Sequential Exporting in a Context of Trade Liberalisation
The Case of Peru

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ABSTRACT

With a wide dataset of Peruvian firms that exported to the United States between 2006 and 2013, this paper attempts to measure the impact of the Free Trade Agreement signed by Peru and the United States on the dynamics of Peruvian exporters, by reorienting the analysis on sequential exporting, focusing now on product diversification, and incorporating the issue of trade liberalisation. This research tests whether new Peruvian exporters to the US are more likely to intensify their participation in that market, and whether trade liberalisation boosts even more such behaviour. Firms with one-year experience in the US market grow more at the intensive and extensive margin than more experienced firms; but absolute beginners are more likely to stop exporting a product to the US, and have a disadvantage in the intensive margin. Trade liberalisation, expressed as a tariff reduction by USA through a bilateral Free Trade Agreement, intensifies many of these dynamics. That boost in the intensive margin is more evident in small and medium firms. However, trade liberalisation seems to hamper new firms' growth in the extensive margin, except for large firms.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

Appendix D: Correlation Matrices

1. INTRODUCTION

Since the early 1990s, Peru has undertaken a series of liberal economic reforms, including a determined increase of its trade openness, unilaterally reducing tariff levels and dispersion. In parallel, the United States, historically Peru's most important trading partner, implemented since 1991 unilateral trade preferences to several Peruvian exports through the Andean Trade Preference Act (ATPA) and the Andean Trade Promotion and Drug Eradication Act (ATPDEA), which were periodically renewed.

In order to stop depending on the ATPDEA renewals, Peru began the negotiations of a Free Trade Agreement with the United States, approved in 2006 and coming into force on the 1st of February, 2009, consolidating the free entry to USA of 98% of tariff lines. Before and after the enactment, a controversy arose about the potential effects of this agreement on Peruvian exports, especially exports from manufacturing industries and smaller firms. The common argument by agents against the FTA was that these firms would be harmed by the agreement for their increasing exposure to competition with US products, driving down their prices.

So far, most studies and official reports on the impact of the USA-Peru Free Trade Agreement have focused on the overall rise in exports to USA, which has been on average 5.81% between 2008 and 2012[1]. However, a great part of that increase is accounted for by a small number of products, mostly traditional exports[2] like minerals, oil and fuel and, to a minor extent, agriculture and textile products. Moreover, other reports[3] reveal that from 2009 to 2011, 1973 new firms began exporting to USA, being 1782 micro and small enterprises[4]; but only 180 of them remained exporting during those years.

Five years after the USA-Peru Free Trade Agreement came into force, several research questions can be addressed on the impact of this treaty on the performance of Peruvian exporters, by the design of firm-level models. And the analysis of Peruvian export dynamics in the US market is a good starting point.

Recent literature has addressed the dynamics of exports at the firm level, first agreeing that the most productive firms decide to enter the export market, paying sunk entry costs, and increasing their knowledge about their productivity through export experience, compared to non-exporters. But a common feature identified is the continuous flow of entry and exit of firms into the exporting activity. Many firms leave it after few years, despite having borne the entry costs; while some of those that continue to export grow and expand to other markets.

This firm behaviour has been explored by diverse studies, such as Albornoz *et al.* (2012). These authors focus their analysis on new exporters (firms with only one-year experience), finding that this type of firm drops out of the export business very quickly; however, those new exporters that remain in the market grow at both the intensive margin (export growth in one destination) and the extensive margin (entering new destinations). Thus, new exporters that continue to export experience a sequential exporting process.

Nevertheless, this sequential exporting issue has not been analysed yet, to my knowledge, in a context of trade liberalisation. Other studies addressing the entry, exit and survival of firms in

[1] Source: Commission for Promotion of Exports and Tourism of Peru – PROMPERÚ.
[2] Traditional exports mainly embraces commodities and raw material from the mining, fishery, agriculture and fuel sectors; in contrast, non-traditional exports considers more value-added products from the mentioned sectors, as well as the textile, chemical, metallic, timber, jewellery and other sectors. That categorisation became popular in Peru since the late 1970s.
[3] Source: Ministry of Foreign Trade and Tourism of Peru.
[4] That study considered as large firms those that exported over US$ 10 million per year; medium firms were those exporting between US$ 1 million and US$ 10 million; small firms exported between US$ 100,000 and US$ 1 million; and finally micro enterprises exported less than US$ 100,000 per year.

the export market have considered the existence of preferential trade agreements or tariff reductions only to a very limited extent. Moreover, the export dynamics researched by Albornoz *et al.* (2012) was in terms of market (destination) diversification. How do export dynamics work across products within one particular destination?

Given the existence of these mentioned gaps, this paper attempts to contribute to the literature by providing one of the first researches on the impact of the USA-Peru Free Trade Agreement on the performance of Peruvian firms, five years after its enactment. This is done through a reorientation of the sequential exporting analysis, now focusing on the dynamics new exporters undergo in terms of product diversification within one destination, and incorporating into that analysis the issue of trade liberalisation.

In summary, this paper pursues to address the following questions: Are Peruvian firms with one-year experience in the US market more likely than more experienced firms to grow their exports to that country at the intensive (export growth in one product) and extensive margin (entry with other products)? Are these firms more likely to give up exporting a product to the US than more experienced firms? Does the trade liberalisation process undertaken by Peru with the United States boost even more these dynamics?

A very rich dataset of Peruvian firms that exported to USA during the 2006-2013 time period is employed to address these questions, through three different models on intensive margin, entry and exit.

A particular challenge for this and future researches is that the enactment of this Free Trade Agreement occurred in the same year as the world economic crisis that negatively affected Peruvian exports. Hence, it is necessary to disentangle the effects of the crisis from those of liberalisation.

The results show that firms that are new exporting product j to USA or new in the overall US market grow more at the intensive margin than more experienced firms; whereas firms that meet these two criteria at the same time (absolute beginners) are in disadvantage. In terms of the extensive margin, new firms in the overall US market are more likely to jump further and export a new product to the US than more experienced firms. Furthermore, being new in the export of product j to USA or an absolute beginner makes a Peruvian firm more likely to leave that product's market; while having one-year experience in the overall US export market discourages firms from exiting. Some of these outcomes differ from the predictions and empirical results of Albornoz *et al.* (2012), giving a sign that export dynamics across products behave in a different way from across destinations.

The effects of trade liberalisation, expressed as the change in tariff rates of a particular product, are diverse across models, and the significance levels are not so high. A reduction of tariff rates by the USA-Peru FTA is associated with an increase in export growth rates of product j to USA, in the probability of entering with a new product to the USA market, and in the probability of exiting the export business of that product. The effects of liberalisation in the intensive margin are more evident for new firms in product j and new firms in the US export market (especially small and medium firms). The effects on the exit seem to be clearer for absolute beginners and new firms exporting product j to USA. However, trade liberalisation seems to hamper the entry with a new product by new firms in the US market, except for the largest firms.

The remainder of the paper is organised as follows. Section 2 summarises the literature previously reviewed. Section 3 describes the data and provides a descriptive analysis of Peruvian firms' export performance in the US market. Section 4 presents the three models with their respective results and robustness checks. Section 5 concludes, pointing out some limitations in the analysis, and proposing issues for further research.

2. LITERATURE REVIEW

2.1 EXPORT DECISION: ENTRY, EXIT AND SURVIVAL

Several researches have raised the issue of the dynamics of the export market, in which there are constant flows of firm entry and exit, as well as others that survive and evolve in both the intensive (within one market) and extensive margin (across markets).

Roberts and Tybout (1997) focus on the entry decision in the Colombian case (1981-1989), quantifying the effect of prior exporting experience on the decision of manufacturing plants to enter into foreign markets. These authors, as well as other studies, depart from the idea that a firm decides to export if the expected increment to gross future profits for the plant exceeds the sunk entry costs. They obtain a very relevant finding: exporting experience depreciates once plants cease servicing foreign markets. After a two-year absence, the re-entry costs are not significantly different from those faced by a new exporter. Additionally, larger and older plants, owned by corporations, are all more likely to export.

Other papers deal with the entry and exit export dynamics in the way of a descriptive analysis. Eaton et al. (2007) do it in the Colombian context, with custom-level data from 1996 to 2005. They find that, while many firms enter and exit from exporting, these tend to account for small contributions to overall export revenues. Export sales are dominated by a small number of very large and stable exporters. Also, most entering firms leave after one year of exporting, and a small minority go on to become incumbents.

Another descriptive analysis was done, this time for the Peruvian non-traditional agricultural sector (1994-2007), by Freund and Piérola (2010). They developed a theory that states, contrary to studies like Albornoz *et al.* (2012), that smaller firms can discover their entry costs by a very costless and cheap trial, while the larger the firm, the larger the initial exports. On the other hand, developing new products requires a much larger entry cost. This is corroborated by the descriptive analysis, which shows that larger firms tend to export to more products and markets, emphasising a considerable entry and exit of exporters each year. That exit is especially likely after the first year and among small firms. Overall, it is cheaper to enter a new country than to develop a new product.

Recent studies have also focused on the entry and exit dynamics into the export market, but now adding a new subject of analysis: the survival (duration) of trade relations. Besedes and Prusa (2006) made a survival analysis to study the duration of US imports from up to 180 countries. They find that international trade is far more dynamic than previously thought, with a short median duration of US imports, of about 2 or 4 years. They also find a negative duration dependence, meaning that if a country can survive exporting for the first few years, its failure probability is smaller, being likely to export a product for longer. In general, trade relationships involving either small initial value, small economies or small exporters tend to be short lived.

Using a different focus for survival, Malca and Rubio (2012) developed a logit model to analyse the relation between continuity of Peruvian firms in export markets and their export performances, measured in export sales. By using different measures, the authors find that, in the agriculture sector, for one additional year a firm exports, there is a considerable increase, between 50.7% and 206.6%, in the probability of survival. They classify firms by their mean annual exports, employing two categories: small (below US$ 50,000) and large (above or equal to US$ 50,000).

However, two methodologies were commonly used by different researches to measure the probability of survival of export relations: the Kaplan-Meier estimator and the Cox proportional hazard models. Besedes and Prusa (2006b), by using both methodologies, examine the extent to which product differentiation affects duration of US import trade relationships. They obtain that

differentiated products have a median duration more than twice as long as other product types, and that differentiated products start with considerably smaller initial purchases. As these initial purchases increase, duration increases as well as differences across product types.

Like this work, many others analysed export survival by employing the two mentioned methodologies, such as Besedes and Blyde (2010) for Latin America, Carrere and Strauss-Khan (2014) for non-OECD countries, and Volpe and Carballo (2009) in the Peruvian case. This research, covering the 2000-2006 period and considering only new exporters (firms that exported for the first time since 2000), finds that both geographical and product diversification of exports increase the chances of remaining an exporter, but this effect is larger for geographical diversification. Larger firms, in terms of number of employees, are more likely to survive in international markets, according to the authors. Other studies discard the use of the Cox model and explore alternative methodologies like discrete-time models, employed by Hess and Persson (2010), or the Prentice-Gloecker (1978) model, used by Brenton et al. (2010).

From the above mentioned researches, just few of them incorporate the trade liberalisation issue, in a very vague way, into the analysis of export dynamics, giving an open space for further research[5]. Also, to my knowledge, few studies using rich firm and custom-level data were made for the Peruvian case, and given the recent enactment of the USA-Peru Free Trade agreement and other similar treaties, I have not found until now firm-level researches incorporating the trade liberalisation issue for Peru. In that sense, there is an alternative view that will serve as a base to address the dynamics of exports in Peru, in a context of trade liberalisation.

2.2 SEQUENTIAL EXPORTING: INTENSIVE, EXTENSIVE MARGIN AND EXIT

The methodologies proposed for this paper are inspired in a previous research by Albornoz *et al.* (2012) for the Argentinean industry, between 2002 and 2007. The authors emphasise that many new exporters give up exporting very shortly after entering, despite the existence of substantial entry costs; while others shoot up foreign sales and expand to new destinations.

The basic assumption of their work is that a firm's export profitability is initially uncertain, and it will only be known once it enters the export market, paying a fixed entry cost. Such export profitability is positively correlated over time (persistent but ex-ante unknown demand patterns) and across destinations (similarities in either demand or supply conditions). The discovery of this profitability by firms leads to a "sequential exporting" process, in which firms use their initial export experience to infer information on their future success in a market and others. For the effects of their research, Albornoz *et al.* consider an exporter as new in year t if it began its export experience in t-1.

The authors develop a model of profit maximisation, leading to three main implications, which are the predictions they test subsequently:

1. Conditional on survival, a faster intensive margin export growth should be expected when firms are learning their export profitability (when they are new exporters),

[5] On the other hand, most of the recent works addressing trade liberalisation with firm-level data have been predominantly focused on its relation with the productivity of exporters. The common idea tested is that most productive firms will enter the export market and/or exporting makes firms more productive, and trade liberalisation plays the role of facilitating the access especially for those more productive enterprises. Researches like Bustos (2011) on Argentina; Schor (2004) on Brazil; Pavcnik (2002) on Chile; Fernandes (2007) on Colombia; Amity and Konings (2007) on Indonesia; Bernard and Jensen (1999 and 2004) on the United States; De Loecker (2007) on Slovenia; Van Viesebroeck (2007) on Sub-Saharan African countries; and Lileeva and Trefler (2010) on Canada, go on that line.

because their first-year exports are on average relatively low. This implies that the early expansion of surviving firms is greater in their first markets than in subsequent markets.

2. Conditional on survival, some new exporters realise that their export profitabilities are so high that decide to expand to other markets in the next period. New exporters are more likely to do so than more experienced firms, as the latter already learnt enough about their export profitability, and already made entry decisions in the past.
3. Since experienced exporters are better informed about their export profitability, new exporters are more likely to exit a market because they find out it is not worthwhile to stay in it. That also holds for firms that are new in a market but with experience elsewhere.

After testing these predictions, the authors find that, despite entry sunk costs, many firms that start exporting drop out of the export business very shortly. The successful ones grow at both intensive and extensive margin, experiencing sequential exporting. Since breaking into a new market entails unrecoverable costs, and export profitability has a global scope, these new exporters have an incentive to enter foreign destinations sequentially.

Despite the compelling findings from their work, the issue of trade liberalisation is not considered in this analysis. Indeed, Albornoz *et al.* argue that there is a gap in the literature to link sequential exporting with trade liberalisation processes:

> *"Another area where understanding firms' sequential exporting strategies can be far-reaching is trade policy. (…) The lower tariffs will induce some foreign firms to start exporting. As these new exporters learn about their ability to serve foreign markets, some will be very successful and decide to expand to other foreign destinations. (…) Trade liberalization could lead to entry in third markets even in the short run, if it raises the value of "export experimentation" for some foreign firms. For the same reason, the impact of trade agreements, at both the regional and the multilateral levels, could be much richer than what existing studies indicate. (…) this is an area that surely calls for further research".*

The recent reforms in trade policy undertaken by Peru, especially the approval of the Free Trade Agreement with the United States, and their impact on Peruvian firms' performance represent an interesting issue that has not been sufficiently researched yet. And Albornoz *et al.* provide a good framework for that purpose. It is in that circumstance that this paper attempts to bridge the aforementioned gaps.

While Albornoz *et al.* focused their model on market (destination) diversification, this research tests the existence of sequential exporting for Peruvian firms in terms of product diversification within one specific destination, which is the United States, Peru's most important trading partner. Adapting their predictions to the purposes of this research, and after observing the recent performance of Peruvian exporters in the US export market, I propose a set of models that test the likelihood of Peruvian new exporters in the US market (one-year experience) to grow at the product intensive and extensive margin, as well as their probability to exit the market of a specific product in the US, compared to more experienced firms. Additionally, these models test whether the tariff reduction caused by the USA-Peru Free Trade Agreement boosts even more these export dynamics.

3. DATA AND DESCRIPTIVE ANALYSIS

3.1 DATA COLLECTION

The export data utilised in this paper was provided by the Peruvian Society of Foreign Trade (COMEXPERU in Spanish), a business union which manages data on daily export and import

transactions from different sectors. This information is collected from the Peruvian Tax and Tariff Agency (Superintendencia Nacional de Administracion Tributaria – SUNAT in Spanish).

The time period of the original datasets ranges from 1998 to 2013, and each of the eight datasets compiles information on daily export transactions per firm, from the following eight sectors:

1) Agriculture, which includes traditional commodities like coffee, cotton and sugar, as well as non-traditional products like asparagus, grapes, artichokes, capsicum, among other fruits and vegetables.
2) Basic Metal Industries, which includes processed minerals, like gold, silver, copper, steel and iron, utilised as inputs for other production processes.
3) Chemical, which includes products like medicines, cosmetics, diverse body care items and other products containing chemical solutions.
4) Jewellery, which includes jewels made of different metals like gold and silver. This is the sector with the least amount of tariff lines exported.
5) Metallic-Mechanics, which includes machinery and different tools made of minerals like steel, iron and aluminium (nails, screws, saws, clippers, hammers, among others).
6) Non-Metallic Mining, which includes mineral-based products like salt, cement, marble, pottery, dishes, glass, among others.
7) Textile and Apparel, which includes products like T-shirts, trousers, shirts and other kinds of clothes and fabrics.
8) Timber and Paper, which includes gross timber and diverse products made of timber, like furniture, as well as books, notebooks and other products made of paper and cardboard.

Each transaction registered contains very detailed information, such as the transaction date, name and tax code of the firm, the port of departure, the description and 10-digit tariff line of the product, the destination and port of arrival, the export value in US dollars, the weight and unit of measure. As my interest is focused more on manufacturing industries[6], this paper does not work with exports from sectors like mining, fishery and oil and derivatives, which traditionally account for more than 50% of total Peruvian exports.

From the Peruvian Tax and Tariff Agency, I have also collected some firm-level information. From that source I have obtained data on the year each firm came into existence and, where relevant, the year they exited the market, as well as the region of location of their main headquarter.

Finally, in order to account for the trade liberalisation issue, I have collected data on tariff rates levied by the United States at the 8-digit level, from the World Integrated Trade Solutions (WITS) database of the World Bank. The tariff rates collected derive from the Most Favoured Nation (MFN) scheme, until 2008. From 2009 onwards, I make use of the tariffs valid under the Free Trade Agreement (FTA) between Peru and the United States. Additionally, given that many products were unilaterally liberalised by the US before the enactment of the FTA, under the mentioned ATPDEA scheme, I also collected the list of 8-digit tariff lines eligible under that regime, with their respective effective tariff until 2008.

