeiket, az árakat a nagyobb verseny lefelé húzta. Az árazás másképp működik az összes termékre; a külföldi tulajdon magasabb arányával alacsonyabb export- és importár jár együtt. Az új termékek árbevételaránya csökken a vállalat méretével, akárcsak a a termelékenységgel és a külföldi tulajdon arányával. A termelékenységnek nincsen szerepe az árak és a mennyiségek növekedési ütemének alakulásában.

JEL: D24, F23, L25
Tárgyszavak: külkereskedelem, növekedés, termelékenység

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Introduction

The relationship between economic development and economic growth can be understood properly only if the underlying mechanisms are correctly described. The notion of economic complexity can help in this understanding. Countries produce more and more complex products and less complex products are left out from the product portfolio. Theoretical and empirical studies pursue this line of research and disentangle the inherently nonlinear nature of this relationship. Firm and product level models and data are required in order to obtain promising results.

International competition makes necessary for firms to introduce new products as rents from previously introduced products are vanishing quite fast. Furthermore, consumer taste may also change quickly. That is the reason why it is important to understand which firms are able to renew their product portfolio and maintain and improve their position in the international competition.

Our previous results (Halpern, 2020) showed that firms with higher productivity, with higher employment, with larger number of imported products and with higher foreign ownership export larger number of new products. This was checked on production and domestic sales and was found that there is no positive connection between productivity and the number of products produced or sold at the domestic market.

This paper investigates two closely related issues with respect to the number of new products. First, pricing is a strategic decision of the firm at what price a product is introduced to new or old markets. Firms decide whether the introductory price is tilted toward gaining market share or rather trying to capture a specific quality segment of the market which is ready to pay all the costs. In light of this it is investigated whether prices of the new products depend on different features of the firm and the market itself. Second, it is examined what happens with the new products in the next three years following the introduction. Price and quantity developments are analyzed; to what extent they are determined by the firm characteristics. Furthermore, these characteristics may have a role in the development of product composition; whether the share of new products in the next three years can be explained by them.

New products

There are theoretical concepts and explanations for the difference between the economic development of rich and poor countries. Technology gap underlines the difference in abilities to introduce new products, as more advanced technologies make firms able to produce new products. The complexity explanation enhances the role of capabilities in producing new products. The development process consists of acquiring new capabilities and of the ability to use them to produce new products.

van Dam and Frenken (forthcoming) argue using a theoretical framework that the relationship between product variety and economic complexity is highly dependent on the stage of development. In the first stage product variety increases exponentially, then slows down during a transition period. In the final stage product variety starts decreasing. In the meantime, the economic complexity accelerates and the average product length increases.

There are only relatively few papers dealing with the empirical analysis of what drives firms selling new products. See Kaitila (2019), Castellani and Fassio (2019), Cirera, Marin and Markwald (2015). More can be found on the pricing of new products.

Pricing

Pricing has always received special attention, how firms set prices of new products and how these prices affect the general price level. The main issues are the following: how does quality affect prices; how import and export prices are related to each other; and what are the implication of micro pricing on macro level.

Klenow and Malin (2010) give a detailed review of the empirical studies dealing with individual prices. Prices change at least once a year, with temporary price discounts and product turnover often playing an important role. After excluding many short-lived prices, prices change closer to once a year. The frequency of price changes differs widely across goods, however, with more cyclical goods exhibiting greater price flexibility. The timing of price changes is little synchronized across sellers. The hazard and size of price changes do not increase with the age of the price. The cross-sectional distribution of price changes is thick-tailed, but contains many small price changes too.

Bils (2009) claims that much of CPI inflation for consumer durables reflects shifts to newer product models that display higher prices, not price increases for a given set of goods. It is examined how these higher prices for new models should be divided between quality growth and price inflation based on (a) whether consumer purchases shift toward or away from the new models and (b) whether new-model price increases generate higher relative prices that persist through the model cycle. The conclusion is that two-thirds of the price increases with new models should be treated as quality growth. This implies that CPI inflation for durables has been overstated by almost 2 percentage points per year, with quality growth understated by the same magnitude.

Byrne, Kovak and Michaels (2017) underline that markets exhibit price dispersion across suppliers of observationally identical goods. Statistical agencies typically assume this dispersion reflects unobserved quality, so standard price indexes do not incorporate price declines when buyers substitute toward lower-price suppliers. The authors show that long-run price differences across suppliers can be used to infer unobserved quality differences and propose an index that accommodates quality-adjusted price dispersion. Using transaction-level data on contract semiconductor manufacturing, substantial quality-adjusted price dispersion is documented and it is confirmed that a standard index is biased above the proposed index.

Gorodnichenko, Talavera and Vu (2021) investigate the link between product quality and price setting for central processing units (CPUs). Using thousands of price quotes from a popular price-comparison website, they find that market fundamentals, such as the number of sellers, median price, share of convenient prices and level of seller stability, are important factors for explaining price stickiness and price dispersion. It is demonstrated that calculations of price inflation require conditioning not only on CPU quality, but also on market fundamentals to ensure that CPU attributes are priced correctly. Failing to do so can result in an understatement of CPU price deflation in the sample period.

Bas and Strauss-Kahn (2015) explore the impact of input trade liberalization on imported input and exported product prices. Using Chinese transaction data for 2000–2006, causal effects between exogenous input tariff reductions and within firm changes in HS6-traded product prices are captured. For identification, authors make use of a natural control group of firms that are exempted from paying tariffs. Both imported input and export prices rise. The effect on export prices is specific to firms sourcing inputs from developed economies and exporting output to high-income countries. Results are consistent with a scenario within which firms exploit the input tariff cuts to access high-quality inputs in order to quality-upgrade their exports.

Fan, Li and Yeaple (2015) present theory and evidence from disaggregated Chinese data that tariff reductions induce a country's producers to upgrade the quality of their exports. They document stylized facts regarding the effect of trade liberalization on export prices. An analytical framework is developed that relates a firm's choice of quality to its access to imported intermediates. In the model, a reduction in import tariffs induces a firm to increase export quality and raise its export price in industries where the scope for quality differentiation is large and lower its export price in industries where the scope is small. The predictions are consistent with the stylized facts.

Mallick and Marques (2016) claim that the product quality dimension has been rarely mentioned as a factor explaining the heterogeneous pricing strategies of exporters. This could underestimate the degree of mark-up adjustment and the extent of incomplete exchange rate pass-through at a disaggregated level across products and destination markets. The authors investigate the role of quality differentiation in price discrimination using data for China and India's exports disaggregated at the 6-digit product level across destination markets. The paper adopts an empirical approach that incorporates gravity model explanatory factors and allows disentangling the effect of quality on trade prices and volumes from that of other sources of price variation. After excluding short duration export spells, China's export prices denominated in foreign currency terms increase with the yuan's depreciation, implying an increase in exporters' mark-ups, but they decrease as expected in the case of India. However, mark-up increases decline with product quality and destination market income, as the elasticity of demand perceived by exporters increases. These findings remain robust to different measures of quality, samples, specifications, and to the potential endogeneity of quality.

Mallick and Marques (2017) analyze empirically the export pricing behavior of Chinese and Indian exporters when there is selection into exporting. Previous exchange rate pass-through estimates that did not take selection into account could be biased if selection into exporting is correlated with pricing strategy. Authors use 6-digit product-level data across high- and low-income export destinations over the period 1994–2007 and assess a number of determinants of the degree of pass-through of exchange rates to export prices, such as the level of external demand, exporter's wage cost, degree of competition in export markets, currency volatility and the direction of currency movements. They find systematic differences in the pricing strategies of Chinese and Indian exporters while uncovering a selection bias in exports to high-income markets, although the pricing of exports to low-income markets is independent of the decision to export. Export prices do not increase systematically with the destination market per capita income, and tend to be less sensitive in shipments to advanced nations. Export prices of India are sensitive to the volatility of the trade-weighted nominal effective exchange rate, indicating heterogeneity in prices to maintain competitiveness, but not in China as volatility is insignificant given a fixed currency system. It is also revealed that a country with a relatively flexible currency regime and arms-length trade such as India is more likely to exhibit incomplete pass-through, whereas a country with an inflexible currency system and involved in outward processing trade is more likely to have full pass-through as shown in the case of China.

Empirical analysis

Data

Two product level data sets are matched with detailed firm income and balance sheet data between 2001 and 2016. The first data set contains product and partner level data of foreign trade at HS8 level of manufacturing firms. The second one is from the Industrial production and sales survey called Prodcom survey. Product category changes and the difference between

the foreign trade and Prodcom categories made necessary to create a time invariant product category separately for manufacturing and Prodcom data.[1] Both samples contain product level export data, what makes possible to analyze the difference on the investigated relationships.

There are close to 3000 firms in the Prodcom sample in the early years, what went below 2000 by the end of the observation period. The number of products also declined from between 1200 and 1300 below 1100 in the Prodcom sample. The tendency was just the opposite for the manufacturing sample; the product number increased from 1300 to 1500 for the exports and from 1500 to 1550-70 for the imports.[2]

Prodcom firms employ one third of the industrial labor between 2001 and 2004, their share declines to one-fourth. Manufacturing sample firms employed two thirds of manufacturing labor in the early period what then declined to 55 percent. The average firm size in the manufacturing sample grew from around 80 to above 110. Firms in the Prodcom sample are bigger, the average size was higher by around 50 percent.

Indicators

The main focus of this paper is to analyze the driving factors of growth of quantities and prices of the new products in different contexts. It will also be investigated how price levels are correlated with firm and market characteristics. Finally, the time path of the share of new products will also be explained.

The average normalized price of both new and all products for domestic sales, exports and imports are calculated on firm level. Normalization means, that the difference between the product price of a firm and the minimum price of the same product traded by all the other firms is divided by the difference between the maximum and the minimum price of the same product. In other words, it is the percentage share of the price range. The higher this ratio, the closer the price to the maximum price. Individual normalized prices then weighted by the value of trade to obtain the firm level average of prices across different products and partners. The share of the products used for calculating the average normalized price of the firm offers further possibilities in understanding the role of these products.

These normalized prices are calculated for exports and domestic sales for firms in the Prodcom sample and for imports and exports for firms in the manufacturing sample where normalization means that product prices are compared by partners. It means that the price comparison is made on the most disaggregated level in order to get as close as possible to the concept of relevant market. It is obvious, that the product categories used here are much more aggregated than the individual products presented in the previous section.

Firms may set their prices in their exports and domestic sales differently. The data allows it to investigate for the firms in the Prodcom sample. As there is no data on domestic sales in the manufacturing sample, the comparison is made between exports and imports for the same products. These relative prices can be interpreted as the relation between input and output prices. Imported and exported products in the same product category are not identical, but one can assume that similarly to the processing trade the imported input is used for the export of the product in the same category. The relative difference between domestic sales and export prices for both running and new products for the Prodcom sample can also be calculated. The same can be done for the manufacturing sample, too. The relative difference means that the difference between the two prices is divided by the domestic sales price. Here, the share of the

[1] The concordance was created using the methodology developed by Pierce and Schott (2012).

[2] Product categories are not necessarily the same in the two samples as the concordance procedure created synthetic product categories separately.

products for calculating this indicator is also available. The same indicator is calculated for the difference between the export and import price for the manufacturing sample.

The statistics of normalized and relative prices are presented in Table A1.

Average growth rate of prices and quantities for domestic sales, exports for both samples and for imports for the manufacturing sample are computed. More precisely only three growth rates are calculated: for the first, for the second and for the third year after the product is new in the product portfolio of a firm. The statistics of these growth rates are presented in Table A2 for Prodcom and in Table A3 for manufacturing firms.

Prices reflect market conditions under which products are traded. The nature of our data allows us to use two variables which are characterizing product markets. The first is the number of market participants, what means the number of firms actively participating at that product market, i.e., exporting that product to the same partner country, or importing the same product from the same partner country. It would be highly desirable to be able to identify the partner firm, but this information was not available. Second, the market concentration, which is the sum of squared market shares. Our definition of market is quite narrow determined by data availability. In this interpretation only Hungarian firms are competing with each other when exporting the same product to the same partner country. It is assumed that larger number of market participants and lower concentration rate are associated with a more competitive market. The interpretation used for domestic sales and Prodcom export is confined to product level as no further information is available. In case of imports it is assumed that Hungarian firms importing the same product from the same partner country are competing with each other. The descriptive statistics are presented in Table A4.

First step in analysing prices and quantities

Normalized prices demonstrate a close positive association between domestic sales and exports for Prodcom firms (Figure 1) and between import and export prices for manufacturing firms for both new and all products (Figure 2). Two minor differences can, however, be observed. First, domestic prices are much closer to the export prices, than the import prices to the export prices on average. Second, the linear trend is flatter for the new domestic sales than for the overall products.

Firm size seems to matter somehow; both for Prodcom (Figure 3) and for manufacturing firms (Figure 4) relative prices – domestic to export and import to export respectively – fall with size, that is, smaller firms attain higher relative prices. This is true for new products in case of manufacturing firms only.

Prices and quantities of new products of manufacturing firms tend to grow together in the next three years after introduction (Figure 5). There is a quite large difference across years, it is understandable that the quantity growth rates are significantly larger in the first year than in the next two years as the base year might be much shorter than the full calendar year.

Growth rates of prices and quantities of new export in the base year of manufacturing firms are scattered widely along the linear trend in the next three years (Figure 7). The slope of the trend is changing from slightly positive to negative and back to positive across years.

The share of new products in export which were new in the base year shows negative relation with size, the larger the firm, the smaller the share of formerly new products in the export (Figure 8). This slope seems to stay more or less stable over the first three years.

Finally, there is a quite strong positive linear relationship between the shares of new products in imports and exports in the next three years (Figure 9). It seems that this relationship does

not change over time. It is noteworthy, that the new export shares are generally higher than the new import shares.

Second step: do foreign ownership and productivity matter?

Figures present that firm size is correlated with the indicators covering normalized prices, relative price ratios and quantity and price growth rates. Before using regression analysis let us investigate the role of two other firm characteristics, namely the productivity and the share of foreign ownership beside firm size. Medians of these three variables are used as a cutoff. Each firm in each year has a binary indicator for these three variables showing the firm is above or below the median in the given year. S stands for below, L for above median. Firms then are aggregated into eight cells. Cells show the average of the indicator for firms with the same triad characteristics.

Before looking at the tabulated indicators the distribution of the turnover is presented in Table A5 for new exports, in Table A6 for exports, in Table A7 for new imports and in Table A8 for imports. The four distributions show common patterns. Large firms carry more than 96% of the turnover of any of the trade. Firms with high productivity have more than 70% share. Finally, firms with large foreign ownership have similar – above 70% – share. Firms with high productivity and high foreign ownership have more than 50% share in new exports, almost 70% in exports, and 2/3 in new imports and imports. On the other edge of the distribution small firms with small foreign ownership and small productivity have less than 1% turnover in any of the trade flows.

The share of new export products which was 19.8% on average in the next year (Table A9) and slightly increased afterwards: 20.0% two years after (Table A10) and 20.4% after three years (Table A11). Small firms have always significantly higher share of once new exports compared to large firms. The same order prevails in case of foreign ownership and productivity; lower level goes together with higher share of once new exports. Those products which were new three years ago in case of firms with three S's represent about 1/3 of the exports. The same ratio is around 13% for firms with three L's. The share of once new products was increasing in time for both triple S's and triple L's firms.

The share of new import products in total imports is significantly lower than for exports, the difference is 6-10 percentage points (Table A12, Table A13, Table A14). There is an aggregate downward trend, what is just the contrary what was observed for exports. Small, less productive and less foreign ownership firms have higher new import shares. The difference between the three S's and three L's firms is around threefold.

Annual normalized prices of new exports span from 22 to 27% (Table A15). Firms in the S cells in each dimension have the lowest, while firms with three L's have the largest value. In each dimension L firms have larger values of normalized price than S firms.

The export prices do not differ as much as new export prices – the maximum difference is 2.4 percentage points (Table A16). New export prices exceed export prices by at least 4 percentage points. The largest difference – 50% – can be observed at firms with triple L's.

Average normalized price for new import is twice as high as the same for imports (Table A17 for new imports and Table A18 for imports). The internal structure of these prices is similar to that of the exports.

New export prices are higher than new import prices by slightly less than 50% what is above 50% for the ratio of all exports and to all imports prices (Table A19 for new products and Table A20 for all products). The gap between export and import prices is significantly higher for

small firms and for firms with lower foreign ownership, while there is no difference according to productivity groupings.

The average annual rate of price increase of those export products which were new was between 18.0 and 25.9% in different subgroups in the next year (Table A21). The range decreased to 10.5-17.9% and to 9.3-17.6% in the following two years (Table A22 and Table A23, respectively). Large, more productive and more foreign owned firms had higher price increases with a couple of exceptions.