3.2 DATA PROCESSING

I initially collapsed my datasets to obtain annual export values per firm, overall, per destination and per tariff line. Since the main interest of this paper is the US market, as a next step I selected only the firms which have exported to that country within the time period. Appending

[6] I focus on manufacturing industries because a large share of them are small, unlike more traditional extractive industries dominated by medium and large firms. Moreover, there was a previous controversies on a potential damage by an FTA with the US to Peruvian manufacturers, especially the smallest firms.

the datasets for the eight sectors, I achieved a broad dataset of Peruvian exports to USA, consisting of 8976 Peruvian firms. For each firm I constructed export transactions per 8-digit tariff line/year, for the purposes of this paper. In total, the dataset compiles 3654 manufacturing 8-digit tariff lines.

In order to categorise these firms per size as an approximation, I calculated the mean of firms' annual exports throughout the 1998-2013 period, which led to the following four groups:

a) Large Firms, which mean annual exports are higher than US$ 1000000.
b) Medium Firms, which mean annual exports range from US$ 100000 to US$ 1000000.
c) Small Firms, which mean annual exports range from US$ 10000 to US$ 100000.
d) Very Small Firms, which mean annual exports are up to US$ 10000.

According to this categorisation, 54.16% of firms are very small and only 6.97% are large. With this broad dataset, I started the descriptive analysis.

3.3 DESCRIPTIVE ANALYSIS

3.3.1 1998-2013 Analysis

From the information on the 8976 Peruvian firms that exported at least once to the United States, I can plot the evolution of their overall exports from 1998 to 2013 in US Dollars and the annual growth rates of those exports. A common pattern in this analysis is that exports follow a continuous growth that gets more pronounced from 2004, but then sharply fall in 2009, exactly the same year the Free Trade Agreement between Peru and the United States came into force. Afterwards, there was a sustained recovery of exports until 2011, and then slightly decreased again from 2012.

Figure 1: Peru - Annual Exports 1998-2013 (US Dollars)

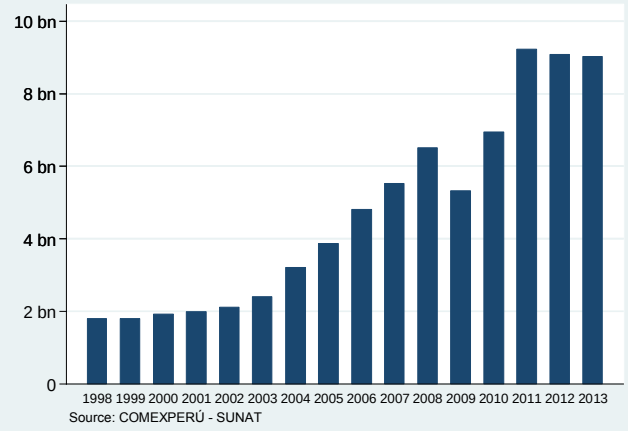
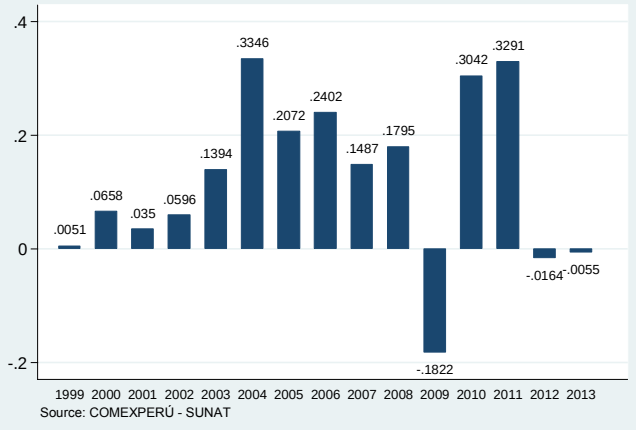


Figure 2: Peru - Annual Exports 1998-2013 (% Growth Rate)



A very similar pattern can be found for the exports by these firms to the United States. The rise in 2004 is greater and the drop in 2009 is sharper in this case, and a slight recovery was attained in 2013. The pronounced decrease of exports in 2009, the same year of the enactment of the USA-Peru FTA represents a challenge for the analysis in this paper, as it is necessary to disentangle the effects of trade liberalisation from the effects from an economic crisis.

Figure 3: Peru - Annual Exports to USA 1998-2013 (US Dollars)

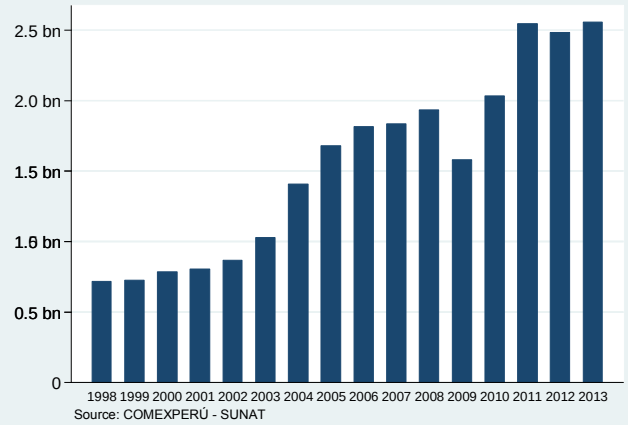


Figure 4: Peru - Annual Exports to USA 1998-2013 (% Growth Rate)

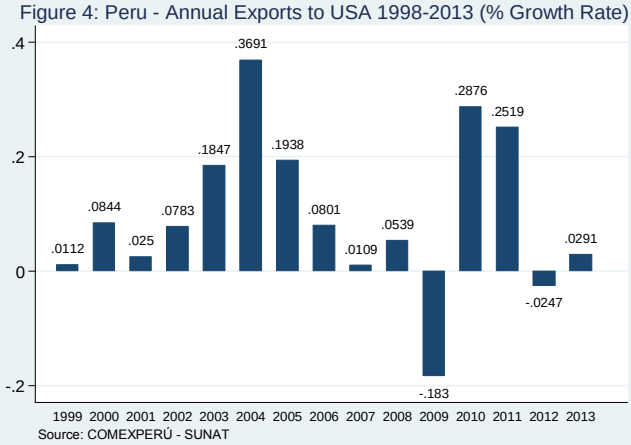
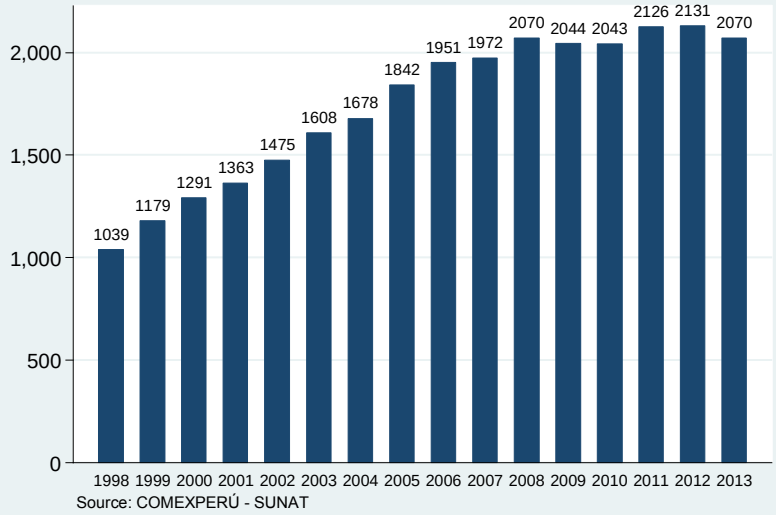


Figure 5 displays the evolution of the number of Peruvian exporting firms to USA during the period analysed. Unlike the export volumes, the number of exporters follows a steady pace since 2008, despite any external shock produced by the crisis during those years. The main effect of it was, therefore, expressed in export volumes.

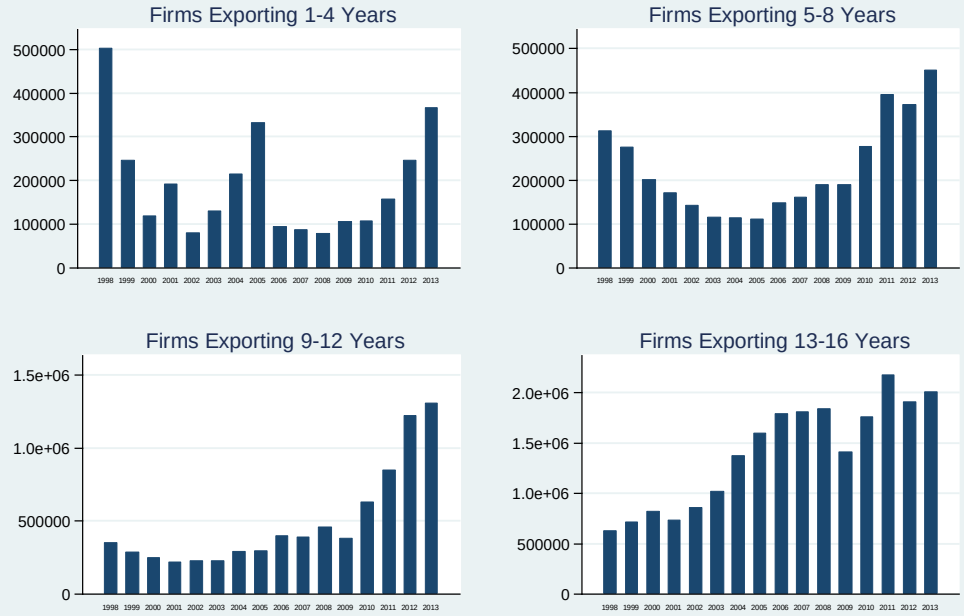
Figure 5: Peru - Number of Firms Exporting to USA 1998-2013



For each firm, I registered the number of years within the sample in which they actually exported. With that information, and also considering the years each firm actually existed in the market, I calculated mean annual exports to USA per firm. Figure 6 shows how these mean exports evolve over time according to firms' experience measured by the number of years they exported. 66.17% of all firms analysed have only between 1 and 4 years exporting.

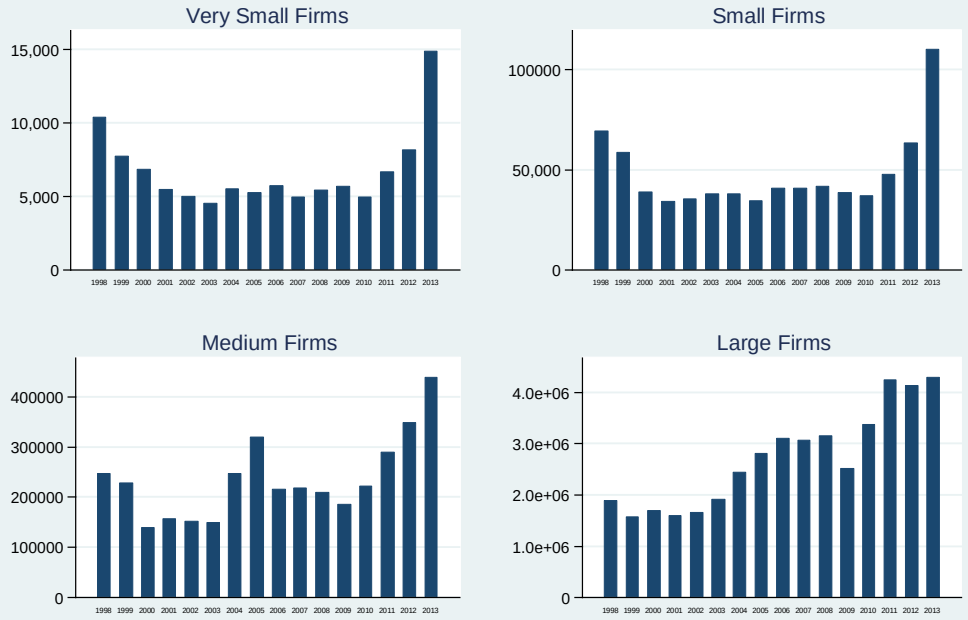
These graphs present one striking pattern. Firms with less participation in the export market do not seem to suffer so much the effects of the economic crisis between 2008 and 2010. They rather increase on average their export volumes until 2013. Firms with most years active in the export market tend to reflect more the trend shown in the first figures, with a sharp fall in 2009, a subsequent recovery and a final drop in 2012.

Figure 6: Peru - Mean Annual Exports to USA 1998-2013 (US Dollars) - Experience



Source: COMEXPERÚ - SUNAT

Figure 7: Peru - Mean Annual Exports to USA 1998-2013 (US Dollars) - Firm Size



Source: COMEXPERÚ - SUNAT

Even more striking are the statistics provided in Figure 7 which takes into account the firm size measured by the mean annual exports per firm. All types of firms except the large ones experience a continuous positive evolution in exports during the last four years of the sample, exactly when the USA-Peru FTA was in course, with a pronounced jump in 2013. Again, the figures for larger firms follow the overall trend presented earlier. Figures 6 and 7 might give a first signal that the bilateral trade liberalisation between both countries facilitated the export

growth and entry of new Peruvian firms into that market, especially the smallest ones and those with limited export experience.

One issue that is relevant for the analysis in this paper is the entry and exit of Peruvian firms into the US export market, and one first approximation to this is by looking at the first and last year firms participated in that market. Figures 8 and 9 illustrate the densities of the first and last year firms exported to USA, respectively. They show that there was a decline in the entry of new firms from 2009 onwards and a continuous exit, which was more pronounced in 2011 and 2012. However, a more focused analysis per firm size displayed that for small and very small firms, there was rather an active entry of new firms between 2009 and 2013, the years of the FTA. Therefore, these figures might provide further signs that a bilateral liberalisation between Peru and USA, apart from boosting the exit of firms (presumably doing a "trial and error" practice), also facilitates the entry of smaller Peruvian exporters.

Figure 8: Peru - First Year Exporting to USA by Firms 1998-2013

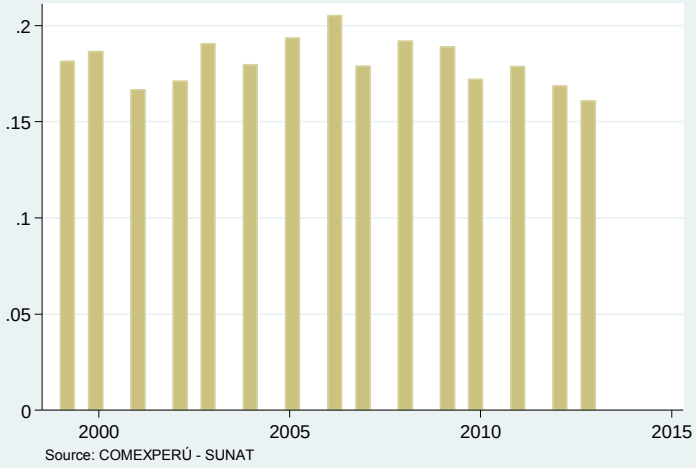
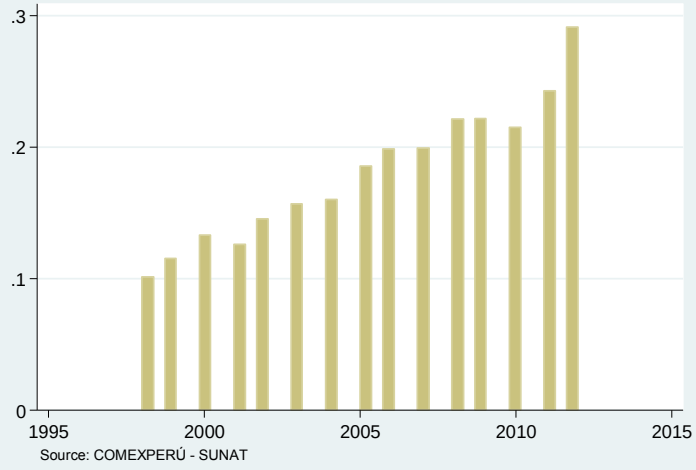


Figure 9: Peru - Last Year Exporting to USA by Firms 1998-2013



3.3.2 2006-2013 Analysis

For the subsequent econometric analysis, I reduced the sample to the 2006-2013 time period. The main argument to begin this period in 2006 is that at the end of 2005, the negotiations between both countries to achieve the FTA were concluded and, since then, some uncertainty was present due to the time taken by Peruvian and American congresses to approve the treaty. Also, three years before the FTA are a reasonable time to analyse any potential change in the variables of interest.

The sample reduction led to a final amount of 4579 Peruvian exporters, 2371 8-digit tariff lines and 31311 firm-product pairs. Since some tariff lines did not have available information on actual tariff levels before the enactment of the Free Trade Agreement, they had to be removed from the dataset, and that also led to the removal of some firms from the analysis.

From this new sample of firms, 45.82% are considered very small firms for the purposes of this paper; 23.91% are small; 18.72% are medium sized firms; whereas the remaining 11.55% are considered large. Moreover, 19.22% of these firms only had a one-year overall experience exporting, and almost 50% (49.22%) have up to four years exporting only.

Tables 1 and 2 provide an analysis of the continuity of Peruvian firms in the US export market. Table 1 indicates, for instance, that from the 1914 firms that exported to USA in 2006, 64.73% (1239 firms) exported in 2007. Overall, this table shows that just over 60% of firms that exported to USA in a particular year do it the year after, which means that over 30% of firms leave the US market after one year. Hence, attrition levels are quite high. On the other hand, Table 2 shows that, for example, from the 1927 firms that exported to USA in 2007, 64.30% (1239 firms) did it in 2006. In general, this table shows that between 63% and 76% of firms that exported to USA in a particular year did it the year before. That means that between 24% and 37% of firms each year entered or re-entered into the US export market. Therefore, these two tables provide an idea of how dynamic this market is in terms of entry and exit.

Table 1
Peru - USA: Export Participation of Firms 2006-2013 (% columns)

Year	2006		2007		2008		2009		2010		2011		2012		2013	
	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq
2006	1914	100.00%														
2007	1239	64.73%	1927	100.00%												
2008	1083	56.58%	1277	66.27%	2012	100.00%										
2009	932	48.69%	1044	54.18%	1284	63.82%	1832	100.00%								
2010	850	44.41%	929	48.21%	1092	54.27%	1201	65.56%	1660	100.00%						
2011	766	40.02%	842	43.69%	984	48.91%	1048	57.21%	1139	68.61%	1581	100.00%				
2012	712	37.20%	765	39.70%	883	43.89%	922	50.33%	992	59.76%	1090	68.94%	1461	100.00%		
2013	655	34.22%	704	36.53%	804	39.96%	837	45.69%	896	53.98%	950	60.09%	997	68.24%	1309	100.00%

Source: COMEXPERÚ - SUNAT

Table 2
Peru - USA: Export Participation of Firms 2006-2013 (% rows)

Year	2006		2007		2008		2009		2010		2011		2012		2013	
	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq
2006	1914	100.00%														
2007	1239	64.30%	1927	100.00%												
2008	1083	53.83%	1277	63.47%	2012	100.00%										
2009	932	50.87%	1044	56.99%	1284	70.09%	1832	100.00%								
2010	850	51.20%	929	55.96%	1092	65.78%	1201	72.35%	1660	100.00%						
2011	766	48.45%	842	53.26%	984	62.24%	1048	66.29%	1139	72.04%	1581	100.00%				
2012	712	48.73%	765	52.36%	883	60.44%	922	63.11%	992	67.90%	1090	74.61%	1461	100.00%		
2013	655	50.04%	704	53.78%	804	61.42%	837	63.94%	896	68.45%	950	72.57%	997	76.17%	1309	100.00%

Source: COMEXPERÚ - SUNAT

Another approach, closer to the subsequent econometric analysis, is to look at the dynamics of the firm-product pairs included in the sample. 62.49% of these pairs are present in the sample only for one year, whereas 15.94% do it for two years. Tables 3 and 4 repeat the same exercise done with firms for the case of firm-product pairs. The former says that over 50% of firm-product pairs present in the US export market in a year leave it the year after. The latter, on the other hand, says between 42% and 52% of pairs exporting in a year did it the year before, meaning that from 48% to 58% of pairs that exported in that year entered or re-entered the market. Hence, entry and exit dynamics are more evident at the firm-product-pair level.

Table 3
Peru - USA: Participation of Firm-Product Pairs 2006-2013 (% columns)

Year	2006		2007		2008		2009		2010		2011		2012		2013	
	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq
2006	8721	100.00%														
2007	3738	42.86%	8950	100.00%												
2008	2798	32.08%	4129	46.13%	9132	100.00%										
2009	2314	26.53%	3208	35.84%	4216	46.17%	8073	100.00%								
2010	2055	23.56%	2739	30.60%	3324	36.40%	3829	47.43%	7265	100.00%						
2011	1870	21.44%	2455	27.43%	2873	31.46%	3166	39.22%	3620	49.83%	7181	100.00%				
2012	1670	19.15%	2092	23.37%	2495	27.32%	2665	33.01%	2862	39.39%	3443	47.95%	6681	100.00%		
2013	1460	16.74%	1803	20.15%	2110	23.11%	2222	27.52%	2358	32.46%	2761	38.45%	3153	47.19%	6039	100.00%

Source: COMEXPERÚ - SUNAT

Table 4
Peru - USA: Participation of Firm-Product Pairs 2006-2013 (% rows)

Year	2006		2007		2008		2009		2010		2011		2012		2013	
	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq	N°	Freq
2006	8721	100.00%														
2007	3738	41.77%	8950	100.00%												
2008	2798	30.64%	4129	45.21%	9132	100.00%										
2009	2314	28.66%	3208	39.74%	4216	52.22%	8073	100.00%								
2010	2055	28.29%	2739	37.70%	3324	45.75%	3829	52.70%	7265	100.00%						
2011	1870	26.04%	2455	34.19%	2873	40.01%	3166	44.09%	3620	50.41%	7181	100.00%				
2012	1670	25.00%	2092	31.31%	2495	37.34%	2665	39.89%	2862	42.84%	3443	51.53%	6681	100.00%		
2013	1460	24.18%	1803	29.86%	2110	34.94%	2222	36.79%	2358	39.05%	2761	45.72%	3153	52.21%	6039	100.00%

Source: COMEXPERÚ - SUNAT

4. MODELS AND RESULTS

This section reports the three models estimated in this research, with their respective first results and robustness checks: intensive margin (Model 1), extensive margin (Model 2) and exit (Model 3).

The three models estimated are inspired by the work by Albornoz *et al.* (2012); but they additionally include regressors controlling for trade liberalisation and its possible influence in the performance of new Peruvian exporters. Moreover, while Albornoz *et al.* focus on the extensive, intensive margin and exit of new exporting firms in terms of market diversification (destinations) over time, this research analyses the mentioned phenomena, but in terms of product diversification, within one specific destination, which is the United States.

For the three models proposed, the observations are defined as a Peruvian firm i exporting a product j to the United States at time (year) t. The time-period considered in the regression analysis is from 2006 to 2013.

The main results reported for each model consider samples restricted to firms that began exporting to USA from 2006 onwards, also called "non-re-entrants", since I am mainly interested in the behaviour of genuinely new exporters and the outcomes obtained from these samples are more compatible with the models and hypotheses. From the broad dataset of Peruvian exports to USA between 2006 and 2013, 24.35% of the total observations correspond to "non-re-entrant" firms.

4.1 INTENSIVE MARGIN (EXPORT GROWTH)

4.1.1 The Model

The purpose of this first estimation is to test the following hypothesis on the intensive margin:

Hypothesis 1: *Conditional on survival, having a one-year experience exporting product j to the United States makes firm i likely to increase its exports of that product to USA in year t more than more experienced firms; and trade liberalisation boosts this growth.*

For this first regression, presented in Equation (1) and estimated by a Fixed Effects Model with robust standard errors, the dependent variable *gr_ln_real_ev*$_{ijt}$ is the log of the annual growth of firm i's exports of product j in time t. It is regressed on a binary variable *new_productij*$_{t-1}$ that takes the value 1 if firm i exported that product j to the United States for the first time in year t-1, and 0 otherwise. I also add another binary variable *new_USA*$_{i,t-1}$ that takes the value 1 if that firm i exported to the US market for the first time in year t-1. An interaction of these two dummies, called *new_product_USA*, is also included in the model, which controls for firms I call "absolute beginners" in the US market. Guided by the results achieved by Albornoz *et al.*, I initially expect the signs of these two dummies and, especially, their interaction to be positive.

$$\begin{aligned} gr\_\ln\_real\_ev_{ijt} = & \beta_1 new\_product_{ij,t-1} + \beta_2 new\_USA_{i,t-1} + \beta_3 new\_product\_USA + \\ & \beta_4 gr\_\ln\_effective\_tariff_{j,t} + \beta_5 fta\_new\_product_{ij,t-1} + \\ & \beta_6 fta\_new\_USA_{i,t-1} + \beta_7 fta\_new\_product\_USA + (FE) + \mu_{ijt} \end{aligned} \quad (1)$$

This effect on export growth might be enhanced by the existence of the Free Trade Agreement between Peru and the US since 2009. To account for that, I propose to include a variable representing this trade liberalisation process, named *gr_ln_effective_tariff*$_{j,t}$. This variable represents the change in logs of the tariff levied by the United States to product j (8-digit tariff line), from t-1 to t, and is included on its own and interacted with the dummies controlling for one-year experienced exporters. The outcome I expect from these variables is a negative sign, since my initial hypothesis is that a reduction in tariff rates in the US market will facilitate the export performance of new Peruvian firms in a particular product j.

It is important to stress that this variable on the change in tariffs per product is also useful to disentangle the effects of trade liberalisation and the effects of the economic crisis that dropped Peruvian exports in 2009, the same year the USA-Peru FTA came into force.

The model is enriched with the inclusion of fixed effects at different levels. Year fixed effects control for particular demand shocks occurring in a specific year, like 2008 and 2009 when the recent economic crisis in the US and Europe took place. The reference year in this case is 2006, the beginning of the sample. Yearly average levels of the real exchange rate between the Peruvian currency and the US dollars are also included. In terms of product fixed effects, I take into account the issue that many products exported to the United States were previously liberalised by the ATPDEA unilateral liberalisation or enjoyed a 0% tariff from the Most-Favoured-Nation scheme, even before the enactment of the FTA. This condition for some products might be influential for their export growth. Regarding sector fixed effects, dummies accounting for the industry each product belongs to are added as well. Recall I work with eight different sectors, and the reference sector for this analysis is agriculture.

It is also feasible that export growth of product j by firm i in the US market is influenced by firm i's export performance in the previous year, either in the US market or in the overall export market. That is why I incorporate the log of firm i's overall real exports to the US in year t-1, *lag_ln_real_ev_USA_tot*$_i$ and, alternatively, the log of firm i's total real exports in t-1, *lag_ln_real_annual_ev_tot*$_i$. Additionally, as proxies of firm i's export performance, the lag of the number of destinations and products (at the 6-digit level) exported are also included. Exporting to specific destinations in the previous year, like the Andean Community or the European Union, accounted for by dummies, can also explain the influence of firm i's export performance and experience. It is arguable that new exporters to the US that previously exported to neighbour countries like the Andean countries are more likely to more rapidly raise their exports in the American market, in the case of manufacturing sectors. Conversely, for agricultural products, it can be stated that previously exporting to the European Union might be determinant for the export performance in the United States, given the constant large volumes of agricultural products from Peru to that region.

It is necessary to mention that for this first regression, the sample consists of firms that exported a product to the US for at least two consecutive years and, following Albornoz *et al*. (2012), the standard errors are clustered at the firm level. Table 5 summarises the main variables considered and their respective hypotheses.

Table 5
Model 1: Intensive Margin (Export Growth) - List of Main Variables

Variable Name	Definition	Initial Hypothesis
Dependent Variable		
gr_ln_real_ev	Difference in logs of real exports by firm i of product j between year t and year t-1	
Explanatory Variables		
new_product	1 if firm i exported product j to USA for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting product j to USA is associated with a positive export growth in that product in year t, compared to more experienced firms in that specific product
new_USA	1 if firm i exported to the US market for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting to the US market is associated with a positive export growth for product j in year t, compared to more experienced firms in the US export market
new_product_USA	Interaction of new_product and new_USA: 1 if firm i exported product j to USA for the first time in t-1, and started exporting to the US overall market in that year, and 0 otherwise	Having a one-year experience in the US export market, and specifically exporting product j to the US, is associated with a positive export growth for product j in year t, compared to more experienced firms in that market
gr_ln_effective_tariff	Difference in logs of the effective tariff levied by USA to product j between year t and year t-1	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firm i from year t-1 to year t.
fta_new_product	Interaction of gr_ln_effective_tariff and new_product to see the effect of liberalisation on new exporters of product j to USA	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firms that have a one-year experience exporting that product to USA, compared to more experienced firms in that specific product
fta_new_USA	Interaction of gr_ln_effective_tariff and new_USA to see the effect of liberalisation on new exporters to the US market	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firms that have a one-year experience exporting to the overall US market, compared to more experienced firms in that market
fta_new_product_USA	Interaction of gr_ln_effective_tariff and new_product_USA to see the effect of liberalisation on new exporters to the US market starting with product j	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firms that have a one-year experience exporting to the overall US market and specifically in product j, compared to more experienced firms in that market and product
d_atpdea (Product FE)	1 if product j was unilaterally liberalised by USA, under the ATPDEA regime, before the enactment of the US-Peru FTA, and 0 otherwise	Products unilaterally liberalised by USA under ATPDEA are less likely to have a positive export growth from t-1 to t
d_mfn (Product FE)	1 if product j already entered to USA with zero tariff, under the MFN scheme, before the enactment of the US-Peru FTA, and 0 otherwise	Products that already entered to USA with zero tariff, under the MFN scheme, are less likely to have a positive export growth from t-1 to t
ln_rer_usa_peru	Log of average annual real exchange rate index between Peru and USA	A more depreciated local currency in real terms is associated with a positive export growth of product j by firm i from t-1 to t
lag_ln_real_annual_ev_tot	Log of the total real exports of firm i in year t-1	A positive overall export performance of firm i in year t-1 is associated with a positive growth of its exports of product j to USA from t-1 to t
lag_ln_real_ev_USA_tot	Log of the total real exports of firm i to USA in year t-1	A positive export performance of firm i in the US market in year t-1 is associated with a positive growth of its exports of product j to USA from t-1 to t
new_sector_USA	1 if firm i exported to the US market in sector s for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting to the US market in sector s is associated with a positive export growth for product j in year t, compared to more experienced firms in the US export market, in sector s
new_product_sector_USA	Interaction of new_product and new_sector_USA: 1 if firm i exported product j to USA for the first time in t-1, and started exporting to the US market in sector s in that year, and 0 otherwise	Having a one-year experience in the US export market in sector s, and specifically exporting product j to the US, is associated with a positive export growth for product j in year t, compared to more experienced firms in that market and sector
fta_new_sector_USA	Interaction of gr_ln_effective_tariff and new_secto_USA to see the effect of liberalisation on new exporters to the US market in sector s	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firms that have a one-year experience exporting to the US market in sector s, compared to more experienced firms in that market and that particular sector
fta_new_product_sector_USA	Interaction of gr_ln_effective_tariff and new_product_sector_USA to see the effect of liberalisation on new exporters to the US market in sector s, starting with product j	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firms that have a one-year experience exporting to US market in sector s, and specifically in product j, compared to more experienced firms in that market/product and sector

4.1.2 Main Results

I began the analysis by running the simplest specification, with only the most crucial variables, subsequently adding the interactions and other controls. From the simplest specification, column (1) in Table 6 it can be seen that only the $new\_USA_{i,t-1}$ variable, accounting for one-year experience in the US export market, actually meets my initial hypothesis, by showing a positive and very significant coefficient. Conversely, the $new\_productij_{,t-1}$ dummy controlling for one-year experience exporting a particular product to USA, shows a negative and significant

coefficient, opposite to what I initially expected. In the case of the variable for tariff change, controlling for trade liberalisation, it obtains a negative and slightly significant coefficient, giving an outcome in favour of my previous expectations.

When adding the interaction terms, from column (2) onwards, steady patterns are identified. Contrary to the simplest specification, the $new\_productij_{,t-1}$ now exhibits positive and significant coefficients, meeting my initial hypothesis, in most of the estimations, especially when controlling for firm i's export performance in t-1. However, the *new_product_USA* interaction for "absolute beginners" always gives very negative and significant values, unlike my original expectations. According to these results, having a one-year experience in the US market favours the export growth by firm i of product j from t-1 to t. The same can be argued about having a one-year experience exporting that product to USA. Nevertheless, being an "absolute beginner", meeting the two mentioned characteristics simultaneously, represents a disadvantage. This might seem to represent a contradiction with the results obtained by Albornoz *et al*. (2012); but recall that their analysis was focused on destinations rather than products within one destination. Hence, these first results might indicate that the dynamics of sequential exporting in terms of product intensive margin work in a fairly different way from the dynamics in market intensive margin.

Regarding the trade liberalisation issue, unfortunately these first results do not show a clear pattern by either the tariff change variable $gr\_ln\_effective\_tariff_{j,t}$ or its interactions. Perhaps one of the most notorious features is that tariff change variable gets negative, although not significant, coefficients in most of the specifications. However, when adding the real exchange rate variable, they turn into positive and sometimes significant. This outcome might imply that Peruvian firms' export performance in the US market still depend highly on the overall economic situation of both countries, represented by the exchange rate. Another feature identified is that the interaction of tariff change with the $new\_USA_{i,t-1}$ variable usually gives negative coefficients, meeting my initial hypothesis, but hardly ever significant. Clearer patterns for these variables are found in further robustness checks, especially in regressions per firm size.

It is interesting to note that some variables, especially those of "new exporters", have quite large values and, despite having different signs, similar absolute values. Hence, when it comes to determining the total effect of being a new exporter, these coefficients tend to offset each other, leading to think that the overall effect of that condition is minimal, either positive or negative.

As for the rest of the variables, the most striking issue is related with the two regressors accounting for firm i's export performance last year: $lag\_ln\_real\_ev\_USA\_tot_i$ and $lag\_ln\_real\_annual\_ev\_tot_i$. Both show negative and significant coefficients, apparently contradicting the initial expectations about them. However, these outcomes might reflect a desire by firms to diversify with other products, reducing the export growth of the specific product j. The real exchange rate variable, on the other hand, provides an expected positive sign, meaning that a more depreciated domestic currency favours the export growth. The dummy on ATPDEA products, those unilaterally liberalised by USA before the Free Trade Agreement, usually show positive but insignificant coefficients. Conversely, the MFN dummy, accounting for products already liberalised under the Most Favoured Nation Scheme, usually show negative values, although not significant, which make sense since given the trade liberalisation process, firms would prefer to experiment by exporting products that were not liberalised, at the expense of already liberalised goods.

The year fixed effects in all cases show highly negative and significant values. Most of sector fixed effects obtain negative but not significant coefficients. Respect of other variables accounting for firm i's past export performance, no clear pattern was found for either the lag of number of tariff lines exported or the lag of number of destinations. As for the specific destination dummies, some of them, like Chile, South Korea and European Union, usually presented positive and significant coefficients.