The average annual quantity growth rates of those export products which were new was extremely high; it was between 131 and 219% in the first year (Table A24) and fell considerably in the following two years: 37-65 (Table A25) and 44-57% (Table A26). It is obvious that the growth rates calculated for the first year are inflated by the eventually shorter base year period depending on the day of introduction of a new product. Large, more productive and firms with high foreign ownership had typically higher quantity growth rates.

The price and quantity increases of the new imports are very similar to what was observed for the new exports. (See Table A27 for price increases in the first year; Table A28 price increases in the second year; Table A29 price increases in the third year; Table A30 quantity increases in the first year; Table A31 quantity increases in the second year; Table A32 quantity increases in the third year.) There is a downward trend in growth rates and larger, more productive and firms with higher foreign ownership share have usually higher growth rates.

Results

In order to alleviate inherent endogeneity and simultaneity every explanatory variable is lagged by one year. Time and industry dummy variables are used in each regression. Stata fracreg probit estimation method was used for dependent variables between 0 and 1, ordinary least squares for the other dependent variables.

Normalized prices

The estimated results for Prodcom domestic sales and exports are presented in Table 1. Neither new export nor export prices are affected by any of the firm lagged basic characteristics, only the lagged number of market participants has significant negative impact on normalized prices. Furthermore, we can observe a cross effect of market concentration, that is the domestic sales concentration has significant negative effect on export prices, while the export concentration increases domestic sales prices.

The estimated results for the manufacturing sample differ from that of Prodcom sample – see Table 2. First, lagged productivity and size have both positive and significant effect on normalized prices of export and import, new ones included. Second, foreign ownership had only effect on exports and imports which turned out to be negative. Third, the lagged number of export market participants had consistently negative significant effect on all normalized prices, while the number of import market participants had negative significant effect on new import and import. Fourth, export sales concentration had negative effect which was significant always, new import excepted. Finally, the sign of import purchase concentration coefficient was always positive and two of them – new export and import – were significant. All in all, the signs of the estimated coefficients refer to some strong positive association between normalized prices and two of the firm basic characteristics – productivity and size. The other important observation is that market type characteristics – number of players and concentration – dampened prices, especially the number of exporters and the export concentration.

These regressions were extended with two other explanatory variables: the lagged dependent variable and the average quality distilled from product level demand estimations. These robustness checks were made for the four variables of interest of foreign trade in the manufacturing sample. These results are presented in four tables and organized similarly – Table 3: new exports; Table 4: exports; Table 5: new imports; Table 6: imports. The first column presents the original result in Table 2, the second column is with the lagged dependent variable, the third column is with the lagged quality variable and finally the fourth column is with both variables included.

The general result is that the new variables were always positive and significant. In general, they do not affect the sign and significance of the other explanatory variables, though their absolute values are somewhat decreased. Finally, in couple of cases these new variables eliminate the significance of some of the market variables.

For new exports both export market variables were eliminated. For exports all the variables are retained, but foreign ownership loses its significance. In case of new imports export players variable is crowded out while import purchase concentration gets in with negative sign. Finally, for imports the productivity and the two concentration variables fell victim of the new explanatory variables.

Relative prices

Two relative prices are examined: the relative difference between export prices and domestic sales prices for the Prodcom sample and the relative difference between export and import prices for the manufacturing sample. Firms have two main sales channels: domestic sales or exports. The choice between them partly determined by the price paid by the buyers. The price ratio of exports to imports for manufacturing sample can be interpreted as a cost margin by comparing output to input prices.

The estimation results – in Table 7 – show that larger firms more foreign owned have lower relative export prices. Market variables have quite heterogeneous effect – they are rarely significant and their sign may also differ in different estimations.

Share of new products

New products should replace the existing ones in order to improve the product portfolio. The question is what is the connection between the share of new products in the subsequent years and the firm and the market characteristics. These estimations are made for up to three years, that is, how the chosen explanatory variables affect the share of those products in year $t+1$, $t+2$, and $t+3$ which were new in year t.

The share of new products in domestic sales grew from 36 per cent in the next year to 45 per cent in the third year. The export share in manufacturing sample started from a much more modest level 20 per cent and grew by a very little. The opposite was the case for the imports the much lower first year level – 14 per cent – went down to 11 per cent in the third year.

Productivity had significantly positive while size had significantly negative effect on the share of new products (Table 8). The productivity effect was increasing, while the size effect was decreasing in time. The overall picture is totally different in case of exports (Table 9) and imports (Table 10). The explanatory variables were significant negative import purchase concentration for imports excepted. The effect of a couple of variables – actually that of both concentration variables – fades away for the third year, while the effect of productivity gradually goes down in time.

Quantity and price dynamic

The hypothesis is that the quantity and price growth of new products might be in close connection with firm and market characteristics. Our results support this hypothesis only to a rather limited extent. A general conclusion is that productivity had no role in determining any of the growth rates. There are very few significant coefficients in the estimations of domestic sales quantity and price growth rates (Table 11), and of Prodcom exports (Table 12). Slightly more positive significant coefficients were found for manufacturing exports (Table 13) especially for the quantity growth rates, where size, ownership and export participants number proved to be relevant as an explanatory variable. None of the export market variables were important in price growth rates, while import market variables were non-significant for quantities. Foreign ownership share increased both price and quantity growth rates of new products in each consecutive years (Table 14). Besides, firm size and import market participant number had important role.

Conclusions

The ultimate objective of introducing new products is to improve market position of a firm. Firms may have preferences whether it is to be achieved by setting appropriate prices or by selling more. We found that larger and more productive firms were able to sell their new products at higher prices and as expected market characteristics had dampening role. Firm level quality variables seem to substitute market variables. Pricing patterns differ for all products, higher share of foreign ownership leads to lower export and import prices.

One way to assess the success of a new product is its share in turnover. While as it is expected that the share is negatively affected by size; the negative effect of both productivity and foreign ownership requires further examination. This effect was supplemented by the negative effect of market conditions, too.

Productivity does not have any role in price and quantity growth rates. It requires further analysis especially in light of its negative effect on the share of new products.