Table 6
Model 1: Intensive Margin (Export Growth)

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-2.146***	0.197*	0.196*	-0.672***	-0.387**	0.197*	0.419***	0.714***	0.698***	0.173	-0.676***	0.348**	0.438***	0.749***	0.742***
	(0.121)	(0.121)	(0.122)	(0.112)	(0.119)	(0.122)	(0.152)	(0.145)	(0.144)	(0.148)	(0.139)	(0.164)	(0.167)	(0.169)	(0.167)
new_USA	3.675***	7.984***	7.984***	4.986***	5.065***	7.987***	5.646***	6.006***	6.164***	8.118***	5.113***	5.876***	5.912***	6.277***	6.441***
	(0.153)	(0.213)	(0.213)	(0.256)	(0.293)	(0.213)	(0.316)	(0.364)	(0.359)	(0.248)	(0.284)	(0.374)	(0.364)	(0.409)	(0.391)
new_product_USA		-7.776***	-7.775***	-6.221***	-6.492***	-7.780***	-6.213***	-6.093***	-6.155***	-7.729***	-6.242***	-6.373***	-6.383***	-6.270***	-6.367***
		(0.267)	(0.268)	(0.268)	(0.299)	(0.267)	(0.387)	(0.438)	(0.445)	(0.309)	(0.310)	(0.426)	(0.427)	(0.472)	(0.469)
gr_ln_effective_tariff	-4.086*	-4.558	-4.604	9.270***	-1.285	-4.604	2.626	-4.134	2.415	-4.790	9.131***	-3.835	2.444	-4.252	2.198
	(2.296)	(3.364)	(3.372)	(3.226)	(3.367)	(3.380)	(2.694)	(2.645)	(2.392)	(3.387)	(3.242)	(2.932)	(2.731)	(2.682)	(2.427)
fta_new_product		0.696	0.679	-1.007	0.790	0.716	3.622	3.574	4.091	0.527	-1.032	3.672	3.726	3.826	4.387
		(4.131)	(4.126)	(4.297)	(4.211)	(4.132)	(5.070)	(5.525)	(5.459)	(4.289)	(4.441)	(5.327)	(5.121)	(5.553)	(5.474)
fta_new_USA		2.869	2.858	-12.18**	-10.19*	2.841	-4.504	-2.224	-3.614	3.924	-11.21**	-1.604	-2.577	-0.275	-1.645
		(5.420)	(5.414)	(5.309)	(5.497)	(5.408)	(5.774)	(5.785)	(5.603)	(5.428)	(5.328)	(5.767)	(5.843)	(5.821)	(5.689)
fta_new_product_USA		-0.546	-0.511	4.416	2.727	-0.528	3.362	3.894	3.576	-0.186	4.293	1.808	2.266	2.714	2.193
		(5.708)	(5.702)	(5.830)	(5.881)	(5.696)	(6.577)	(6.902)	(6.831)	(5.767)	(5.866)	(6.385)	(6.337)	(6.555)	(6.512)
d_atpdea			0.0721	0.0406			0.0790	0.131	0.188**	0.116	0.0764	0.136	0.128	0.163	0.258***
			(0.0600)	(0.0664)			(0.0909)	(0.0836)	(0.0851)	(0.0743)	(0.0780)	(0.108)	(0.111)	(0.112)	(0.103)
ln_rer_usa_peru				25.66***			24.96***	.	23.01***		25.65***	.	24.95***	.	23.00***
				(1.595)			(1.629)	.	(1.549)		(1.595)	.	(1.632)	.	(1.552)
lag_ln_real_annual_ev_tot							-0.466***					-0.480***	-0.466***		
							(0.0234)					(0.0184)	(0.0233)		
lag_ln_real_ev_USA_tot								-0.575***	-0.620***					-0.576***	-0.620***
								(0.0219)	(0.0243)					(0.0220)	(0.0242)
d_mfn												-0.0508	-0.0270	-0.0623	0.0101
												(0.0780)	(0.0771)	(0.0781)	(0.0747)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	14575	14575	14575	14575	14575	14575	14575	14575	14575	14575	14575	14575	14575	14575	14575
r2_o	0.0362	0.0821	0.0823	0.118	0.141	0.0831	0.158	0.203	0.209	0.0823	0.118	0.157	0.158	0.203	0.209
N_clust	911	911	911	911	911	911	911	911	911	911	911	911	911	911	911

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

4.1.3 Robustness Checks

4.1.3.1 Considering Experience in a Particular Sector

I constructed a more specific measure of the "new exporter" condition of Peruvian firms in the US market, by taking into account, instead of their one-year experience condition in the US market as a whole, their one-year experience exporting to USA in a particular sector s. In that sense, for the three models, I replaced the $new\_USA_{i,t-1}$ dummy by a $new\_sector\_USA_{i,t-1}$ binary variable, which takes value 1 if firm i exported specifically in sector s for the first time to USA in year t-1, and 0 otherwise. Similarly, *new_product_USA* becomes *new_product_sector_USA*, which takes value 1 if firm i is an absolute beginner exporting to USA in a particular sector s. When running this model, as well as the other two, with this change in variables, no major modifications occur in the results. The signs, sizes and significance of the coefficients remain very similar as the original specifications. This is probably because there is a little difference in the statistics of these dummies in the broad dataset. While 13.47% of observations have a value 1 in $new\_USA_{i,t-1}$, a very close 13.42% have a value 1 in $new\_sector\_USA_{i,t-1}$. The summary tables with the results of this robustness check can be found at Appendix A.

4.1.3.2 Annual Transactions Greater Than US$ 1000

Diverse studies working with firm-level exports data make use of a lower bound in terms of annual exports, in order to prevent any distortions or biases probably caused by very small export transactions, such as sample deliveries. For this research, given the massive presence of annual exports per firm/product pair lower than US$ 1000, I decided to employ this value as a lower bound, so as to compare the subsequent results with the original regressions. By making use of that threshold, Model 1's dataset drops in 33.6%.

When applying the US$ 1000 lower bound, the original results presented are shown to be mostly robust in sign and significance; but some notable issues occur in terms of size. The dummy for one-year experience in USA becomes more positive; while the *new_product_USA* interaction turns more negative. Something similar happens with the trade liberalisation variables. A parallel exercise was done considering the experience in a particular sector, with the same tendencies, but with slightly lower coefficients in absolute value. In Appendix B, I present the tables with the results attained from this robustness check.

4.1.3.3 Regressions per Firm Size and Sector

Following the criterion utilised in the descriptive analysis, I split the samples according to the size of firms, approximated by the mean of their annual exports from 1998 to 2013. Separate regressions for each of the four categories of firm size were made for the three models, in order to identify any possible difference in the results. These outcomes can be found in Appendix C, but here is a summary of the main features. Initially, these estimations have been made considering the whole set of firms exporting to USA between 2006 and 2013, regardless of when they started their trade relation with that country. In further stages, I will apply the same exercise with only the "non-re-entrants".

For Model 1 on the intensive margin, the positive sign obtained for the dummy on one-year experience in product j is only achieved for the very small firms. For the rest of firms, this dummy turns into negative and significant. Regarding the interactions with the tariff change variable, clearer figures are attained, with signs closer to my initial expectations, specifically in the case of medium and small firms. For those firms, $fta\_new\_product_{ij,t-1}$ and $fta\_new\_USA_{i,t-1}$ are always negative, whereas *fta_new_product_USA* is always positive. For large and very small firms, the signs are exactly the opposite, which gives a signal that it is likely that the dynamics in sequential exporting in a context of trade liberalisation are different depending on the firm size, at least in terms of the intensive margin.

Focusing on the outcomes from medium and small firms, the interaction of tariff changes with *new_productij*$_{,t-1}$ and *new_USA*$_{i,t-1}$, with a negative sign, indicate that the tariff reduction occurred in Peru is relatively more beneficial in terms of export growth to firms with one-year experience either exporting product j to USA or in the overall US market, comparing to more experienced firms. However, the positive sign of the interaction between tariff change and *new_product_USA* tells that being an absolute beginner in the US market does not entail so much benefits from trade liberalisation, in terms of export growth, compared to more expert Peruvian firms.

Additionally, an experiment was made by running separate regressions for each of the eight sectors considered in the analysis. The results can be shared by request; but it could be observed that the basic outcomes from the main regressions were mostly driven by the Agriculture and Textile industries, which products underwent more tariff changes than in other sectors. These outcomes are common across the three models estimated in this paper.

4.2 EXTENSIVE MARGIN (ENTRY)

4.2.1 The Model

Through this second estimation on the extensive margin, I test the following hypothesis:

Hypothesis 2: *Conditional on survival, having a one-year experience exporting to the US market makes firm i more likely to enter with a new product j to that market in year t than more experienced firms; and trade liberalisation boosts that likelihood.*

The dependent variable for this second regression, shown in Equation (2), is denoted as *Entry_ijt*, which is a binary variable that takes the value 1 if firm i exported product j in year t for the first time, and 0 otherwise. Given the condition of the dependent variable, a probit estimation is undertaken. The dummy described is regressed on another binary variable, *new_USA*$_{i,t-1}$, already utilised in the first model, taking the value 1 if the firm entered the US market for the first time in year t-1. It is expected to obtain a positive coefficient for such dummy, since new exporters have more unexploited opportunities to follow up.

$$Pr[Entry\_ijt = 1] = \beta_1 new\_USA_{i,t-1} + \beta_2 gr\_\ln\_effective\_tariff_{j,t} + \beta_3 fta\_new\_USA_{i,t-1} + \beta_4 ln\_lag\_n\_sec\_exp\_USA_t + \beta_5 gr\_ln\_real\_sector\_USA\_exports_t + (FE) + \mu_{ijt} \quad (2)$$

The effect of trade liberalisation is controlled for by the *gr_ln_effective_tariff*$_{j,t}$ variable described earlier, adding it on its own and interacting it with the dummy of new exporter in the US market. My initial expectation is to achieve negative coefficients for the change in tariffs and, more relevant, for the interaction.

The entry into the US market with a new product might be also influenced by the performance of other firms in the Peruvian industry in the previous year. For that reason, inspired in Albornoz *et al.* (2012) model, I include *ln_lag_n_sec_exp_USA*$_t$, the number of exporters to the United States in year t-1 from the sector the product belongs to, as well as the growth of the log of exports from that sector to the US in year t, denoted by *gr_ln_real_sector_USA_exports*$_t$. Like in the first model, the log of exports by firm i to the US in year t-1 and to the overall export market are added. The fixed effects and other indicators of firm i's performance defined in the previous model are also included.

Once again, the standard errors are clustered at the firm level, and the sample includes firms exporting to the US for at least two years. However, since I am interested in the entry into a

particular product, the firm-product pair is dropped from the sample from year t+1 onwards. Also, in order to control for left censoring, I drop from the sample firm-product pairs with exports registered in 2006, as I am not certain about whether firms actually began exporting product j to USA in 2006 or rather before. Hence, for the purposes of this paper, I assume that, if exports in 2006 for a firm-product pair were zero, these were also zero before that year.

Table 7 summarises the main variables utilised in this second model, with their respective initial hypotheses.

Table 7
Model 2: Extensive Margin (Entry) - List of Main Variables

Variable Name	Definition	Initial Hypothesis
Dependent Variable		
Entry_ijt	1 if firm i exported product j to USA for the first time in year t, and 0 otherwise	
Explanatory Variables		
new_USA	1 if firm i exported to the US market for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting to the US market may encourage the entry of firm i to product j´s market in the US in year t, compared to more experienced firms in the US export market
gr_ln_effective_tariff	Difference in logs of the effective tariff levied by USA to product j between year t and year t-1	A reduction in tariff rates levied by USA to product j from t-1 to t may encourage the entry of firm i to product j's market in the US in year t
fta_new_USA	Interaction of gr_ln_effective_tariff and new_USA to see the effect of liberalisation on new exporters to the US market	A reduction in tariff rates levied by USA to product j may encourage the entry into product j's market in the US in year t by firms that have a one-year experience exporting to the overall US market, compared to more experienced firms in that market
d_atpdea (Product FE)	1 if product j was unilaterally liberalised by USA, under the ATPDEA regime, before the enactment of the US-Peru FTA, and 0 otherwise	Firm i is less likely to enter product j's market in the US if that product was unilaterally liberalised under the ATPDEA regime
d_mfn (Product FE)	1 if product j already entered to USA with zero tariff, under the MFN scheme, before the enactment of the US-Peru FTA, and 0 otherwise	Firm i is less likely to enter product j's market in the US if that product already entered to USA with zero tariff under the MFN scheme
ln_rer_usa_peru	Log of average annual real exchange rate index between Peru and USA	A more depreciated local currency in real terms may encourage the entry of firm i to product j's market in the US in year t
lag_ln_real_annual_ev_tot	Log of the total real exports of firm i in year t-1	A positive overall export performance of firm i in year t-1 may encourage the entry of firm i to product j's market in the US in year t
lag_ln_real_ev_USA_tot	Log of the total real exports of firm i to USA in year t-1	A positive export performance of firm i in the US market in year t-1 may encourage the entry of firm i to product j's market in the US in year t
ln_lag_n_sec_exp_USA	Log of number of exporters to USA in sector s in year t-1	The larger number of exporters to USA in sector s last year may encourage the entry of firm i to the US market with product j
gr_ln_real_sector_USA_exports	Difference of logs of real annual exports to USA in sector s, from t-1 to t	A positive growth of exports to USA in sector s may encourage the entry of firm i to the US market with product j
new_sector_USA	1 if firm i exported to the US market in sector s for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting to the US market in sector s may encourage the entry of firm i to product j's market in the US in year t, compared to more experienced firms in the US export market, in sector s
fta_new_sector_USA	Interaction of gr_ln_effective_tariff and new_secto_USA to see the effect of liberalisation on new exporters to the US market in sector s	A reduction in tariff rates levied by USA to product j may encourage the entry to product j's market in the US in year t by firms that have a one-year experience exporting to the US market in sector s, compared to more experienced firms in that market and that particular sector

4.2.2 Main Results[7]

Like in the first model, I started by running a very simple specification without any interaction or other regressors, shown in column (1) of Table 8. This regression gives exactly the coefficients expected: positive and significant for $new\_USA_{i,t-1}$ and negative and significant for the change in tariffs for product j over time. In other words, being a new exporter to the US, namely one-year experienced, makes a Peruvian firm more likely to export a new product to the US market, compared to more experienced firms; while a reduction/elimination of tariffs for product j contributes to the facilitation of firms' entry to that product j's market in the US. The

[7] For this model and model 3 on exit, due to non-convergence, it was problematic to obtain the results for regressions with year fixed effects, which led to the attainment of incomplete information (marginal effects and goodness of fit), but I will attempt again these estimations in the future. The results shown for these regressions report the index coefficients.

outcome described is constant across all specifications for $new\_USA_{i,t-1}$, and in most regressions for $gr\_ln\_effective\_tariff_{j,t}$.

When adding the interaction terms and the rest of variables, it is observed that the interaction between the two above mentioned variables, $fta\_new\_USA_{i,t-1}$, always obtains positive coefficients, and significant at 1%. Unlike the initial hypothesis proposed, this outcome suggests that a reduction in tariff levels makes one-year experienced firms in the US market less likely to enter with a new product's market in the US, with respect to more expert firms.

This apparent contradiction with my initial hypotheses is addressed in some robustness checks I did afterwards, which give more clarifying ideas about the role of trade liberalisation and the "new exporter" condition. Now, when analysing the figures of sectorial variables, they offer a constant pattern. The lag of the number of exporters in sector s to USA often gives positive and significant values; while the opposite occurs with the growth rate of real exports from sector s to USA. These figures indicate that the existence of more exporters to USA in a sector is associated with a higher probability of entry into a particular product's market in the US by firm i; while the increase in exports to USA from that sector is linked with a reduction in such probability. Hence, the competition factor seen under two different terms, number of competitors and export growth, acts in opposite ways with respect to the entry decision by Peruvian firms in the US market.

Regarding the other variables included, the ATPDEA dummy always obtains negative and sometimes significant coefficients, meaning that firms are more likely to enter the US market with a product not previously liberalised by the US, instead of an ATPDEA product. Something similar is obtained for the MFN dummy.

Respect of the real exchange rate, it always gives negative and significant coefficients, unlike my initial expectations, meaning that a more depreciated local currency is associated with a reduction in the likelihood of firm i to enter with product j to the US market. Linking this outcome with Model 1, there can be an explanation: a more depreciated currency tends to favour more the intensive margin rather than the extensive margin. Firms will take advantage of the depreciation to increase their participation in a particular product, rather than experimenting with a new product.

The two variables accounting for firm i's export performance in t-1 in both the US and the overall export market obtain positive and significant coefficients, meeting my previous hypotheses. That means that a better performance in terms of volume of exports boosts the extensive margin, entering the US market with new products. This complements the findings from Model 1, which showed negative values for these two variables in the intensive margin.

Regarding the fixed effects variables, all year dummies show positive and significant values; whereas a more confusing pattern is obtained by the sector dummies, which sign and significance change depending on the presence or absence of the sector size variables. The lag of number of tariff lines exported usually give positive and significant coefficients, while no clear pattern is given by the lag in the number of destinations. As for the lag of specific destinations, the dummies for Chile, the European Union and EFTA usually give negative and significant values, and the dummies for South Korea and Mexico give the opposite.

Table 8
Model 2: Extensive Margin (Entry)

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_USA	0.181***	0.118***	0.100***	0.192***	0.190***	0.185***	0.121***	0.186***	0.175***	0.180***	0.123***	0.116***	0.210***	0.206***	0.576***	0.252***	0.572***	0.252***
	(0.0235)	(0.0207)	(0.0209)	(0.0250)	(0.0248)	(0.0191)	(0.0211)	(0.0247)	(0.0214)	(0.0186)	(0.0204)	(0.0208)	(0.0180)	(0.0175)	(0.0649)	(0.0747)	(0.0628)	(0.0753)
gr_ln_effective_tariff	-0.359**	0.0783	0.0574	-0.710***	-0.636***	-0.585***	-0.385**	-0.480***	-0.148	-0.436***	-0.201	-0.213	-0.652***	-0.472***	-2.085***	-1.117	-1.880***	-1.098
	(0.151)	(0.143)	(0.145)	(0.182)	(0.181)	(0.146)	(0.175)	(0.179)	(0.167)	(0.146)	(0.168)	(0.170)	(0.150)	(0.149)	(0.759)	(0.719)	(0.715)	(0.723)
fta_new_USA				1.027***	1.014***	1.027***	0.979***	0.998***	0.946***	1.004***	0.909***	0.948***	1.209***	1.187***	2.981***	1.923	2.965***	1.927
				(0.346)	(0.346)	(0.297)	(0.325)	(0.346)	(0.327)	(0.295)	(0.321)	(0.323)	(0.298)	(0.297)	(1.084)	(1.076)	(1.080)	(1.076)
ln_lag_n_sec_exp_USA		0.0171	0.0152					0.0495***	1.336***	0.251***	0.00435	0.000573		0.00610			0.0683	0.130
		(0.0162)	(0.0158)					(0.00868)	(0.0599)	(0.0726)	(0.0164)	(0.0161)		(0.0101)			(0.0731)	(0.284)
gr_ln_real_sector_USA_exports		-0.0775***	-0.0787***					-0.0537***	0.0100	-0.0339**	-0.0791***	-0.0817***		0.0192			-0.131***	0.0552
		(0.0143)	(0.0142)					(0.0146)	(0.0159)	(0.0141)	(0.0144)	(0.0139)		(0.0164)			(0.0546)	(0.0554)
d_atpdea		-0.0115	-0.0131			-0.0165**	-0.0105			-0.0165***	-0.00909	-0.00902	-0.000520	-0.0738***		-0.0788***		-0.0787***
		(0.00799)	(0.00802)			(0.00576)	(0.00936)			(0.00572)	(0.00858)	(0.00867)	(0.0124)	(0.0126)		(0.0251)		(0.0251)
ln_rer_usa_peru		-1.521***	-1.499***			-1.800***	-1.480***			-1.710***	-1.525***	-1.507***	-1.767***	-1.778***				
		(0.102)	(0.106)			(0.0770)	(0.105)			(0.0971)	(0.0987)	(0.104)	(0.0877)	(0.0893)				
lag_ln_real_annual_ev_tot		0.00898***									0.00713***							
		(0.00174)									(0.00175)							
lag_ln_real_ev_USA_tot			0.00964***				0.00676***					0.00659***				0.0287***		0.0287***
			(0.00208)				(0.00200)					(0.00197)				(0.00795)		(0.00797)
d_mfn													-0.00224	-0.00177				
													(0.00884)	(0.00685)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	28488	24530	24530	28488	28488	28488	24530	28488	28488	28488	24530	24530	28488	28488	27866	23908	27866	23908
r2_p	0.0286	0.120	0.119	0.0298	0.0330	0.154	0.123	0.0331	0.0712	0.156	0.126	0.126	0.147	0.150	n.d.	n.d.	n.d.	n.d.
N_clust	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

4.2.3 Robustness Checks

4.2.3.1 Annual Transactions Greater Than US$ 1000

When applying the US$ 1000 lower bound for Model 2, the dataset falls in 43.7%. Results are again predominantly robust in sign and significance. Regarding the variables of interest, $new\_USA_{i,t-1}$ obtains very similar values as the original regressions, but slightly less positive. The tariff change variable maintains the same signs, but in this experiment the coefficients have a little tendency to be less negative. Conversely, the $fta\_new\_USA_{i,t-1}$ interaction, which was positive in the first regressions, now becomes slightly higher. Very similar results are achieved when this experiment is done considering the experience exporting to USA in a particular sector. In Appendix B, I present the tables with the results attained from this robustness check.

So far, the robustness checks for Model 2 seem to confirm that trade liberalisation might have a deterrent effect in the entry of new Peruvian firms with a particular product to the US market. However, new findings are shown in the next robustness checks about this issue.

4.2.3.2 Regressions per Firm Size

When splitting the sample according to the aforementioned firm size categories for Model 2 on the extensive margin, basically the variables of interest lose significance when moving from the smallest to the largest firms, although the signs remain the same as in the original regressions. However, for large firms the interaction between the tariff change and the dummy on one-year experience in the United States becomes negative, although not significant. According to this, the dynamics of entry to a new product's market in the US, under a liberalisation context, work differently for larger firms, which tend to be more prepared to diversify and take advantage of the trade barrier reduction than smaller firms. These results are shown in Appendix C.

4.3 EXIT FROM A MARKET

4.3.1 The Model

The last model presented in this paper was designed to test the following hypothesis:

Hypothesis 3: *Peruvian exporters that have only one-year experience exporting product j to the United States are more likely to stop exporting that product to USA in year t than more experienced firms; and trade liberalisation boosts that likelihood.*

For this third model, represented by Equation (3), a probit estimation is run. The dependent variable in this case, denoted as $Exit\_{ijt}$, is a binary variable that takes the value 1 if firm i exits product j's market in the United States in year t, and 0 otherwise.

$$\begin{aligned} Pr[Exit\_{ijt} = 1] = {} & \beta_1 new\_product_{ij,t-1} + \beta_2 new\_USA_{i,t-1} + \beta_3 new\_product\_USA + \\ & \beta_4 gr\_\ln\_effective\_tariff_{j,t} + \beta_5 fta\_new\_product_{ij,t-1} + \\ & \beta_6 fta\_new\_USA_{i,t-1} + \beta_7 fta\_new\_product\_USA + (FE) + \mu_{ijt} \end{aligned} \quad (3)$$

That dummy is regressed on the two binary variables defined in the first model, controlling for the export of product j for the first time in t-1 and for the entry for the first time into the overall US market in that same year, as well as on the interaction of these two dummies, which accounts for "absolute beginners" in the US market. The variable accounting for the US trade liberalisation of 2009 is again included on its own, as well as interacted with the explanatory variables described above.

Fixed effects utilised in the previous models are included, like year, product and sector fixed effects. Firm i's exports to the United States and the overall export markets in the previous years are also considered, as well as other variables aforementioned, describing that firm's overall export performance.

Table 9
Model 3: Exit - List of Main Variables

Variable Name	Definition	Initial Hypothesis
Dependent Variable		
Exit_ijt	1 if firm i exits product j's market in USA in year t, and 0 otherwise	
Explanatory Variables		
new_product	1 if firm i exported product j to USA for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting product j to USA is associated with an increase in the probability of firm i leaving product j's market in USA in year t, compared to more experienced firms in that specific product
new_USA	1 if firm i exported to the US market for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting to the US market is associated with an increase in the probability of firm i leaving product j's market in USA in year t, compared to more experienced firms in the US export market
new_product_USA	Interaction of new_product and new_USA: 1 if firm i exported product j to USA for the first time in t-1, and started exporting to the US overall market in that year, and 0 otherwise	Having a one-year experience in the US export market, and specifically exporting product j to the US, is associated with an increase in the probability of firm i leaving product j's market in USA in year t, compared to more experienced firms in that market
gr_ln_effective_tariff	Difference in logs of the effective tariff levied by USA to product j between year t and year t-1	A reduction in tariff rates levied by USA to product j is associated with an increase in the probability of firm i leaving that market in USA in year t
fta_new_product	Interaction of gr_ln_effective_tariff and new_product to see the effect of liberalisation on new exporters of product j to USA	A reduction in tariff rates levied by USA to product j is associated with an increase in the probability of leaving that market in USA in year t by firms that have a one-year experience exporting that product to USA, compared to more experienced firms in that specific product
fta_new_USA	Interaction of gr_ln_effective_tariff and new_USA to see the effect of liberalisation on new exporters to the US market	A reduction in tariff rates levied by USA to product j is associated with an increase in the probability of leaving that market in USA in year t by firms that have a one-year experience exporting to the overall US market, compared to more experienced firms in that market
fta_new_product_USA	Interaction of gr_ln_effective_tariff and new_product_USA to see the effect of liberalisation on new exporters to the US market starting with product j	A reduction in tariff rates levied by USA to product j is associated with a positive export growth of that product by firms that have a one-year experience exporting to the overall US market and specifically in product j, compared to more experienced firms in that market and product
d_atpdea (Product FE)	1 if product j was unilaterally liberalised by USA, under the ATPDEA regime, before the enactment of the US-Peru FTA, and 0 otherwise	Firm i is less likely to leave product j's market in the US if that product was unilaterally liberalised under the ATPDEA regime
d_mfn (Product FE)	1 if product j already entered to USA with zero tariff, under the MFN scheme, before the enactment of the US-Peru FTA, and 0 otherwise	Firm i is less likely to leave product j's market in the US if that product already entered to USA with zero tariff under the MFN scheme
ln_rer_usa_peru	Log of average annual real exchange rate index between Peru and USA	A more depreciated local currency in real terms may discourage the exit of firm i to product j's market in the US in year t
lag_ln_real_annual_ev_tot	Log of the total real exports of firm i in year t-1	A positive overall export performance of firm i in year t-1 is associated with a fall in the probability of firm i leaving product j's market in USA in year t
lag_ln_real_ev_USA_tot	Log of the total real exports of firm i to USA in year t-1	A positive export performance of firm i in the US market in year t-1 is associated with a fall in the probability of firm i leaving product j's market in USA in year t
new_sector_USA	1 if firm i exported to the US market in sector s for the first time in year t-1, and 0 otherwise	Having a one-year experience exporting to the US market in sector s is associated with an increase in the probability of firm i leaving product j's market in USA in year t, compared to more experienced firms in the US export market, in sector s
new_product_sector_USA	Interaction of new_product and new_sector_USA: 1 if firm i exported product j to USA for the first time in t-1, and started exporting to the US market in sector s in that year, and 0 otherwise	Having a one-year experience in the US export market in sector s, and specifically exporting product j to the US, is associated with an increase in the probability of firm i leaving product j's market in USA in year t, compared to more experienced firms in that market, in sector s
fta_new_sector_USA	Interaction of gr_ln_effective_tariff and new_sector_USA to see the effect of liberalisation on new exporters to the US market in sector s	A reduction in tariff rates by USA to product j is associated with an increase in the probability of leaving product j's market in USA in year t by firms that have a one-year experience exporting to the US market in sector s, compared to more experienced firms in that market and that particular sector
fta_new_product_sector_USA	Interaction of gr_ln_effective_tariff and new_product_sector_USA to see the effect of liberalisation on new exporters to the US market in sector s, starting with product j	A reduction in tariff rates by USA to product j is associated with an increase in the probability of leaving product j's market in USA in year t by firms that have a one-year experience exporting to US market in sector s, and specifically in product j, compared to more experienced firms

For this third estimation, all exporters to the US from 2006 to 2013 are considered in the sample, with no restriction on the number of years they have exported within the sample. As I am interested in the transition from exporting to not exporting, observations with zero exports per firm-product pair before the first non-zero export are dropped from the sample. Once again,

the robust standard errors are clustered at the firm level. Table 9 summarises the main variables utilised in this last model, with their respective hypotheses.

4.3.2 Main Results

As previously stated, I intended to make use of exactly the same regressors as in Model 1. However, the *new_product_USA* interaction was always dropped from the regressions, due to collinearity between this variable and $new\_USA_{i,t-1}$, making these regressions less reliable[8]. As a solution for that, I replaced that interaction and the $new\_USA_{i,t-1}$ dummy for the variables accounting for one-year experience in a specific sector s, within the US market, which were previously used for the robustness checks in Models 1 and 2. Hence, $new\_USA_{i,t-1}$ becomes $new\_sector\_USA_{i,t-1}$, and *new_product_USA* becomes *new_product_sector_USA*.

The simplest specification shown in column (1) of Table 10 gives not so close results to the initial hypotheses I proposed. Being a new exporter in a particular product to the US market is associated with a higher likelihood of firm i exiting the export business of product j in USA. The conditions represented by this variables is linked to an increase in the "trial and error" practice by a firm in the US export market of a particular product. Conversely, a reduction of tariff levels for product j might discourage that exit, given the positive and significant coefficient. Moreover, being new exporting to the overall US market in sector s shows a negative and significant value, entailing that such condition might prevent firm i from leaving the export business of product j.

When I add the *new_product_sector_USA* interaction for "absolute beginners", this variable obtains the expected positive and significant coefficients, which provides the idea that the real boost to exit is given by the condition of being an actual new exporter in the US market, starting its experience with product j.

When it comes to the liberalisation variables, the positive sign for the tariff change obtained in the first specification is usually reverted in the other regressions, giving the initially expected negative signs, and its significance increases when I include the lags of firm i's annual exports in the US and overall market. The interaction of this tariff change with the "new exporter" dummies show symmetric patterns as the dummies on their own. That means, a reduction of tariff rates levied by USA to Peruvian exports is associated to an increase in the probability of stopping the export business of product j in the American market if Peruvian firms are new exporting that product to USA, and even more if those firms are "absolute beginners", as it was initially expected. The positive sign of the $fta\_new\_sector\_USA_{i,t-1}$ interaction leads to a complementary conclusion to the outcome for $new\_sector\_USA_{i,t-1}$: apparently, being new exporting to USA in a particular sector makes the firm even less likely to exit the export market of product j if there is a tariff reduction.

I find that the interactions with the tariff change obtain quite large coefficients. These values increase when I add more regressors, and they are very similar in absolute value, especially $fta\_new\_sector\_USA_{i,t-1}$ and $fta\_new\_product\_sector\_USA_{i,t-1}$. Therefore, when I try to see the overall effect of trade liberalisation, these coefficients offset each other, leading to a minimal effect of a tariff reduction. In most of the specifications, that minimal overall effect tends to be positive, meaning that liberalisation makes the exit less likely.

Regarding the rest of variables considered, the ATPDEA dummy gives negative and even significant values in some estimations. Curiously, the MFN dummy always gives positive and significant coefficients, meaning that this category of products might actually be more likely to pass through a "trial and error" process. The real exchange rate gives negative and significant

[8] This issue did not occur in Model 1 because the dataset was more restricted than for Model 3. The former discarded firm-product pairs with less than two consecutive years of non-zero exports.

coefficients as expected: a more depreciated local currency is linked to a lower probability of exit. The two lags of firm i's export performance in the US and overall markets are always positive and significant, meaning that better export performances in terms of export volume might encourage more experimentation across products in a particular destination, instead of consolidating the participation in the market of a specific product, as was initially expected. This outcome gives more power to the idea that the dynamics of sequential exporting in terms of product diversification are different from the dynamics in terms of market diversification, investigated by Albornoz *et al*. (2012).

Respect of the additional fixed effects included, both year and sector fixed effects achieved positive and significant values. The same occurs with the lag of number of tariff lines exported by firm i and the lag of number of destinations. The lags of participation in specific destinations, like Japan, the European Union, the Andean Community and Chile, always show negative and significant coefficients, presumably meaning that having experience in these markets might contribute to prevent a firm from exiting a particular export market in the US.

Table 10
Model 3: Exit considering experience exporting in the sector

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.488***	0.376***	0.375***	0.378***	0.374***	0.357***	0.341***	0.357***	0.350***	0.335***	0.333***	1.233***	1.371***	1.344***	1.333***
	(0.00967)	(0.0128)	(0.0129)	(0.0127)	(0.0126)	(0.00954)	(0.00932)	(0.0134)	(0.0105)	(0.0103)	(0.0105)	(0.0518)	(0.0456)	(0.0464)	(0.0468)
new_sector_USA	-0.103***	-0.760***	-0.761***	-0.763***	-0.762***	-0.513***	-0.517***	-0.801***	-0.533***	-0.530***	-0.537***	-2.619***	-2.042***	-2.118***	-2.131***
	(0.0131)	(0.0654)	(0.0654)	(0.0650)	(0.0656)	(0.0590)	(0.0581)	(0.0955)	(0.0803)	(0.0787)	(0.0788)	(0.210)	(0.224)	(0.309)	(0.310)
new_product_sector_USA		0.786***	0.789***	0.787***	0.791***	0.590***	0.593***	0.812***	0.596***	0.603***	0.599***	2.587***	2.373***	2.393***	2.411***
		(0.0653)	(0.0654)	(0.0659)	(0.0652)	(0.0587)	(0.0579)	(0.0964)	(0.0808)	(0.0793)	(0.0793)	(0.216)	(0.223)	(0.313)	(0.314)
gr_ln_effective_tariff	0.628***	0.787***	0.857***	0.867***	0.931***	-0.309**	-0.344**	0.923***	-0.334**	-0.372**	-0.371**	1.084	-0.511	-0.739	-0.635
	(0.149)	(0.208)	(0.213)	(0.218)	(0.218)	(0.152)	(0.150)	(0.213)	(0.155)	(0.154)	(0.153)	(0.625)	(0.632)	(0.646)	(0.654)
fta_new_product		-0.891***	-0.888***	-0.862***	-0.870***	-0.0667	-0.0132	-1.022***	-0.105	-0.124	-0.0571	-2.697***	-0.404	-0.603	-0.535
		(0.310)	(0.309)	(0.314)	(0.308)	(0.249)	(0.245)	(0.301)	(0.244)	(0.241)	(0.241)	(1.021)	(0.975)	(0.958)	(0.955)
fta_new_sector_USA		6.102***	6.080***	5.911***	5.696***	7.738***	7.575***	5.818***	7.612***	7.114***	7.508***	10.62***	32.75***	31.81***	30.21***
		(1.456)	(1.472)	(1.426)	(1.337)	(1.558)	(1.565)	(1.445)	(1.526)	(1.302)	(1.548)	(2.943)	(6.261)	(6.183)	(5.795)
fta_new_product_sector_USA		-5.413***	-5.387***	-5.249***	-5.008***	-6.885***	-6.748***	-5.232***	-6.859***	-6.270***	-6.773***	"-9.110***	-29.14***	-28.55***	-26.97***
		(1.511)	(1.526)	(1.480)	(1.393)	(1.581)	(1.581)	(1.473)	(1.534)	(1.309)	(1.548)	(3.161)	(6.358)	(6.208)	(5.808)
d_atpdea			-0.0246***	-0.0247***		-0.00141	-0.00168	-0.0482***	-0.00984	-0.00697	-0.0103		-0.0215	-0.0621	-0.0326
			(0.00708)	(0.00706)		(0.00815)	(0.00858)	(0.00893)	(0.0105)	(0.00923)	(0.0109)		(0.0281)	(0.0381)	(0.0375)
ln_rer_usa_peru				0.0617		-0.744***	-0.672***		-0.740***	-0.633***	-0.668***				
				(0.0784)		(0.0639)	(0.0658)		(0.0639)	(0.0642)	(0.0658)				
lag_ln_real_annual_ev_tot						0.0112***			0.0113***						
						(0.00122)			(0.00122)						
lag_ln_real_ev_USA_tot							0.0151***			0.0153***	0.0152***		0.0513***	0.0528***	0.0578***
							(0.00114)			(0.00119)	(0.00115)		(0.00417)	(0.00425)	(0.00462)
d_mfn									0.0289***	0.0204***	0.0299***			0.116***	0.0750***
									(0.00674)	(0.00631)	(0.00716)			(0.0252)	(0.0255)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	31882	31882	31882	31882	31882	27434	27434	31882	27434	27434	27434	31882	27434	27434	27434
r2_p	0.173	0.192	0.192	0.192	0.194	0.327	0.334	0.193	0.328	0.330	0.335	n.d.	n.d.	n.d.	n.d.
N_clust	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

4.3.3 Robustness Checks

4.3.3.1 Annual Transactions Greater Than US$ 1000

When applying the US$ 1000 lower bound, Model 3's dataset sharply falls in 46.5%. In this situation, the dummies accounting for the "new exporter" condition do not suffer major changes. Being new exporting to USA (sector s) and at the same time new exporting product j (absolute beginner) still increase the exit probability; whereas only being new exporting to USA in sector s might reduce that probability. Similarly, a tariff reduction by USA is still associated to an increase in that probability. Nevertheless, the excessively large numbers in absolute value I obtained for the interactions of the tariff change with the "new exporter" dummies are not achieved here. Their signs are identical to the original regressions, but the sizes are more reasonable. That can imply that the original outcomes obtained were distorted by the clearly massive presence of sample export deliveries in the broad dataset. In Appendix B, I present the tables with the results attained from this robustness check.

4.3.3.2 Regressions per Firm Size

Finally, for Model 3 most of the figures described in the original regressions for the main variables of interest are conserved in the majority of the specifications run regardless of the firm size. These results are found in Appendix C.

5. CONCLUSIONS

The research presented in this paper is one of the first attempts to measure the effects of the Free Trade Agreement signed by Peru and the United States on the performance of Peruvian exporters, made through the proposal of a complementary focus to the sequential exporting approach done by Albornoz *et al.* (2012), considering this time the evolution of one-year experienced firms within one destination, diversifying their product portfolio, and incorporating the issue of trade liberalisation.

I employed a very wide dataset of Peruvian exports to the American market, at the firm level, from 2006 to 2013, restricting my samples in most estimations to firms that began exporting to USA since 2006.

Overall, these estimations show that export dynamics across products within one market act differently from dynamics across destinations. Firms with one-year experience exporting one specific product to USA or with one-year experience in the overall US export market tend to grow their exports of that product at higher rates than more experienced firms (intensive margin). However, absolute beginners, firms that meet the two mentioned conditions at once, are in disadvantage. Regarding the extensive margin, new firms in the US market are more likely to export a new product to that destination than more expert firms. In terms of exit, new firms in the export of one particular product to USA and, especially, absolute beginners, have higher probabilities to leave the market of that product. Conversely, being new in the overall US market discourages firms from exiting.