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Figures

Figure 1. Normalized prices for exports and domestic sales

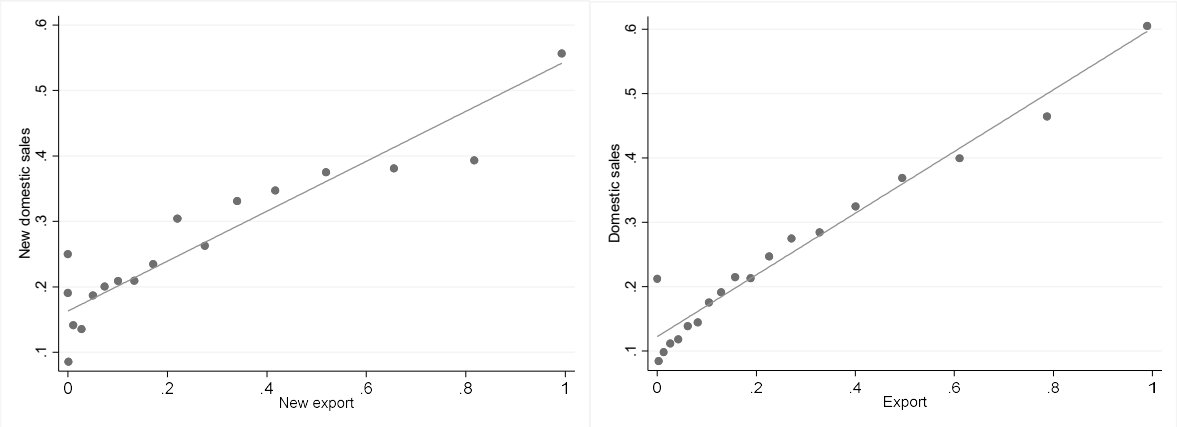


Figure 2. Normalized prices for exports and imports

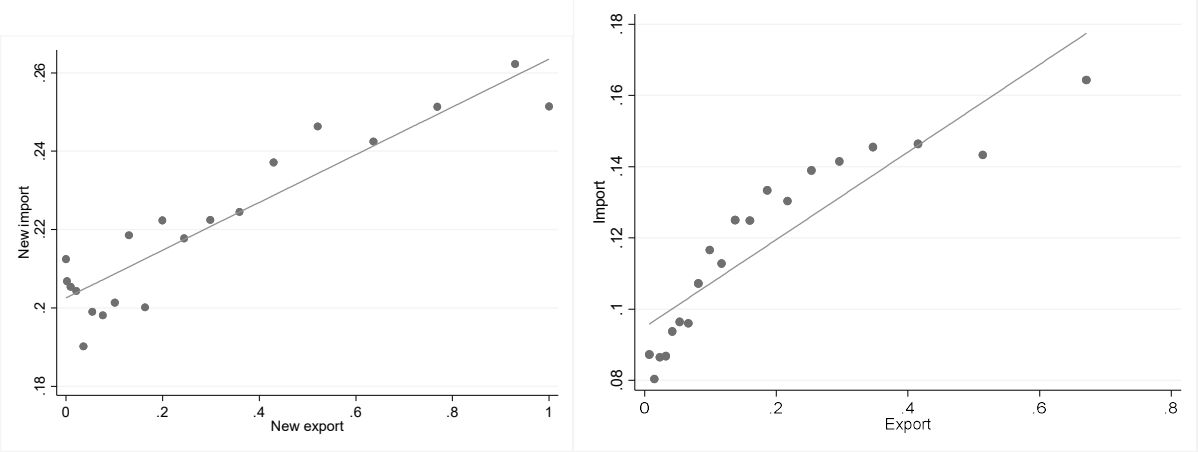


Figure 3. Size and relative price of export and domestic sales

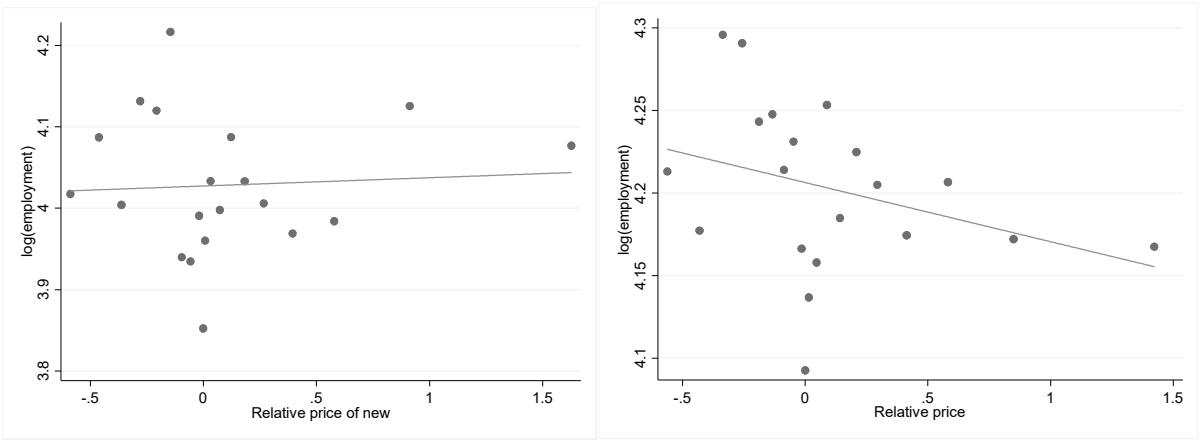


Figure 4. Size and relative price of exports and imports

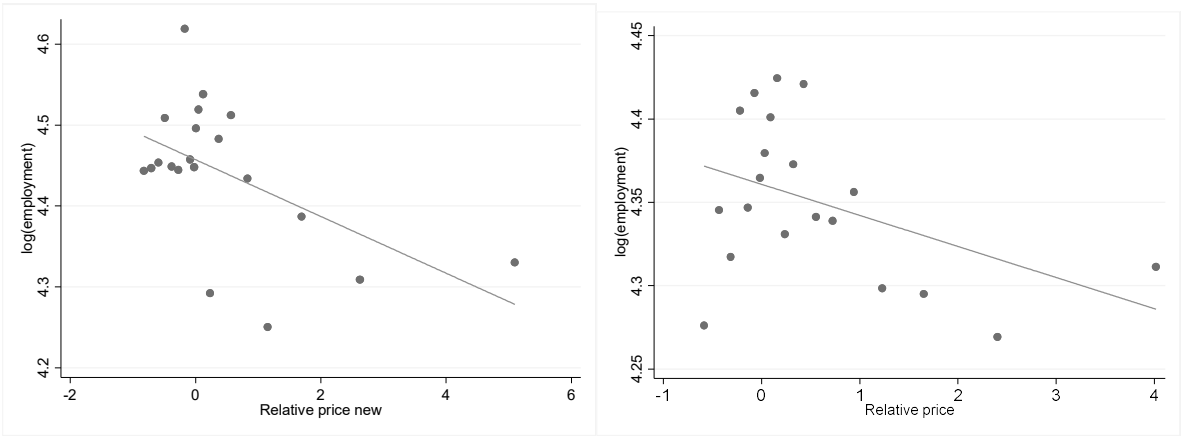


Figure 5. Price and quantity growth rates of new exports in subsequent years

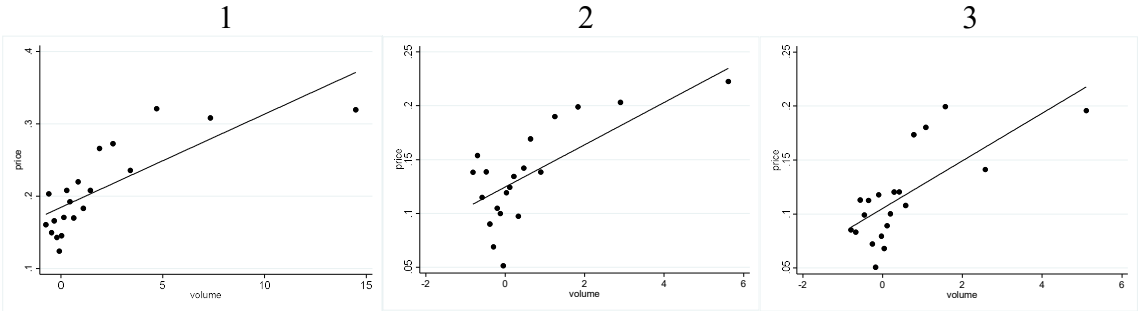


Figure 6. Size and quantity growth rates of new exports in subsequent years

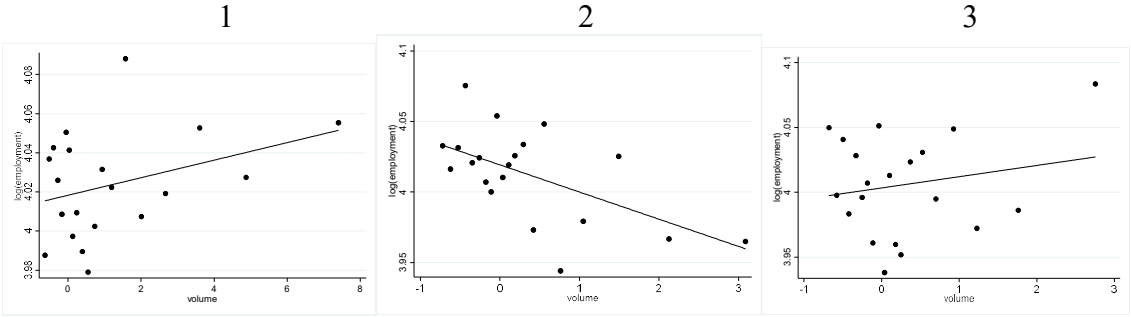


Figure 7. Size and price increase of new exports in subsequent years

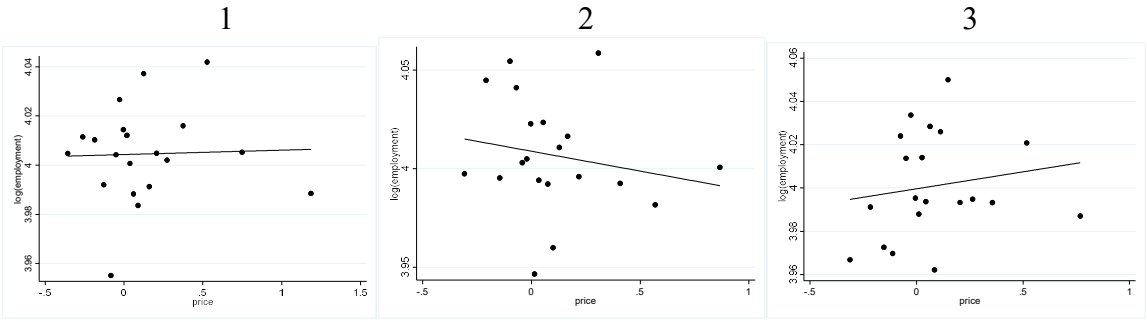


Figure 8. Size and share of new exports in subsequent years

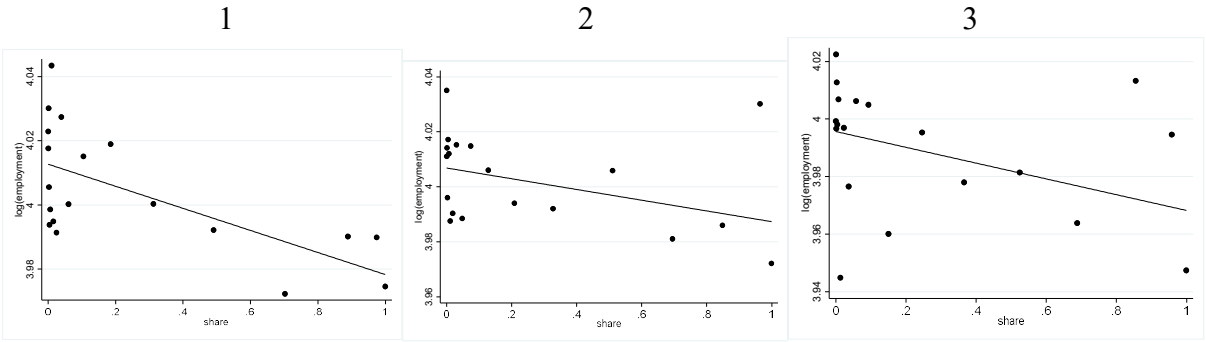
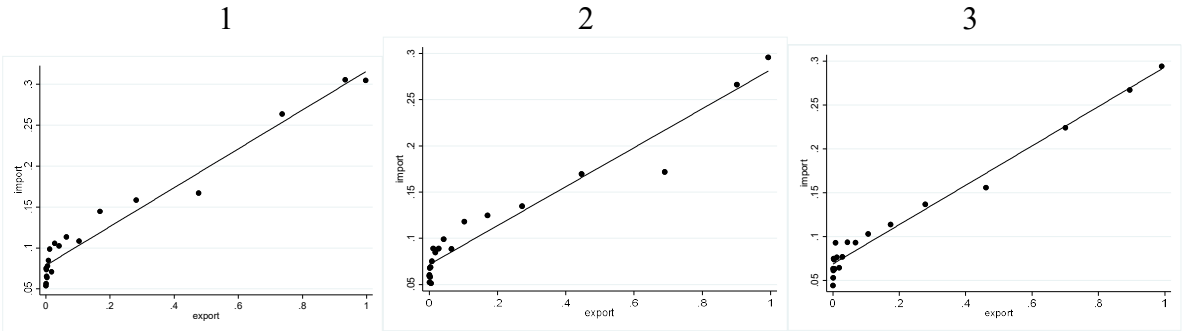


Figure 9. Share of new exports and new imports in subsequent years



Tables

Table 1. Normalized prices in Prodcom sample

	New export	Export	New domestic sales	Domestic sales
TFP (-1)	0.00115	0.0155	0.0209	0.0279***
log(employment)(-1)	-0.00159	-0.00136	0.0344**	0.00199
foreign (-1)	0.0473	0.00293	0.0464	0.0436***
log (export players)(-1)	0.106***	-0.249***	-0.00195	-0.0631***
log (domestic players)(-1)	-0.0499	-0.0437***	0.0531	-0.174***
export market concentration (-1)	-0.00186	0.0309	0.187	0.0797**
domestic sales concentration (-1)	0.132	-0.252***	0.0613	0.00393
Constant	-0.510**	0.227***	-1.096***	-0.00255
Observations	1508	15102	1831	16359
χ^2 type Wald	506.1	2113	4086	2343
p-stat	0	0	0	0
Pseudo R^2	0.0219	0.370	0.0189	0.0381

Table 2. Normalized prices in manufacturing sample

	New export	Export	New import	Import
TFP (-1)	0.0505***	0.0241***	0.0513***	0.0317***
log(employment)(-1)	0.0374***	0.00347	0.0653***	0.0393***
foreign (-1)	0.000406	-0.0348**	0.00960	-0.0414***
log (export players)(-1)	-0.0249**	-0.211***	-0.0179***	-0.0230***
log (import players)(-1)	0.00918	-0.00719	-0.0542***	-0.155***
export sales concentration (-1)	-0.0738*	-0.173***	-0.0275	-0.0648***
import purchase concentration (-1)	0.117**	0.0118	0.0153	0.0840***
Constant	-0.928***	-0.0276	-0.935***	-0.569***
Observations	17250	29253	25885	31031
χ^2 type Wald	691	3685	1172	4969
p-stat	0	0	0	0
Pseudo R^2	0.0118	0.0294	0.0112	0.0275

Table 3. Normalized price Manufacturing. New export

	(1)	(2)	(3)	(4)
TFP (-1)	0.0505***	0.0393***	0.0365***	0.0291**
log(employment)(-1)	0.0374***	0.0308***	0.0286***	0.0221***
foreign (-1)	0.000406	0.0104	0.00197	0.00879
log (export players)(-1)	-0.0249**	-0.00808	-0.00515	0.000485
log (import players)(-1)	0.00918	0.00297	0.00886	0.00387
export sales concentration (-1)	-0.0738*	-0.0584	0.0115	0.0277
import purchase concentration (-1)	0.117**	0.0821	0.136**	0.123*
product quality (-1)		0.0351***		0.0327***
normalized price (-1)			0.288***	0.195***
Constant	-0.928***	-0.772***	-1.008***	-0.821***
Observations	17250	13426	12473	10038
χ^2 type Wald	691	749.8	647	642.8
p-stat	0	0	0	0
Pseudo R^2	0.0118	0.0165	0.0150	0.0183

Table 4. Normalized price Manufacturing. Export

	(1)	(2)	(3)	(4)
TFP (-1)	0.0241***	0.0172***	0.0150***	0.0124*
log(employment)(-1)	0.00347	-0.00002	0.00396	0.00315
foreign (-1)	-0.0348**	-0.0253**	-0.0119	-0.00440
log (export players)(-1)	-0.211***	-0.211***	-0.0891***	-0.0876***
log (import players)(-1)	-0.00719	-0.0214***	-0.0108*	-0.0159**
export sales concentration (-1)	-0.173***	-0.183***	-0.0750***	-0.0870***
import purchase concentration (-1)	0.0118	-0.0575	-0.00379	-0.0152
product quality (-1)		0.0517***		0.0230***
normalized price (-1)			1.677***	1.661***
Constant	-0.0276	0.207***	-0.845***	-0.784***
Observations	29,253	22,543	27,592	21,754
χ^2 type Wald	3685	4082	9885	8874
p-stat	0	0	0	0
Pseudo R^2	0.0294	0.0418	0.0763	0.0818

Table 5. Normalized price Manufacturing. New import

	(1)	(2)	(3)	(4)
TFP (-1)	0.0513***	0.0250***	0.0480***	0.0257***
log(employment)(-1)	0.0653***	0.0516***	0.0566***	0.0475***
foreign (-1)	0.00960	0.00730	0.00542	0.00702
log (export players)(-1)	-0.0179***	-0.00759	-0.0160**	-0.00782
log (import players)(-1)	-0.0542***	-0.0683***	-0.0500***	-0.0632***
export sales concentration (-1)	-0.0275	-0.0134	-0.0153	-0.00421
import purchase concentration (-1)	0.0153	-0.107**	0.0248	-0.0894**
product quality (-1)		0.0426***		0.0397***
normalized price (-1)			0.273***	0.172***
Constant	-0.935***	-0.713***	-0.968***	-0.763***
Observations	25885	21529	22703	19300
χ^2 type Wald	1172	1419	1239	1371
p-stat	0	0	0	0
Pseudo R^2	0.0112	0.0158	0.0128	0.0164

Table 6. Normalized price Manufacturing. Import

TFP (-1)	0.0317***	0.00242	0.0197***	0.00397
log(employment)(-1)	0.0393***	0.0236***	0.0246***	0.0161***
foreign (-1)	-0.0414***	-0.0454***	-0.0281***	-0.0284***
log (export players)(-1)	-0.0230***	-0.0154***	-0.0148***	-0.0112**
log (import players)(-1)	-0.155***	-0.183***	-0.0796***	-0.0985***
export sales concentration (-1)	-0.0648***	-0.0568**	-0.0375*	-0.0294
import purchase concentration (-1)	0.0840***	-0.0436	0.0404	-0.0484
product quality (-1)		0.0485***		0.0264***
normalized price (-1)			1.925***	1.828***
Constant	-0.569***	-0.285***	-1.155***	-0.982***
Observations	31,031	25,493	29,870	24,887
χ^2 type Wald	4969	6031	10679	10240
p-stat	0	0	0	0
Pseudo R^2	0.0275	0.0380	0.0528	0.0572