The effects of trade liberalisation on Peruvian firms' performance are less clear in terms of significance. However, the results tend to show that a tariff reduction by USA is associated with higher export growth, greater probabilities of entry and exit from the market of a particular product in that country. This impact in the intensive margin is more evident for small and medium new firms exporting a product to USA or in the overall US market. Similarly, the effect on exit probability is greater especially for absolute beginners. Nevertheless, results warn that trade liberalisation may hamper the entry with a new product into the US market by one-year experienced firms, except the largest.

The disadvantageous conditions some results entail for new or less expert Peruvian firms give a sign that the achievement of a Free Trade Agreement with Peru's main trading partner is a necessary but not sufficient condition to boost the productivity and competitiveness of the Peruvian industry, along with the sustainability of trade relations. Opening the market of a developing country must be joint by other crucial measures that promote competitiveness of labour and enterprises, in terms of infrastructure, education, health, safety, labour costs and formalisation, among others. I consider this the main policy implication of my research.

I am aware, however, that the analysis implemented has a series of limitations caused by the limited availability of data, such as firm-specific characteristics to account for heterogeneity. Also, the lack of full certainty about the actual year firms began exporting a particular product was another shortcoming. More importantly, there are surely other factors that affect firms' decision to enter or exit the export business of a particular product to USA, from both the supply and demand side. One of those is the economic crisis occurred in 2009, the same year the USA-Peru FTA came into force. For this research, I tried to disentangle the effects of liberalisation from the crisis by considering the tariff reduction per product. Nevertheless, I aim in further stages to find alternative ways to capture these two events independently. Also, for my robustness checks on firm size, I plan to run new regressions, this time restricting my samples to firms that began exporting to USA since 2006, like in my main estimations.

I intend to make additional experiments to complement the findings of this research. One is related to the reformulation of the "new exporter" criterion. It would be interesting to consider two or three-year experienced exporters as new to see how the initial results change. Furthermore, it is arguable that some Peruvian firms might have incorporated in advance the FTA issue in their decision-making processes. Hence, a sort of anticipation effect of the FTA is intended to be included in the analysis. Finally, it is also arguable that some industries were more dependent on external credit flows, which underwent a sharp deterioration during the last great recession. That would make some sectors more vulnerable, leading to lower exports. Hence, in next stages of this research I will consider this issue.

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APPENDIX A: MAIN REGRESSIONS CONSIDERING EXPERIENCE EXPORTING IN SECTOR S

Appendix A1

Model 1: Intensive Margin (Export Growth) considering experience exporting in the sector

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-2.207***	0.104	0.104	-0.648***	-0.371***	0.105	0.368*	0.628***	0.600***	0.153	-0.623***	0.330**	0.432**	0.695***	0.699***
	(0.114)	(0.124)	(0.124)	(0.109)	(0.114)	(0.123)	(0.147)	(0.142)	(0.140)	(0.148)	(0.138)	(0.163)	(0.166)	(0.167)	(0.167)
new_sector_USA	3.488***	7.939***	7.942***	5.053***	5.112***	7.941***	5.616***	5.947***	6.065***	8.111***	5.185***	5.836***	5.878***	6.201***	6.332***
	(0.148)	(0.203)	(0.203)	(0.227)	(0.264)	(0.203)	(0.288)	(0.326)	(0.321)	(0.245)	(0.265)	(0.364)	(0.350)	(0.394)	(0.380)
new_product_sector_USA		-7.752***	-7.755***	-6.287***	-6.537***	-7.757***	-6.296***	-6.221***	-6.218***	-7.765***	-6.299***	-6.433***	-6.423***	-6.322***	-6.370***
		(0.264)	(0.265)	(0.249)	(0.274)	(0.263)	(0.365)	(0.401)	(0.410)	(0.312)	(0.302)	(0.420)	(0.421)	(0.460)	(0.463)
gr_ln_effective_tariff	-3.828*	-3.536	-3.621	9.883***	-0.957	-3.694	3.400	-3.885	3.305	-3.900	9.683***	-3.688	3.127	-4.113	2.970
	(2.338)	(3.421)	(3.430)	(3.273)	(3.353)	(3.440)	(2.733)	(2.612)	(2.424)	(3.443)	(3.288)	(2.934)	(2.766)	(2.642)	(2.454)
fta_new_product		-0.440	-0.456	-1.527	0.257	-0.414	2.430	2.360	2.520	-0.0265	-1.311	3.026	2.928	2.913	3.302
		(4.060)	(4.054)	(4.233)	(4.123)	(4.063)	(4.983)	(5.376)	(5.360)	(4.212)	(4.380)	(5.174)	(5.043)	(5.405)	(5.381)
fta_new_sector_USA		2.794	2.797	-11.71**	-9.648*	2.736	-4.192	-2.367	-3.813	4.104	-10.70**	-1.458	-2.254	-0.496	-1.852
		(5.636)	(5.626)	(5.471)	(5.614)	(5.612)	(5.984)	(5.942)	(5.813)	(5.610)	(5.461)	(5.899)	(6.011)	(5.949)	(5.855)
fta_new_product_sector_USA		-0.944	-0.924	3.741	1.970	-0.917	2.681	3.097	3.463	-1.024	3.659	0.940	1.828	2.401	2.416
		(5.829)	(5.821)	(5.891)	(5.879)	(5.816)	(6.685)	(6.881)	(6.888)	(5.895)	(5.961)	(6.431)	(6.487)	(6.601)	(6.623)
d_atpdea			0.134**	0.0982			0.0598	0.155**	0.178**	0.207***	0.148**	0.192*	0.118	0.220**	0.263***
			(0.0563)	(0.0625)			(0.0901)	(0.0803)	(0.0831)	(0.0695)	(0.0727)	(0.103)	(0.108)	(0.106)	(0.0987)
ln_rer_usa_peru				25.13***			24.94***	.	23.59***		25.11***	.	24.92***	.	23.57***
				(1.404)			(1.489)	.	(1.456)		(1.404)	.	(1.495)	.	(1.463)
lag_ln_real_annual_ev_tot							-0.438***					-0.470***	-0.437***		
							(0.0226)					(0.0177)	(0.0226)		
lag_ln_real_ev_USA_tot								-0.564***	-0.594***					-0.564***	-0.594***
								(0.0203)	(0.0226)					(0.0204)	(0.0225)
d_mfn												-0.0218	-0.0572	-0.0396	-0.0193
												(0.0739)	(0.0778)	(0.0738)	(0.0741)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	15799	15799	15799	15799	15799	15799	15799	15799	15799	15799	15799	15799	15799	15799	15799
r2_o	0.0309	0.0741	0.0745	0.114	0.138	0.0750	0.145	0.193	0.195	0.0746	0.114	0.150	0.145	0.193	0.195
N_clust	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034	1034

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix A2
Model 2: Extensive Margin (Entry) considering experience exporting in the sector

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_sector_USA	0.173***	0.102***	0.0816***	0.186***	0.185***	0.179***	0.0929***	0.178***	0.172***	0.175***	0.103***	0.0907***	0.205***	0.201***	0.549***	0.227***	0.546***	0.227***
	(0.0195)	(0.0167)	(0.0167)	(0.0207)	(0.0204)	(0.0168)	(0.0180)	(0.0199)	(0.0173)	(0.0163)	(0.0164)	(0.0173)	(0.0179)	(0.0173)	(0.0587)	(0.0594)	(0.0545)	(0.0601)
gr_ln_effective_tariff	-0.345**	0.0861	0.0604	-0.716***	-0.667***	-0.606***	-0.400**	-0.485***	-0.163	-0.439***	-0.207	-0.224	-0.674***	-0.480***	-2.050***	-1.253	-1.920**	-1.236
	(0.151)	(0.142)	(0.144)	(0.180)	(0.181)	(0.146)	(0.175)	(0.178)	(0.166)	(0.145)	(0.168)	(0.170)	(0.151)	(0.149)	(0.745)	(0.715)	(0.699)	(0.720)
fta_new_sector_USA				1.121***	1.118***	1.099***	0.999***	1.075***	1.056***	1.080***	0.933***	0.976***	1.293***	1.272***	3.240***	2.338**	3.224**	2.345*
				(0.335)	(0.334)	(0.293)	(0.317)	(0.333)	(0.318)	(0.292)	(0.312)	(0.315)	(0.302)	(0.301)	(1.074)	(1.063)	(1.066)	(1.064)
ln_lag_n_sec_exp_USA		0.0105	0.00918					0.0396***	1.349***	0.275***	0.000702	-0.00367		0.00923			0.0389	0.158
		(0.0157)	(0.0155)					(0.00764)	(0.0608)	(0.0754)	(0.0159)	(0.0158)		(0.00955)			(0.0746)	(0.281)
gr_ln_real_sector_USA_exports		-0.0837***	-0.0838***					-0.0635***	0.00377	-0.0393***	-0.0841***	-0.0868***		0.0117			-0.153**	0.0518
		(0.0139)	(0.0139)					(0.0141)	(0.0154)	(0.0135)	(0.0141)	(0.0137)		(0.0154)			(0.0569)	(0.0567)
d_atpdea		-0.0103	-0.0124			-0.0152***	-0.00954			-0.0153***	-0.00879	-0.00886	0.00500	-0.0828***		-0.0776***		-0.0775**
		(0.00806)	(0.00809)			(0.00578)	(0.00948)			(0.00574)	(0.00864)	(0.00876)	(0.0116)	(0.0123)		(0.0253)		(0.0252)
ln_rer_usa_peru		-1.490***	-1.458***			-1.795***	-1.430***			-1.696***	-1.493***	-1.462***	-1.761***	-1.778***				
		(0.103)	(0.108)			(0.0721)	(0.105)			(0.0939)	(0.0996)	(0.105)	(0.0827)	(0.0843)				
lag_ln_real_annual_ev_tot		0.00979***									0.00897***							
		(0.00178)									(0.00178)							
lag_ln_real_ev_USA_tot			0.0108***				0.00900***					0.00869***				0.0309***		0.0309***
			(0.00214)				(0.00212)					(0.00209)				(0.00746)		(0.00748)
d_mfn													0.00255	0.000506				
													(0.00877)	(0.00695)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	28488	24530	24530	28488	28488	28488	24530	28488	28488	28488	24530	24530	28488	28488	27866	23908	27866	23908
r2_p	0.0232	0.117	0.117	0.0246	0.0281	0.148	0.119	0.0276	0.0671	0.150	0.123	0.123	0.140	0.144	n.d.	n.d.	n.d.	n.d.
N_clust	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158	1158

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix A3
Model 3: Exit

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.494***	0.486***	0.487***	0.493***	0.486***	0.445***	0.431***	0.461***	0.427***	0.416***	0.413***	1.581***	1.702***	1.645***	1.638***
	(0.00896)	(0.00931)	(0.00927)	(0.00967)	(0.00908)	(0.00628)	(0.00591)	(0.0107)	(0.00825)	(0.00768)	(0.00789)	(0.0443)	(0.0386)	(0.0394)	(0.0395)
new_USA	-0.128***	-0.123***	-0.123***	-0.130***	-0.123***	-0.0231*	-0.0270**	-0.134***	-0.0301**	-0.0233*	-0.0337**	-0.538***	-0.0852*	-0.111**	-0.109**
	(0.0127)	(0.0129)	(0.0129)	(0.0141)	(0.0127)	(0.0133)	(0.0135)	(0.0135)	(0.0137)	(0.0132)	(0.0136)	(0.0439)	(0.0495)	(0.0520)	(0.0522)
gr_ln_effective_tariff	0.598***	0.695***	0.755***	0.780***	0.808***	-0.427***	-0.464**	0.819***	-0.450***	-0.498***	-0.488**	0.804	-1.033	-1.238*	-1.181*
	(0.148)	(0.211)	(0.215)	(0.220)	(0.220)	(0.155)	(0.153)	(0.214)	(0.156)	(0.154)	(0.154)	(0.625)	(0.625)	(0.636)	(0.644)
fta_new_product		-0.140	-0.132	-0.0833	-0.113	0.467*	0.532**	-0.295	0.383	0.395	0.447*	-0.134	1.805*	1.440	1.530
		(0.310)	(0.310)	(0.315)	(0.309)	(0.250)	(0.246)	(0.301)	(0.243)	(0.241)	(0.240)	(1.000)	(0.964)	(0.946)	(0.944)
fta_new_USA		14.53***	14.63***	14.31***	14.20***	13.23***	13.23***	14.37***	12.93***	12.66***	12.92***	33.19***	53.47***	52.76***	51.65***
		(3.467)	(3.517)	(3.473)	(3.348)	(2.763)	(2.816)	(3.505)	(2.736)	(2.522)	(2.782)	(8.820)	(11.05)	(10.97)	(10.39)
fta_new_product_USA		-14.85***	-14.95***	-14.70***	-14.53***	-13.01***	-13.05***	-14.77***	-12.76***	-12.44***	-12.80***	-35.17***	-52.59***	-52.02***	-50.94***
		(3.480)	(3.530)	(3.484)	(3.360)	(2.759)	(2.809)	(3.515)	(2.730)	(2.519)	(2.773)	(8.815)	(11.06)	(10.96)	(10.37)
d_atpdea			-0.0211***	-0.0211***		0.000807	0.000668	-0.0312***	0.00701	0.00951	0.00779		-0.00697	0.0164	0.0340
			(0.00725)	(0.00720)		(0.00805)	(0.00850)	(0.00914)	(0.0106)	(0.00967)	(0.0111)		(0.0278)	(0.0384)	(0.0388)
ln_rer_usa_peru				0.140*		-0.732***	-0.666***		-0.727***	-0.625***	-0.658***				
				(0.0817)		(0.0693)	(0.0716)		(0.0672)	(0.0679)	(0.0693)				
lag_ln_real_annual_ev_tot						0.0105***			0.0111***						
						(0.00124)			(0.00125)						
lag_ln_real_ev_USA_tot							0.0143***			0.0145***	0.0149***		0.0448***	0.0487***	0.0540***
							(0.00115)			(0.00122)	(0.00117)		(0.00409)	(0.00428)	(0.00469)
d_mfn									0.0313***	0.0219***	0.0324***			0.130***	0.0800***
									(0.00675)	(0.00622)	(0.00718)			(0.0261)	(0.0249)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	31882	31882	31882	31882	31882	27434	27434	31882	27434	27434	27434	31882	27434	27434	27434
r2_p	0.176	0.177	0.178	0.178	0.179	0.312	0.319	0.186	0.320	0.322	0.327	n.d.	n.d.	n.d.	n.d.
N_clust	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599	2599

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.
[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

APPENDIX B: MAIN REGRESSIONS CONSIDERING ONLY ANNUAL TRANSACTIONS GREATER THAN US$ 1000

Appendix B1

Model 1: Intensive Margin (Export Growth) - annual transactions greater than US$ 1000

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-2.717***	0.114	0.113	-0.998***	-0.669***	0.110	0.125	0.567***	0.549***	0.0999	-0.933***	0.132	0.173	0.623***	0.591**
	(0.128)	(0.143)	(0.143)	(0.125)	(0.137)	(0.143)	(0.166)	(0.168)	(0.162)	(0.184)	(0.154)	(0.193)	(0.196)	(0.205)	(0.199)
new_USA	4.389***	9.881***	9.881***	5.991***	6.053***	9.886***	6.941***	7.291***	7.480***	9.899***	6.034***	7.011***	7.088***	7.453***	7.618***
	(0.171)	(0.189)	(0.189)	(0.252)	(0.310)	(0.190)	(0.322)	(0.403)	(0.387)	(0.216)	(0.291)	(0.405)	(0.391)	(0.487)	(0.464)
new_product_USA		-9.774***	-9.773***	-7.547***	-7.808***	-9.775***	-7.379***	-7.229***	-7.269***	-9.551***	-7.470***	-7.362***	-7.333***	-7.171***	-7.237***
		(0.272)	(0.272)	(0.267)	(0.309)	(0.274)	(0.410)	(0.497)	(0.481)	(0.326)	(0.311)	(0.482)	(0.475)	(0.569)	(0.553)
gr_ln_effective_tariff	-3.739	-3.966	-3.972	13.23***	1.658	-3.946	4.837	-1.715	4.600	-4.217	12.99***	-1.917	4.395	-2.137	4.200
	(3.016)	(4.552)	(4.556)	(4.348)	(4.599)	(4.561)	(3.570)	(3.484)	(3.168)	(4.581)	(4.374)	(3.902)	(3.617)	(3.509)	(3.214)
fta_new_product		-0.271	-0.271	-2.814	-0.349	-0.303	1.684	1.287	1.270	-0.238	-2.232	2.117	2.116	1.797	1.644
		(4.896)	(4.896)	(4.800)	(4.698)	(4.897)	(5.337)	(5.423)	(5.247)	(5.087)	(4.925)	(5.529)	(5.369)	(5.439)	(5.258)
fta_new_USA		3.076	3.077	-15.82**	-14.80**	3.098	-3.589	-2.572	-4.002	3.445	-15.37**	-2.439	-2.365	-1.219	-2.879
		(6.442)	(6.443)	(6.340)	(6.727)	(6.445)	(7.158)	(7.315)	(7.249)	(6.497)	(6.410)	(7.145)	(7.225)	(7.474)	(7.430)
fta_new_product_USA		0.00314	0.00328	7.715	6.953	0.0206	3.685	7.002	6.767	1.325	8.088	5.236	3.859	7.245	6.869
		(6.303)	(6.304)	(6.283)	(6.478)	(6.305)	(7.470)	(7.794)	(7.747)	(6.428)	(6.291)	(7.132)	(7.220)	(7.538)	(7.558)
d_atpdea			0.0229	-0.0119			0.209	0.0420	0.272	0.0620	0.0478	0.233	0.418**	0.257	0.471**
			(0.128)	(0.147)			(0.182)	(0.205)	(0.185)	(0.146)	(0.158)	(0.225)	(0.199)	(0.228)	(0.190)
ln_rer_usa_peru				32.55***			31.06***	.	28.82***		32.54***	.	31.02***	.	28.78***
				(1.816)			(1.858)	.	(1.770)		(1.814)	.	(1.863)	.	(1.774)
lag_ln_real_annual_ev_tot							-0.554***					-0.537***	-0.555***		
							(0.0259)					(0.0212)	(0.0258)		
lag_ln_real_ev_USA_tot								-0.641***	-0.712***					-0.641***	-0.712***
								(0.0248)	(0.0263)					(0.0249)	(0.0262)
d_mfn												0.223	0.271	0.210	0.269
												(0.204)	(0.202)	(0.201)	(0.191)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	9181	9181	9181	9181	9181	9181	9181	9181	9181	9181	9181	9181	9181	9181	9181
r2_o	0.0392	0.0926	0.0927	0.137	0.160	0.0924	0.191	0.237	0.255	0.0926	0.137	0.184	0.191	0.237	0.254
N_clust	795	795	795	795	795	795	795	795	795	795	795	795	795	795	795

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix B2

Model 1: Intensive Margin (Export Growth) considering experience exporting in the sector - annual transactions greater than US$ 1000