Table 7. Relative prices

	Prodcom		Manufacturing	
	new export/ new domestic	export/ domestic	new export/ new import	export/ import
TFP (-1)	0.0209	-0.0305***	0.0205	0.00886
log(employment)(-1)	-0.000183	-0.00862***	-0.0616***	-0.0143*
foreign (-1)	-0.108***	-0.0439***	-0.175***	-0.0704***
log (export players)(-1)	-0.00678	0.0403***	0.0426	0.00444
log (domestic sales players)(-1)	-0.00346	-0.0328***	0.0624	0.0651***
export sales concentration (-1)	-0.135	-0.0149	0.115	-0.0894
domestic sales concentration (-1)	0.107	-0.0930***	0.318	0.0413
Constant	0.145	0.218***	0.342	0.463***
Observations	1258	16647	3874	17756
R^2	0.057	0.030	0.018	0.023

Table 8. Share of new products in domestic sales in consecutive years

	next year	two years after	three years after
TFP (-1)	0.00560	0.0729**	0.0923***
log(employment)(-1)	-0.114***	-0.108***	-0.0512***
foreign (-1)	0.168***	0.0795	-0.00293
log (export players)(-1)	0.0402	-0.0322	-0.00213
log (domestic sales players)(-1)	0.0508	0.0166	-0.0543
export sales concentration (-1)	0.0647	-0.225*	-0.104
domestic sales concentration (-1)	0.372**	0.232	-0.387**
Constant	-0.324*	0.0646	1.006***
Observations	2,100	1,863	2,054
χ^2 type Wald	195.6	165.3	393.9
p-stat	0	0	0
Pseudo R^2	0.0305	0.0280	0.0622

Table 9. Share of new products in exports in consecutive years

	next year	two years after	three years after
TFP (-1)	-0.0993***	-0.0673***	-0.0586***
log(employment)(-1)	-0.176***	-0.171***	-0.171***
foreign (-1)	-0.143***	-0.148***	-0.147***
log (export players)(-1)	-0.115***	-0.0632***	-0.0662***
log (import players)(-1)	-0.0356**	-0.0484***	-0.0346*
export sales concentration (-1)	-0.338***	-0.123*	-0.0836
import purchase concentration (-1)	-0.148*	-0.186**	-0.000328
Constant	0.931***	0.789***	0.687***
Observations	13,230	11,297	10,045
χ^2 type Wald	1275	1001	819.5
p-stat	0	0	0
Pseudo R^2	0.0526	0.0476	0.0438

Table 10. Share of new products in imports in consecutive years

	next year	two years after	three years after
TFP (-1)	-0.161***	-0.0999***	-0.108***
log(employment)(-1)	-0.209***	-0.201***	-0.198***
foreign (-1)	-0.230***	-0.221***	-0.165***
log (export players)(-1)	-0.0464***	-0.0367***	-0.0168
log (import players)(-1)	-0.0409***	-0.0385***	-0.0548***
export sales concentration (-1)	-0.205***	-0.0840*	-0.0372
import purchase concentration (-1)	0.0928	0.147**	0.0231
Constant	0.881***	0.568***	0.621***
Observations	21142	18877	17053
χ^2 type LR	2233	1846	1482
p-stat	0	0	0
Pseudo R^2	0.0586	0.0533	0.0476

Table 11. Growth rates of domestic sales

	Price			Quantity		
	t+1	t+2	t+3	t+1	t+2	t+3
TFP (-1)	-0.00124	-0.00035	-0.0224***	-0.0585**	-0.0279	-0.0328*
log(employment)(-1)	-0.00604	0.00279	-0.00827*	0.0136	-0.0108	0.00232
foreign (-1)	0.00433	-0.0146	0.0246*	0.145***	0.0479*	-0.00935
log (export players)(-1)	-0.00152	0.0101	0.00134	-0.0329	-0.0233	-0.0123
log (domestic sales players)(-1)	0.00179	-0.00466	0.0102	0.00682	0.0431*	0.0264
export sales concentration (-1)	-0.0477	0.0194	0.00326	0.0740	-0.132*	0.00361
domestic sales concentration (-1)	-0.00534	-0.0181	0.0296	-0.259*	0.110	-0.0383
Constant	0.149***	0.0607	0.0964**	0.509***	0.205**	0.180**
Observations	3809	3179	3536	3792	3185	3518
R^2	0.017	0.021	0.020	0.042	0.031	0.021

Table 12. Growth rates of Prodcom exports

	Price			Quantity		
	t+1	t+2	t+3	t+1	t+2	t+3
TFP (-1)	-0.0132	-0.00375	-0.0113	-0.0799**	0.00686	-0.0235
log(employment)(-1)	-0.00504	-0.00277	-0.00353	0.0247	-0.00506	-0.0269**
foreign (-1)	-0.0141	0.00519	-0.00106	-0.174***	-0.0589*	-0.00147
log (export players)(-1)	0.00925	0.000211	-0.00697	0.00838	-0.0177	-0.0325
log (domestic sales players)(-1)	-0.0124	0.00436	0.0128	0.0617	0.00598	0.0179
export sales concentration (-1)	0.0566	0.0552	0.000500	0.318*	0.0475	-0.000
import purchase concentration (-1)	-0.113**	-0.0253	0.00427	0.122	-0.0943	0.0258
Constant	0.164***	0.0728	0.0779*	0.344	0.344***	0.401***
Observations	4026	3214	3500	4033	3229	3484
R^2	0.021	0.020	0.015	0.026	0.017	0.015

Table 13. Growth rates of manufacturing exports

	Price			Quantity		
	t+1	t+2	t+3	t+1	t+2	t+3
TFP (-1)	-0.00843	0.0141*	0.00454	-0.0725	0.0355	0.0449*
log(employment)(-1)	0.00838*	0.00676	-0.00278	0.0972***	0.0666***	0.0353***
foreign (-1)	0.0147	-0.0116	0.0128	0.289***	0.107***	0.0148
log (export players)(-1)	0.0133	0.00495	-0.0109	0.149***	-0.00266	0.0491*
log (import players)(-1)	0.0189**	0.0112	0.0146*	0.0247	-0.0264	0.0172
export sales concentration (-1)	0.0205	0.0145	-0.0492	0.512**	-0.143	0.127
import purchase concentration (-1)	0.0929**	-0.00528	0.0754*	0.0761	0.120	-0.0960
Constant	0.0342	0.0545	0.0980**	0.546*	0.278*	0.00342
Observations	13606	9588	8362	13627	9621	8394
R^2	0.017	0.016	0.010	0.014	0.009	0.013

Table 14. Growth rates of manufacturing imports

	Price			Quantity		
	t+1	t+2	t+3	t+1	t+2	t+3
TFP (-1)	* 0.0138	0.0110	0.00127	0.0113	0.0260	0.00127
log(employment)(-1)	** 0.00922	*** 0.0126	0.00142	*** 0.126	0.00811	0.00142
foreign (-1)	*** 0.0677	*** 0.0301	*** 0.0378	*** 0.441	*** 0.0639	*** 0.0378
log (export players)(-1)	0.00500	-0.00176	* 0.0114	0.0257	-0.00940	* 0.0114
log (import players)(-1)	*** 0.0238	*** 0.0241	0.000376	*** 0.134	*** 0.0460	0.000376
export sales concentration (-1)	0.0426	-0.0230	0.0299	0.223	-0.0963	0.0299
import purchase concentration (-1)	0.0233	0.0597	0.000692	** 0.384	** 0.186	0.000692
Constant	0.0338	0.00510	** 0.106	0.142	** 0.247	** 0.106
Observations	20995	16522	14756	20922	16506	14756
R^2	0.015	0.015	0.016	0.016	0.009	0.016

Annex

Descriptive statistics

Table A1. Normalized and relative prices

	Mean	coeff of var	1. %	median	99. %	N of obs	Share*
Prodcom sample							
Normalized prices							
new domestic sales	25.7	99.1	0.0	16.7	97.3	5597	15.8
domestic sales	22.6	103.2	0.0	14.2	96.2	26777	75.7
new export (Prodcom)	28.0	98.3	0.0	18.1	98.4	4262	12.0
export (Prodcom)	24.3	103.0	0.0	15.4	97.7	22865	64.6
new export (trade)	27.2	100.2	0.1	17.2	98.3	15368	43.4
export (trade)	18.5	97.8	0.5	12.1	73.2	25765	72.8
new import	21.5	98.9	0.3	13.8	83.6	22362	63.2
import	11.8	96.9	0.4	7.7	48.3	26378	74.6
Relative prices							
new domestic sales/export	9.5	514.6	-63.0	0.1	191.7	3932	11.1
domestic sales/export	9.8	458.8	-61.0	0.3	167.0	22731	64.3
new import/export	47.3	288.4	-85.9	2.3	620.1	3101	8.8
import/export	55.4	194.2	-63.5	20.8	472.6	13177	37.2
Manufacturing sample							
Normalized new export price	9.6	325.3	0.1	16.3	98.1	30514	34.6
Normalized export price	8.8	339.1	0.3	11.7	80.3	50958	57.8
Normalized new import price	10.5	366.1	0.2	12.4	84.4	52248	59.3
Normalized import price	9.7	314.8	0.2	7.2	54.8	64333	73.0
relative new import/export price	18.5	279.5	-86.0	3.0	657.2	5763	6.5
relative import/export price	25.7	260.5	-66.6	21.6	519.5	22114	25.1

* The share of missing values (per cent).

Table A2. Price and quantity growth rates, share in total turnover of new products in Prodcom sample

New products in year zero	y	Mean	coeff of var	1. %	median	99. %	N of obs	Share*
price growth of domestic sales	1	10.7	375.4	-54.9	1.7	167.1	5929	16.8
	2	9.7	314.8	-45.2	3.7	117.0	5563	15.7
	3	8.8	339.1	-45.8	3.3	113.9	4680	13.2
quantity growth of domestic sales	1	46.5	267.4	-74.4	8.5	605.3	5929	16.8
	2	21.1	306.5	-68.1	6.6	279.5	5563	15.7
	3	18.8	337.0	-68.2	5.3	275.8	4680	13.2
share in domestic sales	1	36.3	91.2	0.7	25.0	99.7	2995	8.5
	2	43.8	80.1	1.0	35.8	99.9	2845	8.0
	3	45.0	77.6	1.2	38.3	99.9	2691	7.6
price growth of Prodcom exports	1	10.5	366.1	-53.6	2.4	153.5	5501	15.6
	2	9.6	325.3	-45.2	3.1	119.8	4946	14.0
	3	7.4	388.8	-45.6	2.4	109.7	4170	11.8
quantity growth of Prodcom exports	1	74.8	231.1	-78.8	15.1	822.2	5501	15.6
	2	28.7	281.4	-74.0	8.5	341.7	4946	14.0
	3	23.2	323.0	-74.6	5.8	321.8	4170	11.8
share in Prodcom exports	1	35.9	96.0	0.6	21.5	99.8	2605	7.4
	2	42.5	84.0	0.9	33.1	99.9	2474	7.0
	3	43.9	80.1	0.9	37.9	99.9	2269	6.4
price growth of Manufacturing exports	1	21.2	287.7	-55.1	4.4	280.9	10617	30.0
	2	14.2	301.3	-49.3	3.9	182.2	7552	21.3
	3	11.7	326.5	-50.4	3.7	159.6	6767	19.1
quantity growth of Manufacturing exports	1	188.3	196.1	-80.1	52.6	1812.9	10617	30.0
	2	55.7	276.0	-84.8	7.3	715.4	7552	21.3
	3	49.7	286.3	-83.5	7.6	651.9	6767	19.1
share in Manufacturing exports	1	19.8	158.8	0.0	2.3	99.7	10372	29.3
	2	20.0	156.6	0.0	2.4	99.7	8935	25.3
	3	20.4	154.4	0.0	2.6	99.5	8109	22.9
price growth of imports	1	25.7	260.5	-54.0	5.4	312.9	16243	45.9
	2	18.5	279.5	-50.9	4.6	233.3	12555	35.5
	3	16.3	284.6	-49.0	4.2	200.4	11251	31.8
quantity growth of imports	1	189.3	182.5	-70.9	63.2	1692.3	16243	45.9
	2	54.7	260.4	-78.9	10.7	656.0	12555	35.5
	3	50.1	253.7	-77.9	11.4	578.6	11251	31.8
share in imports	1	13.5	167.3	0.0	2.9	93.0	16243	45.9
	2	11.3	171.3	0.0	2.4	84.2	14341	40.5
	3	11.1	167.9	0.0	2.5	80.5	12950	36.6

* The share of missing values (per cent).

Table A3. Price and quantity growth rates, share in total turnover of new products in manufacturing sample

New products in year zero	y	Mean	coeff of var	1. %	median	99. %	N of obs	Share*
price growth of exports	1	22.1	291.5	-59.3	4.5	289.4	19014	21.6
	2	16.4	299.2	-52.5	4.1	214.3	12648	14.4
	3	12.6	335.0	-54.6	3.8	175.4	10759	12.2
quantity growth of exports	1	181.9	193.9	-80.6	51.0	1710.4	19014	21.6
	2	52.7	288.7	-85.5	5.8	703.1	12648	14.4
	3	47.0	296.5	-84.7	6.1	637.8	10759	12.2
share in exports	1	25.1	134.4	0.0	5.4	99.8	17489	19.8
	2	24.1	137.1	0.0	4.8	99.6	14475	16.4
	3	23.7	138.2	0.0	4.7	99.6	12687	14.4
price growth of imports	1	26.6	264.1	-57.8	5.5	321.7	32984	37.4
	2	19.7	283.5	-54.0	4.8	249.8	23942	27.2
	3	18.4	284.2	-52.4	4.3	230.5	20717	23.5
quantity growth of imports	1	175.6	181.5	-72.1	59.9	1565.9	32984	37.4
	2	52.7	261.1	-79.9	10.4	622.4	23942	27.2
	3	49.5	257.9	-78.5	10.3	575.2	20717	23.5
share in imports	1	19.6	145.9	0.1	4.8	99.0	32398	36.8
	2	17.3	153.2	0.1	4.0	97.8	27738	31.5
	3	15.8	154.8	0.0	3.7	94.0	24225	27.5

* The share of missing values (per cent).

Table A4. Number of market participants and market concentration

	mean	coeff of var	1. %	median	99. %	Nob	Share*
Prodcom							
number of participants							
manuf export weighted	28.2	127.0	1.0	16.0	175.4	29143	17.6
manuf export	28.6	105.0	1.3	20.8	154.6	29143	17.6
import weighted	99.9	129.5	2.0	54.0	610.6	29518	16.6
import	101.3	101.7	3.0	74.2	484.7	29518	16.6
Prodcom export weighted	26.1	142.2	1.0	11.5	164.0	29526	16.5
Prodcom export	25.4	140.2	1.0	11.5	164.0	29526	16.5
domestic sales weighted	50.0	138.8	1.0	22.4	270.0	31701	10.4
domestic sales	48.3	135.4	1.0	22.5	270.0	31701	10.4
concentration ratio							
manuf export	0.5	55.0	0.1	0.4	1.0	29143	17.6
import	0.3	66.9	0.0	0.2	0.9	29518	16.6
Prodcom export weighted	0.4	63.7	0.0	0.4	1.0	29526	16.5
Prodcom export	0.5	60.3	0.0	0.4	1.0	29526	16.5
domestic sales weighted	0.3	86.7	0.0	0.2	1.0	31701	10.4
domestic sales	0.3	81.4	0.0	0.2	1.0	31701	10.4
Manufacturing							
number of participants							
export weighted	31.2	132.3	1.0	17.0	212.9	58359	33.8
export	31.1	115.6	1.0	21.0	176.2	58359	33.8
import weighted	110.1	136.0	2.0	56.9	719.3	72316	17.9
import	109.0	113.9	2.0	73.5	589.3	72316	17.9
concentration ratio							
export weighted	0.5	55.8	0.1	0.4	1.0	58359	33.8
export	0.5	46.8	0.1	0.4	1.0	58359	33.8
import weighted	0.3	70.0	0.0	0.2	1.0	72316	17.9
import	0.3	58.0	0.0	0.3	0.9	72316	17.9

* The share of missing values (per cent).