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-2.748***	0.0799	0.0794	-0.994***	-0.662***	0.0703	0.0655	0.512***	0.475**	0.0910	-0.926***	0.118	0.151	0.584***	0.551***
	(0.124)	(0.142)	(0.142)	(0.122)	(0.134)	(0.142)	(0.164)	(0.165)	(0.159)	(0.184)	(0.153)	(0.193)	(0.196)	(0.205)	(0.200)
new_sector_USA	4.286***	9.833***	9.833***	5.996***	6.054***	9.831***	6.860***	7.186***	7.383***	9.892***	6.006***	6.921***	6.997***	7.353***	7.525***
	(0.167)	(0.186)	(0.186)	(0.243)	(0.304)	(0.185)	(0.320)	(0.396)	(0.386)	(0.217)	(0.287)	(0.405)	(0.394)	(0.484)	(0.470)
new_product_sector_USA		-9.753***	-9.752***	-7.596***	-7.857***	-9.738***	-7.391***	-7.238***	-7.254***	-9.582***	-7.473***	-7.391***	-7.321***	-7.161***	-7.207***
		(0.266)	(0.266)	(0.262)	(0.308)	(0.266)	(0.406)	(0.483)	(0.471)	(0.327)	(0.312)	(0.482)	(0.479)	(0.567)	(0.556)
gr_ln_effective_tariff	-3.420	-3.132	-3.150	14.13***	2.184	-3.160	5.880*	-1.340	5.607*	-3.428	13.88***	-1.531	5.362	-1.799	5.125
	(3.046)	(4.592)	(4.596)	(4.388)	(4.593)	(4.602)	(3.634)	(3.488)	(3.230)	(4.620)	(4.413)	(3.921)	(3.681)	(3.513)	(3.275)
fta_new_product		-1.159	-1.157	-3.476	-0.991	-1.211	0.464	0.586	0.194	-0.943	-2.850	1.564	1.202	1.242	0.848
		(4.928)	(4.929)	(4.839)	(4.718)	(4.933)	(5.398)	(5.417)	(5.295)	(5.119)	(4.964)	(5.533)	(5.437)	(5.441)	(5.313)
fta_new_sector_USA		1.908	1.913	-16.64***	-15.57**	1.928	-4.922	-4.186	-5.699	2.570	-16.41**	-3.647	-3.744	-2.767	-4.510
		(6.502)	(6.504)	(6.391)	(6.783)	(6.506)	(7.255)	(7.386)	(7.311)	(6.559)	(6.470)	(7.233)	(7.329)	(7.540)	(7.508)
fta_new_product_sector_USA		0.905	0.900	8.160	7.373	0.981	4.715	7.871	8.119	1.856	8.825	5.618	5.017	8.203	8.285
		(6.349)	(6.352)	(6.338)	(6.531)	(6.357)	(7.523)	(7.790)	(7.762)	(6.483)	(6.361)	(7.174)	(7.291)	(7.558)	(7.601)
d_atpdea			0.0662	0.0588			0.227	0.106	0.311*	0.124	0.119	0.285	0.455**	0.323	0.530***
			(0.125)	(0.149)			(0.185)	(0.206)	(0.187)	(0.141)	(0.158)	(0.229)	(0.208)	(0.233)	(0.193)
ln_rer_usa_peru				32.71***			31.41***	.	29.50***		32.70***	.	31.37***	.	29.46***
				(1.728)			(1.800)	.	(1.756)		(1.728)	.	(1.808)	.	(1.764)
lag_ln_real_annual_ev_tot							-0.538***					-0.530***	-0.538***		
							(0.0264)					(0.0208)	(0.0264)		
lag_ln_real_ev_USA_tot								-0.637***	-0.705***					-0.637***	-0.705***
								(0.0241)	(0.0260)					(0.0242)	(0.0259)
d_mfn												0.210	0.268	0.194	0.264
												(0.199)	(0.195)	(0.198)	(0.183)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N		9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485
r2_o		0.0879	0.0881	0.136	0.159	0.0840	0.182	0.231	0.247	0.0881	0.136	0.180	0.181	0.231	0.247
N_clust		836	836	836	836	836	836	836	836	836	836	836	836	836	836

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix B3

Model 2: Extensive Margin (Entry) - annual transactions greater than US$ 1000

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)[a]	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_USA	0.157***	0.103***	0.294***	0.171***	0.169***	0.173***	0.112***	0.165***	0.154***	0.168***	0.117***	0.108***	0.192***	0.188***	0.545***	0.228***	0.542***	0.229***
	(0.0196)	(0.0183)	(0.0679)	(0.0208)	(0.0206)	(0.0167)	(0.0204)	(0.0206)	(0.0180)	(0.0163)	(0.0183)	(0.0200)	(0.0180)	(0.0176)	(0.0574)	(0.0724)	(0.0563)	(0.0734)
gr_ln_effective_tariff	-0.279*	0.133	0.387	-0.647***	-0.582***	-0.576***	-0.421**	-0.379**	-0.0256	-0.410***	-0.219	-0.230	-0.619***	-0.437***	-2.320***	-1.532**	-2.026***	-1.530**
	(0.163)	(0.158)	(0.541)	(0.186)	(0.186)	(0.150)	(0.178)	(0.188)	(0.171)	(0.152)	(0.178)	(0.178)	(0.153)	(0.155)	(0.744)	(0.724)	(0.727)	(0.724)
fta_new_USA				1.138***	1.127***	1.175***	1.187***	1.119***	1.077***	1.156***	1.130***	1.159***	1.309***	1.296***	3.610***	2.585**	3.615***	2.591**
				(0.352)	(0.351)	(0.306)	(0.331)	(0.353)	(0.333)	(0.306)	(0.331)	(0.331)	(0.313)	(0.313)	(1.134)	(1.132)	(1.135)	(1.133)
ln_lag_n_sec_exp_USA		0.0238	0.0760					0.0670***	1.635***	0.322***	0.0111	0.00818		0.0134			0.0951	0.470
		(0.0180)	(0.0616)					(0.00881)	(0.0682)	(0.0828)	(0.0187)	(0.0186)		(0.0133)			(0.0756)	(0.398)
gr_ln_real_sector_USA_exports		-0.0903***	-0.304***					-0.0679***	0.0101	-0.0338*	-0.0892***	-0.0888***		0.0288*			-0.137	0.0907
		(0.0182)	(0.0610)					(0.0186)	(0.0187)	(0.0175)	(0.0186)	(0.0182)		(0.0175)			(0.0736)	(0.0772)
d_atpdea		-0.00262	-0.0122			-0.0119	-0.00521			-0.0111	-0.000490	0.000196	0.000724	-0.0831***		-0.0659		-0.0647
		(0.0115)	(0.0389)			(0.00863)	(0.0119)			(0.00852)	(0.0118)	(0.0119)	(0.0135)	(0.0164)		(0.0364)		(0.0362)
ln_rer_usa_peru		-1.562***	-5.221***			-1.841***	-1.521***			-1.690***	-1.570***	-1.541***	-1.805***	-1.807***				
		(0.0784)	(0.292)			(0.0584)	(0.0836)			(0.0812)	(0.0790)	(0.0836)	(0.0628)	(0.0652)				
lag_ln_real_annual_ev_tot		0.00828***									0.00638***							
		(0.00154)									(0.00173)							
lag_ln_real_ev_USA_tot			0.0306***				0.00668***					0.00645***				0.0269***		0.0268***
			(0.00638)				(0.00193)					(0.00191)				(0.00692)		(0.00698)
d_mfn													-0.00761	-0.000171				
													(0.0109)	(0.00931)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	16332	14107	14107	16332	16332	16332	14107	16332	16332	16332	14107	14107	16332	16332	15974	13749	15974	13749
r2_p	0.0212	0.119	0.119	0.0229	0.0261	0.154	0.124	0.0276	0.0851	0.156	0.127	0.127	0.147	0.150	n.d.	n.d.	n.d.	n.d.
N_clust	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] The numbers shown are index coefficients, instead of marginal effects.

Appendix B4

Model 2: Extensive Margin (Entry) considering experience exporting in the sector - annual transactions greater than US$ 1000

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_sector_USA	0.156***	0.0983***	0.0796***	0.172***	0.169***	0.171***	0.102***	0.164***	0.156***	0.167***	0.110***	0.0988***	0.190***	0.186***	0.546***	0.227***	0.280***	0.229***
	(0.0177)	(0.0170)	(0.0186)	(0.0187)	(0.0184)	(0.0158)	(0.0196)	(0.0181)	(0.0165)	(0.0155)	(0.0170)	(0.0189)	(0.0180)	(0.0176)	(0.0557)	(0.0675)	(0.0587)	(0.0686)
gr_ln_effective_tariff	-0.268	0.142	0.119	-0.667***	-0.612***	-0.596***	-0.443**	-0.396**	-0.0438	-0.413***	-0.235	-0.248	-0.641***	-0.448***	-2.374***	-1.651**	-1.699*	-1.647*
	(0.163)	(0.158)	(0.159)	(0.184)	(0.185)	(0.150)	(0.176)	(0.187)	(0.169)	(0.151)	(0.177)	(0.177)	(0.153)	(0.155)	(0.735)	(0.720)	(0.702)	(0.720)
fta_new_sector_USA				1.245***	1.231***	1.243***	1.245***	1.210***	1.186***	1.229***	1.194***	1.223***	1.385***	1.373***	3.951***	2.962***	3.026**	2.970**
				(0.347)	(0.346)	(0.304)	(0.328)	(0.347)	(0.331)	(0.304)	(0.328)	(0.328)	(0.314)	(0.314)	(1.130)	(1.127)	(1.113)	(1.127)
ln_lag_n_sec_exp_USA		0.0188	0.0181					0.0596***	1.639***	0.340***	0.00713	0.00424		0.0140			0.0616	0.491
		(0.0176)	(0.0178)					(0.00803)	(0.0678)	(0.0850)	(0.0182)	(0.0183)		(0.0131)			(0.0733)	(0.398)
gr_ln_real_sector_USA_exports		-0.0949***	-0.0930***					-0.0743***	0.00377	-0.0409**	-0.0939***	-0.0931***		0.0223			-0.171*	0.0820
		(0.0178)	(0.0177)					(0.0181)	(0.0185)	(0.0170)	(0.0181)	(0.0178)		(0.0168)			(0.0682)	(0.0778)
d_atpdea		-0.00230	-0.00337			-0.0117	-0.00483			-0.0110	-0.000656	0.000109	0.00292	-0.0897***		-0.0658	-0.0227	-0.0646
		(0.0114)	(0.0114)			(0.00867)	(0.0120)			(0.00854)	(0.0118)	(0.0119)	(0.0130)	(0.0160)		(0.0366)	(0.0387)	(0.0364)
ln_rer_usa_peru		-1.549***	-1.517***			-1.833***	-1.498***			-1.674***	-1.556***	-1.522***	-1.798***	-1.805***				
		(0.0792)	(0.0846)			(0.0567)	(0.0839)			(0.0817)	(0.0795)	(0.0848)	(0.0606)	(0.0628)				
lag_ln_real_annual_ev_tot		0.00856***									0.00719***						0.0282***	
		(0.00156)									(0.00177)						(0.00582)	
lag_ln_real_ev_USA_tot			0.00935***				0.00756***					0.00724***				0.0274***		0.0273***
			(0.00184)				(0.00200)					(0.00197)				(0.00673)		(0.00679)
d_mfn													-0.00515	0.000152				
													(0.0107)	(0.00937)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	16332	14107	14107	16332	16332	16332	14107	16332	16332	16332	14107	14107	16332	16332	15974	13749	13749	13749
r2_p	0.0199	0.118	0.118	0.0220	0.0250	0.152	0.123	0.0262	0.0846	0.155	0.126	0.126	0.145	0.148	n.d.	n.d.	n.d.	n.d.
N_clust	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054	1054

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix B5
Model 3: Exit - annual transactions greater than US$ 1000

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.473***	0.467***	0.468***	0.451***	0.467***	0.426***	0.409***	0.464***	0.422***	0.409***	0.404***	1.485***	1.511***	1.507***	1.501***
	(0.0104)	(0.0113)	(0.0113)	(0.0115)	(0.0109)	(0.00980)	(0.00929)	(0.0142)	(0.0127)	(0.0120)	(0.0121)	(0.0517)	(0.0492)	(0.0539)	(0.0538)
new_USA	-0.119***	-0.113***	-0.113***	-0.0837***	-0.113***	-0.0527***	-0.0581***	-0.132***	-0.0681***	-0.0565**	-0.0726***	-0.375***	-0.153***	-0.219***	-0.223***
	(0.0137)	(0.0141)	(0.0141)	(0.0150)	(0.0139)	(0.0154)	(0.0154)	(0.0168)	(0.0178)	(0.0176)	(0.0176)	(0.0506)	(0.0555)	(0.0650)	(0.0654)
gr_ln_effective_tariff	0.128	0.0179	0.0904	-0.0178	0.120	-0.480**	-0.512***	0.131	-0.502**	-0.522***	-0.536***	-0.212	-0.931	-1.200	-1.116
	(0.149)	(0.218)	(0.222)	(0.219)	(0.226)	(0.195)	(0.189)	(0.221)	(0.199)	(0.194)	(0.193)	(0.744)	(0.751)	(0.776)	(0.781)
fta_new_product		0.0546	0.0679	-0.0428	0.0923	0.264	0.304	0.0566	0.277	0.286	0.311	-0.249	0.876	0.882	1.012
		(0.345)	(0.344)	(0.343)	(0.343)	(0.312)	(0.310)	(0.342)	(0.311)	(0.308)	(0.310)	(1.146)	(1.118)	(1.122)	(1.125)
fta_new_USA		4.893***	4.890***	5.196***	5.038***	5.316***	5.323***	4.726***	5.170***	5.481***	5.176***	15.66***	19.85***	19.34***	20.22***
		(1.444)	(1.466)	(1.499)	(1.449)	(1.412)	(1.431)	(1.431)	(1.357)	(1.336)	(1.376)	(4.624)	(5.389)	(5.162)	(5.146)
fta_new_product_USA		-4.886***	-4.894***	-4.985***	-5.052***	-4.964***	-4.995***	-4.862***	-4.941***	-5.198***	-4.965***	-15.60***	-18.48***	-18.40***	-19.34***
		(1.455)	(1.476)	(1.507)	(1.459)	(1.412)	(1.429)	(1.439)	(1.354)	(1.334)	(1.371)	(4.652)	(5.379)	(5.144)	(5.127)
d_atpdea			-0.0281***	-0.0283***		-0.0240**	-0.0253**	-0.0310**	-0.0111	0.0213	-0.0113		-0.0788**	-0.0285	0.0715
			(0.00847)	(0.00899)		(0.00997)	(0.0105)	(0.0121)	(0.0141)	(0.0156)	(0.0144)		(0.0374)	(0.0540)	(0.0582)
ln_rer_usa_peru				-0.476***		-0.819***	-0.724***		-0.797***	-0.632***	-0.697***				
				(0.0670)		(0.0745)	(0.0777)		(0.0735)	(0.0751)	(0.0765)				
lag_ln_real_annual_ev_tot						0.0167***			0.0168***						
						(0.00161)			(0.00162)						
lag_ln_real_ev_USA_tot							0.0202***			0.0167***	0.0203***		0.0478***	0.0514***	0.0570***
							(0.00149)			(0.00158)	(0.00151)		(0.00466)	(0.00497)	(0.00556)
d_mfn									0.0269**	0.0308***	0.0292**			0.129**	0.104*
									(0.0109)	(0.0116)	(0.0117)			(0.0414)	(0.0431)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	14042	14042	14042	14042	14042	12679	12679	14042	12679	12679	12679	14042	12679	12679	12679
r2_p	0.184	0.186	0.186	0.192	0.188	0.258	0.267	0.192	0.264	0.265	0.274	n.d.	n.d.	n.d.	n.d.
N_clust	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix B6

Model 3: Exit considering experience exporting in the sector - annual transactions greater than US$ 1000

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.471***	0.384***	0.383***	0.363***	0.382***	0.345***	0.326***	0.378***	0.343***	0.326***	0.323***	1.201***	1.222***	1.218***	1.204***
	(0.0110)	(0.0162)	(0.0162)	(0.0154)	(0.0156)	(0.0146)	(0.0142)	(0.0180)	(0.0164)	(0.0157)	(0.0161)	(0.0648)	(0.0629)	(0.0655)	(0.0656)
new_sector_USA	-0.110***	-0.676***	-0.676***	-0.648***	-0.677***	-0.562***	-0.565***	-1.507***	-1.358***	-1.334***	-1.344***	-2.304***	-2.064***	-5.598***	-5.626***
	(0.0142)	(0.0931)	(0.0933)	(0.0931)	(0.0936)	(0.0869)	(0.0852)	(0.0279)	(0.0283)	(0.0222)	(0.0290)	(0.309)	(0.313)	(0.364)	(0.371)
new_product_sector_USA		0.669***	0.669***	0.673***	0.670***	0.600***	0.598***	1.486***	1.383***	1.373***	1.366***	2.302***	2.248***	5.724***	5.757***
		(0.0957)	(0.0959)	(0.0952)	(0.0963)	(0.0891)	(0.0875)	(0.0344)	(0.0325)	(0.0274)	(0.0333)	(0.316)	(0.320)	(0.362)	(0.369)
gr_ln_effective_tariff	0.139	0.114	0.193	0.0797	0.243	-0.338*	-0.366*	0.232	-0.363*	-0.373*	-0.396**	0.162	-0.393	-0.674	-0.554
	(0.150)	(0.215)	(0.219)	(0.216)	(0.224)	(0.192)	(0.187)	(0.220)	(0.197)	(0.194)	(0.192)	(0.749)	(0.758)	(0.784)	(0.790)
fta_new_product		-0.513	-0.503	-0.632*	-0.481	-0.248	-0.217	-0.541	-0.252	-0.266	-0.229	-2.310	-1.112	-1.138	-1.049
		(0.356)	(0.355)	(0.352)	(0.352)	(0.320)	(0.318)	(0.354)	(0.321)	(0.317)	(0.319)	(1.198)	(1.160)	(1.165)	(1.167)
fta_new_sector_USA		2.133***	2.079***	2.398***	2.326***	2.868***	2.839***	-0.232	0.175	0.390*	0.245	6.587**	10.51***	1.295	1.319
		(0.668)	(0.677)	(0.685)	(0.674)	(0.660)	(0.666)	(0.220)	(0.253)	(0.264)	(0.255)	(2.167)	(2.547)	(1.325)	(1.327)
fta_new_product_sector_USA		-1.417*	-1.367*	-1.452*	-1.620**	-1.934***	-1.918***	0.847**	0.666	0.529	0.591	-3.961	-6.867*	1.990	1.951
		(0.743)	(0.751)	(0.754)	(0.747)	(0.712)	(0.715)	(0.416)	(0.398)	(0.391)	(0.385)	(2.412)	(2.715)	.	.
d_atpdea			-0.0303***	-0.0305***		-0.0250**	-0.0263**	-0.0455***	-0.0283**	0.00688	-0.0294**		-0.0922*	-0.102	0.0170
			(0.00835)	(0.00895)		(0.0102)	(0.0106)	(0.0121)	(0.0140)	(0.0154)	(0.0144)		(0.0380)	(0.0545)	(0.0578)
ln_rer_usa_peru				-0.506***		-0.792***	-0.687***		-0.786***	-0.609***	-0.681***				
				(0.0639)		(0.0711)	(0.0737)		(0.0712)	(0.0719)	(0.0738)				
lag_ln_real_annual_ev_tot						0.0169***			0.0171***						
						(0.00156)			(0.00157)						
lag_ln_real_ev_USA_tot							0.0205***			0.0174***	0.0206***		0.0524***	0.0543***	0.0601***
							(0.00146)			(0.00157)	(0.00148)		(0.00473)	(0.00496)	(0.00553)
d_mfn									0.0234**	0.0300**	0.0257**			0.112**	0.102*
									(0.0108)	(0.0117)	(0.0115)			(0.0405)	(0.0439)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	14042	14042	14042	14042	14042	12679	12679	14042	12679	12679	12679	14042	12679	12679	12679
r2_p	0.183	0.198	0.199	0.206	0.201	0.272	0.282	0.200	0.273	0.275	0.283	n.d.	n.d.	n.d.	n.d.
N_clust	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913	1913