Table A5. New export distribution (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	0.6	0.4	1.0	1.4	1.6	1.8	1.0	2.4	3.4
	L	6.5	20.3	19.6	50.1	26.2	70.4	26.9	69.7	96.6
	Total	7.1	20.8	20.6	51.5	27.7	72.3	27.9	72.1	100.0

Table A6. Export distribution (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	0.1	0.1	0.3	0.6	0.4	0.8	0.3	0.9	1.2
	L	4.2	15.4	10.6	68.7	14.7	84.1	19.6	79.2	98.8
	Total	4.3	15.5	10.9	69.3	15.2	84.8	19.8	80.2	100.0

Table A7. New import distribution (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	0.5	0.4	1.1	1.1	1.5	1.5	0.9	2.2	3.0
	L	6.2	21.1	5.1	64.6	11.3	85.7	27.3	69.7	97.0
	Total	6.7	21.5	6.1	65.7	12.8	87.2	28.1	71.9	100.0

Table A8. Import distribution (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	0.2	0.2	0.4	1.1	0.5	1.3	0.4	1.5	1.9
	L	3.3	22.5	6.5	65.9	9.7	88.4	25.8	72.4	98.1
	Total	3.4	22.7	6.8	67.0	10.3	89.7	26.2	73.8	100.0

Table A9. Share of new export after one year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	32.9	24.6	31.9	21.1	32.4	22.2	30.4	27.0	28.3
	L	20.0	13.5	20.3	12.7	20.1	13.0	16.9	14.9	15.9
	Total	24.4	15.7	26.1	14.8	25.2	15.2	20.7	19.1	19.8

Table A10. Share of new export after two years (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	33.6	24.6	30.2	24.4	31.8	24.5	30.7	27.4	28.7
	L	20.8	14.2	19.6	13.0	20.3	13.5	17.6	14.8	16.1
	Total	24.9	16.2	24.7	15.9	24.8	16.0	21.0	19.1	20.0

Table A11. Share of new export after three years (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	35.7	23.3	31.3	24.5	33.2	24.2	31.6	28.0	29.4
	L	20.3	15.6	20.2	13.5	20.3	14.3	18.0	15.3	16.6
	Total	24.9	17.0	25.6	16.2	25.2	16.5	21.4	19.5	20.4

Table A12. Share of new import after one year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	24.3	17.2	22.5	13.4	23.2	14.5	21.9	18.1	19.5
	L	14.6	9.4	13.4	8.0	14.2	8.6	12.1	9.6	10.8
	Total	17.6	11.0	17.7	9.4	17.6	10.0	14.6	12.5	13.5

Table A13. Share of new import after two years (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	21.3	14.7	18.7	11.8	19.8	12.6	18.8	15.2	16.5
	L	12.2	7.9	12.0	7.2	12.1	7.4	10.0	8.5	9.2
	Total	14.8	9.2	15.1	8.3	14.9	8.7	12.1	10.7	11.3

Table A14. Share of new import after three years (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	20.0	13.5	17.0	12.1	18.2	12.5	17.6	14.4	15.5
	L	12.0	8.4	11.5	7.5	11.8	7.9	10.2	8.6	9.3
	Total	14.3	9.3	14.0	8.7	14.1	8.9	11.9	10.5	11.1

Table A15. Average normalized prices of new exports (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	21.7	21.7	23.9	24.1	22.8	23.3	21.7	24.0	23.0
	L	25.3	25.8	26.3	27.0	25.7	26.6	25.6	26.8	26.2
	Total	23.8	25.0	24.9	26.2	24.3	25.8	24.2	25.7	25.0

Table A16. Average normalized prices of exports (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	17.1	18.9	18.1	18.9	17.6	18.9	17.5	18.4	18.0
	L	19.2	18.1	19.5	18.6	19.3	18.4	18.7	18.9	18.8
	Total	18.2	18.3	18.6	18.7	18.4	18.6	18.2	18.7	18.5

Table A17. Average normalized prices of new imports (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	18.9	18.2	19.5	19.8	19.2	19.3	18.7	19.6	19.3
	L	21.4	22.7	21.9	24.7	21.6	23.9	22.0	23.8	22.9
	Total	20.4	21.7	20.6	23.2	20.5	22.6	20.9	22.1	21.5

Table A18. Average normalized prices of imports (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	10.9	10.2	11.5	10.7	11.2	10.6	10.7	11.2	11.0
	L	12.7	11.4	12.6	12.3	12.7	11.9	12.2	12.4	12.3
	Total	11.9	11.1	12.0	11.8	11.9	11.5	11.6	11.9	11.8

Table A19. Ratio of the difference between new export prices and new import prices to new import prices (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	75.7	55.7	71.9	51.7	73.7	52.9	66.8	59.0	61.8
	L	45.4	41.4	46.3	42.6	45.7	42.1	42.9	43.3	43.1
	Total	52.9	43.4	55.6	44.5	54.1	44.1	47.3	47.2	47.3

Table A20. Ratio of the difference between export prices and import prices to import prices (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	73.9	55.5	65.7	53.5	69.4	54.1	65.5	58.0	60.6
	L	51.5	55.8	52.5	53.7	51.9	54.5	53.8	53.4	53.6
	Total	56.9	55.7	57.5	53.6	57.1	54.4	56.3	54.7	55.4

Table A21. Price increase of new exports next year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	19.6	19.6	19.9	18.0	19.8	18.5	19.6	19.1	19.3
	L	18.1	23.4	18.2	25.9	18.1	24.9	20.5	23.6	22.2
	Total	18.6	22.6	19.1	23.9	18.9	23.4	20.3	22.0	21.2

Table A22. Price increase of new exports in the second year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	10.5	15.4	14.1	14.6	12.4	14.9	12.0	14.3	13.4
	L	12.6	17.9	12.2	14.5	12.5	15.8	15.3	13.9	14.5
	Total	11.9	17.4	13.1	14.6	12.4	15.6	14.3	14.0	14.2

Table A23. Price increase of new exports in the third year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	11.8	17.6	10.3	9.4	11.0	11.8	13.6	9.9	11.3
	L	9.3	12.5	11.9	13.1	10.3	12.9	10.9	12.8	11.9
	Total	10.1	13.5	11.1	12.2	10.6	12.7	11.6	11.8	11.7

Table A24. Quantity increase of new exports in the first year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	131	198	163	171	149	180	150	167	160
	L	184	219	181	214	183	216	201	205	203
	Total	164	215	172	203	168	208	186	191	188

Table A25. Quantity increase of new exports in the second year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	37.5	45.3	49.2	49.6	43.6	48.3	39.8	49.4	45.5
	L	55.0	65.6	50.0	64.7	53.1	65.0	60.3	60.7	60.5
	Total	48.6	61.7	49.6	60.9	49.0	61.2	54.3	56.8	55.7

Table A26. Quantity increase of new exports in the third year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	43.9	47.4	43.6	41.3	43.8	43.2	45.0	42.5	43.5
	L	44.1	55.7	48.8	56.7	45.9	56.3	49.9	54.6	52.4
	Total	44.0	54.1	46.1	53.0	45.0	53.4	48.6	50.5	49.7

Table A27. Price increase of new imports in the first year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	20.5	24.6	21.6	25.3	21.1	25.1	21.8	23.3	22.7
	L	21.8	32.2	22.2	29.9	21.9	30.8	26.7	27.6	27.1
	Total	21.3	30.7	21.9	28.7	21.6	29.4	25.3	26.1	25.7

Table A28. Price increase of new imports in the second year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	13.5	18.1	14.5	18.7	14.0	18.5	15.1	16.6	16.0
	L	16.1	22.2	16.5	20.9	16.3	21.4	19.2	19.7	19.4
	Total	15.3	21.5	15.6	20.4	15.4	20.7	18.2	18.7	18.5

Table A29. Price increase of new imports in the third year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	13.7	19.0	14.9	16.8	14.4	17.4	15.6	15.9	15.8
	L	13.8	18.3	14.5	17.7	14.1	17.9	16.1	16.9	16.5
	Total	13.7	18.4	14.7	17.5	14.2	17.8	16.0	16.6	16.3

Table A30. Quantity increase of new imports in the first year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	146	182	140	181	143	181	157	159	158
	L	173	215	186	226	178	222	193	214	204
	Total	164	208	163	214	164	212	183	194	189

Table A31. Quantity increase of new imports in the second year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	29.1	43.0	52.0	59.0	42.1	54.6	33.9	55.6	47.7
	L	47.5	61.0	51.3	63.3	49.0	62.4	54.4	60.0	57.4
	Total	42.1	57.8	51.6	62.2	46.5	60.7	49.5	58.6	54.7

Table A32. Quantity increase of new imports in the third year (per cent)

		TFP				Total				
		S		L						
		Foreign				Foreign		TFP		
		S	L	S	L	S	L	S	L	
Size	S	36.4	38.1	33.2	61.0	34.5	54.8	37.0	48.0	44.2
	L	46.8	53.1	48.8	56.0	47.6	55.0	50.1	54.1	52.3
	Total	43.9	50.6	41.9	57.2	43.0	54.9	47.2	52.2	50.1