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

APPENDIX C: REGRESSIONS PER FIRM SIZE, MEASURED IN TERMS OF MEAN ANNUAL EXPORTS

Appendix C1

Model 1: Intensive Margin (Export Growth) - very small firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-1.150***	-0.527***	-0.527***	-1.474***	-1.438***	-0.529***	0.248	0.534**	0.459**	-0.431**	-1.441***	0.386*	0.522**	0.828***	0.749***
	(0.153)	(0.150)	(0.150)	(0.171)	(0.203)	(0.150)	(0.187)	(0.219)	(0.194)	(0.187)	(0.231)	(0.242)	(0.234)	(0.249)	(0.235)
new_USA	2.216***	6.115***	6.114***	4.725***	4.984***	6.115***	5.821***	5.979***	6.114***	6.204***	4.841***	5.899***	6.051***	6.189***	6.307***
	(0.254)	(0.516)	(0.516)	(0.487)	(0.536)	(0.514)	(0.609)	(0.593)	(0.601)	(0.696)	(0.662)	(0.774)	(0.790)	(0.769)	(0.763)
new_product_USA		-5.055***	-5.055***	-3.945***	-4.161***	-5.054***	-4.256***	-4.372***	-4.394***	-5.142***	-3.995***	-4.482***	-4.577***	-4.699***	-4.727***
		(0.539)	(0.540)	(0.508)	(0.564)	(0.538)	(0.639)	(0.633)	(0.634)	(0.711)	(0.678)	(0.831)	(0.848)	(0.833)	(0.825)
gr_ln_effective_tariff	1.204	2.024	2.047	8.204*	-1.182	2.022	3.963	-4.887*	3.369	1.888	8.153*	-4.462	3.636	-5.314*	3.055
	(4.073)	(5.114)	(5.128)	(4.854)	(4.927)	(5.144)	(2.851)	(2.918)	(2.873)	(5.153)	(4.918)	(3.059)	(2.882)	(2.989)	(2.904)
fta_new_product		-8.963	-8.933	-13.33**	-11.06*	-9.037	-10.64**	-8.516*	-10.18**	-8.193	-13.02**	-7.700	-8.574*	-6.306	-8.008
		(6.130)	(6.110)	(5.920)	(6.068)	(6.082)	(5.138)	(5.228)	(5.180)	(6.363)	(6.238)	(5.256)	(5.293)	(5.338)	(5.322)
fta_new_USA		4.626	4.599	3.947	4.317	4.698	5.041	4.949	5.027	4.608	4.356	4.474	4.407	4.125	4.059
		(5.873)	(5.859)	(5.628)	(6.054)	(5.835)	(5.519)	(5.295)	(5.333)	(5.955)	(5.710)	(5.521)	(5.616)	(5.354)	(5.424)
d_atpdea			-0.0387	-0.103			-0.114	-0.00860	-0.0406	0.0108	-0.0955	0.0951	-0.0211	0.109	0.0533
			(0.0815)	(0.108)			(0.150)	(0.130)	(0.136)	(0.0977)	(0.125)	(0.151)	(0.160)	(0.152)	(0.143)
ln_rer_usa_peru				16.11***			23.57***		23.33***		16.12***		23.56***		23.32***
				(1.279)			(1.470)		(1.490)		(1.280)		(1.468)		(1.488)
lag_ln_real_annual_ev_tot							-0.646***					-0.640***	-0.645***		
							(0.0319)					(0.0237)	(0.0320)		
lag_ln_real_ev_USA_tot								-0.701***	-0.734***					-0.702***	-0.733***
								(0.0255)	(0.0325)					(0.0255)	(0.0326)
d_mfn											-0.0904	-0.0169	-0.0679	-0.00839	-0.0527
											(0.0875)	(0.114)	(0.103)	(0.114)	(0.0909)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196
r2_o	0.0104	0.0284	0.0283	0.0538	0.0953	0.0273	0.225	0.272	0.260	0.0284	0.0534	0.227	0.225	0.273	0.260
N_clust	416	416	416	416	416	416	416	416	416	416	416	416	416	416	416

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C2

Model 1: Intensive Margin (Export Growth) considering experience exporting in the sector - very small firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-1.145***	-0.528***	-0.528***	-1.494***	-1.515***	-0.528***	0.246	0.472**	0.449**	-0.394**	-1.427***	0.373	0.567**	0.791***	0.766***
	(0.150)	(0.156)	(0.156)	(0.176)	(0.211)	(0.156)	(0.190)	(0.226)	(0.196)	(0.190)	(0.237)	(0.251)	(0.241)	(0.259)	(0.241)
new_sector_USA	2.037***	6.022***	6.023***	4.633***	5.017***	6.021***	5.837***	6.064***	6.051***	6.264***	4.870***	6.141***	6.176***	6.363***	6.361***
	(0.243)	(0.499)	(0.499)	(0.484)	(0.519)	(0.500)	(0.637)	(0.603)	(0.632)	(0.676)	(0.650)	(0.782)	(0.829)	(0.774)	(0.804)
new_product_sector_USA		-5.085***	-5.086***	-3.923***	-4.183***	-5.085***	-4.417***	-4.557***	-4.488***	-5.376***	-4.146***	-4.862***	-4.903***	-4.985***	-4.949***
		(0.533)	(0.533)	(0.509)	(0.550)	(0.534)	(0.665)	(0.642)	(0.665)	(0.702)	(0.680)	(0.841)	(0.884)	(0.838)	(0.862)
gr_ln_effective_tariff	1.249	2.144	2.179	8.317*	-1.335	2.157	4.016	-5.085*	3.474	1.998	8.251*	-4.672	3.663	-5.524*	3.125
	(4.080)	(5.148)	(5.162)	(4.884)	(4.952)	(5.178)	(2.867)	(2.940)	(2.889)	(5.186)	(4.947)	(3.081)	(2.896)	(3.012)	(2.918)
fta_new_product		-9.046	-9.000	-13.47**	-11.56*	-9.083	-10.81**	-8.979*	-10.39**	-8.005	-12.92**	-7.822	-8.409	-6.589	-8.026
		(6.161)	(6.140)	(5.952)	(6.117)	(6.115)	(5.153)	(5.272)	(5.187)	(6.398)	(6.281)	(5.313)	(5.324)	(5.401)	(5.351)
fta_new_sector_USA		41.85***	41.99***	36.65***	40.42***	42.07***	54.91***	57.96***	53.90***	43.61***	38.26***	57.71***	57.15***	59.97***	55.96***
		(5.764)	(5.724)	(5.478)	(5.565)	(5.688)	(6.394)	(4.780)	(6.167)	(6.379)	(6.119)	(5.702)	(7.020)	(5.648)	(6.751)
fta_new_product_sector_USA		-38.04***	-38.22***	-33.17***	-36.04***	-38.24***	-50.59***	-53.41***	-49.68***	-40.14***	-34.71***	-53.91***	-53.83***	-56.32***	-52.77***
		(7.986)	(7.921)	(7.610)	(7.943)	(7.859)	(7.794)	(6.559)	(7.523)	(8.368)	(8.108)	(7.071)	(8.032)	(6.944)	(7.786)
d_atpdea			-0.0614	-0.122			-0.155	-0.0331	-0.0849	0.00135	-0.103	0.0862	-0.0554	0.0974	0.0155
			(0.0829)	(0.110)			(0.154)	(0.131)	(0.141)	(0.0968)	(0.125)	(0.151)	(0.162)	(0.152)	(0.146)
ln_rer_usa_peru				16.22***			23.74***	.	23.53***		16.22***	.	23.73***	.	23.52***
				(1.277)			(1.477)	.	(1.499)		(1.278)	.	(1.475)	.	(1.497)
lag_ln_real_annual_ev_tot							-0.640***					-0.640***	-0.639***		
							(0.0316)					(0.0236)	(0.0317)		
lag_ln_real_ev_USA_tot								-0.700***	-0.727***					-0.701***	-0.725***
								(0.0254)	(0.0323)					(0.0253)	(0.0324)
d_mfn											-0.0918	-0.0102	-0.0747	-0.00160	-0.0603
											(0.0882)	(0.116)	(0.105)	(0.116)	(0.0929)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196	5196
r2_o	0.00919	0.0249	0.0249	0.0509	0.0930	0.0234	0.221	0.270	0.255	0.0250	0.0507	0.225	0.222	0.270	0.256
N_clust	416	416	416	416	416	416	416	416	416	416	416	416	416	416	416

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C3

Model 1: Intensive Margin (Export Growth) - small firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-0.807***	-0.0807	-0.0804	-1.058***	-1.280***	-0.0813	-0.499***	-0.492***	-0.315**	-0.0928	-1.068***	-0.729***	-0.450***	-0.407**	-0.262**
	(0.0927)	(0.0811)	(0.0811)	(0.0992)	(0.136)	(0.0812)	(0.102)	(0.144)	(0.108)	(0.0949)	(0.114)	(0.146)	(0.123)	(0.157)	(0.133)
new_USA	3.024***	7.846***	7.848***	6.109***	5.907***	7.850***	5.942***	6.033***	6.173***	7.993***	6.217***	6.072***	6.043***	6.210***	6.306***
	(0.253)	(0.257)	(0.257)	(0.305)	(0.387)	(0.257)	(0.429)	(0.463)	(0.448)	(0.274)	(0.320)	(0.486)	(0.484)	(0.524)	(0.509)
new_product_USA		-7.330***	-7.333***	-5.990***	-5.586***	-7.334***	-5.312***	-5.004***	-5.268***	-7.342***	-6.049***	-5.443***	-5.542***	-5.426***	-5.572***
		(0.321)	(0.321)	(0.325)	(0.375)	(0.320)	(0.414)	(0.459)	(0.441)	(0.337)	(0.345)	(0.486)	(0.491)	(0.534)	(0.519)
gr_ln_effective_tariff	4.198**	5.109**	5.159**	11.82***	2.090	5.190**	7.584***	-0.290	7.038***	5.107**	11.80***	1.091	7.718***	-0.303	7.141***
	(1.968)	(2.357)	(2.365)	(2.269)	(2.493)	(2.370)	(1.878)	(2.035)	(1.765)	(2.370)	(2.274)	(2.193)	(1.890)	(2.056)	(1.777)
fta_new_product		-6.257**	-6.255**	-11.53***	-13.16***	-6.275**	-9.362**	-8.787**	-7.677**	-6.359**	-11.62***	-9.883***	-9.025**	-8.171**	-7.314*
		(2.893)	(2.894)	(2.938)	(3.110)	(2.896)	(3.655)	(3.900)	(3.765)	(2.938)	(2.992)	(3.781)	(3.676)	(3.905)	(3.789)
fta_new_USA		-1.797	-1.752	-9.146**	-10.06**	-1.697	-2.922	-2.596	-1.329	-0.642	-8.354**	-3.152	-2.123	-1.390	-0.344
		(3.715)	(3.708)	(3.764)	(4.228)	(3.704)	(5.469)	(4.780)	(4.989)	(3.795)	(3.844)	(4.965)	(5.711)	(5.081)	(5.278)
fta_new_product_USA		1.534	1.461	8.675*	11.59**	1.418	12.72**	12.64**	10.95**	1.405	8.270*	10.99**	11.01*	9.654*	8.748
		(4.591)	(4.580)	(4.499)	(4.838)	(4.571)	(5.777)	(5.302)	(5.487)	(4.645)	(4.550)	(5.299)	(5.875)	(5.338)	(5.565)
d_atpdea			-0.0728	-0.122*			-0.242***	-0.00354	-0.153*	-0.0565	-0.116*	-0.0119	-0.287**	0.00276	-0.183*
			(0.0502)	(0.0642)			(0.0924)	(0.0710)	(0.0847)	(0.0595)	(0.0700)	(0.0767)	(0.103)	(0.0780)	(0.0938)
ln_rer_usa_peru				14.15***			19.42***		19.71***		14.15***		19.45***		19.74***
				(0.821)			(1.056)		(1.078)		(0.820)		(1.054)		(1.076)
lag_ln_real_annual_ev_tot							-0.388***					-0.424***	-0.386***		
							(0.0208)					(0.0178)	(0.0208)		
lag_ln_real_ev_USA_tot								-0.489***	-0.494***					-0.489***	-0.493***
								(0.0176)	(0.0200)					(0.0175)	(0.0200)
d_mfn												-0.0770	-0.179***	-0.0634	-0.136**
												(0.0554)	(0.0638)	(0.0558)	(0.0613)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706
r2_o	0.0224	0.0527	0.0528	0.0828	0.103	0.0526	0.126	0.164	0.152	0.0528	0.0828	0.137	0.126	0.164	0.153
N_clust	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C4

Model 1: Intensive Margin (Export Growth) considering experience exporting in the sector - small firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-0.842***	-0.115	-0.115	-1.103***	-1.373***	-0.117	-0.541***	-0.595***	-0.370***	-0.123	-1.113***	-0.816***	-0.500***	-0.504***	-0.321**
	(0.0970)	(0.0801)	(0.0802)	(0.0971)	(0.132)	(0.0805)	(0.101)	(0.145)	(0.107)	(0.0946)	(0.113)	(0.147)	(0.122)	(0.159)	(0.132)
new_sector_USA	2.779***	7.856***	7.856***	6.147***	5.998***	7.856***	5.995***	6.109***	6.241***	7.952***	6.196***	6.058***	6.029***	6.204***	6.292***
	(0.236)	(0.259)	(0.259)	(0.294)	(0.328)	(0.259)	(0.440)	(0.450)	(0.451)	(0.263)	(0.301)	(0.467)	(0.476)	(0.501)	(0.495)
new_product_sector_USA		-7.335***	-7.334***	-5.974***	-5.562***	-7.331***	-5.375***	-5.034***	-5.337***	-7.273***	-5.953***	-5.333***	-5.453***	-5.296***	-5.472***
		(0.317)	(0.317)	(0.321)	(0.350)	(0.318)	(0.438)	(0.474)	(0.457)	(0.325)	(0.333)	(0.480)	(0.491)	(0.527)	(0.515)
gr_ln_effective_tariff	4.051**	5.210**	5.247**	11.96***	1.972	5.248**	7.675***	-0.429	7.137***	5.184**	12.06***	0.948	7.792***	-0.446	7.222***
	(1.961)	(2.347)	(2.355)	(2.254)	(2.500)	(2.364)	(1.869)	(2.044)	(1.754)	(2.361)	(2.276)	(2.205)	(1.880)	(2.066)	(1.767)
fta_new_product		-6.620**	-6.624**	-11.92***	-13.93***	-6.639**	-9.821***	-9.650**	-8.244**	-6.673**	-11.99***	-10.59***	-9.517***	-8.968**	-7.886**
		(2.889)	(2.891)	(2.932)	(3.103)	(2.894)	(3.620)	(3.907)	(3.732)	(2.942)	(3.002)	(3.784)	(3.651)	(3.917)	(3.765)
fta_new_sector_USA		-1.791	-1.767	-8.870**	-9.343**	-1.738	-2.444	-1.966	-0.728	-1.010	-8.444**	-3.152	-2.094	-1.312	-0.295
		(3.749)	(3.744)	(3.742)	(3.975)	(3.744)	(5.590)	(4.743)	(5.042)	(3.786)	(3.782)	(4.885)	(5.751)	(4.981)	(5.261)
fta_new_product_sector_USA		1.643	1.616	8.897**	11.87**	1.613	12.45**	12.55**	10.65**	2.045	8.976**	11.86**	11.81**	10.66**	9.631*
		(4.554)	(4.548)	(4.432)	(4.705)	(4.551)	(5.771)	(5.216)	(5.403)	(4.643)	(4.537)	(5.258)	(5.894)	(5.295)	(5.546)
d_atpdea			-0.0534	-0.105			-0.243**	-0.000767	-0.153*	-0.0322	-0.135*	-0.00659	-0.288***	0.00655	-0.183*
			(0.0513)	(0.0654)			(0.0947)	(0.0708)	(0.0860)	(0.0607)	(0.0763)	(0.0762)	(0.106)	(0.0772)	(0.0953)
ln_rer_usa_peru				14.35***			19.63***		19.93***		14.35***		19.65***		19.95***
				(0.812)			(1.060)		(1.084)		(0.812)		(1.058)		(1.082)
lag_ln_real_annual_ev_tot							-0.384***					-0.423***	-0.382***		
							(0.0210)					(0.0178)	(0.0209)		
lag_ln_real_ev_USA_tot								-0.489***	-0.491***					-0.489***	-0.490***
								(0.0175)	(0.0199)					(0.0174)	(0.0199)
d_mfn											-0.122**	-0.0756	-0.178***	-0.0630	-0.135**
											(0.0536)	(0.0546)	(0.0646)	(0.0549)	(0.0617)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706	14706
r2_o	0.0199	0.0498	0.0498	0.0810	0.102	0.0498	0.124	0.163	0.151	0.0497	0.0812	0.135	0.124	0.163	0.151
N_clust	574	574	574	574	574	574	574	574	574	574	574	574	574	574	574

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C5

Model 1: Intensive Margin (Export Growth) - medium firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-0.540***	-0.222***	-0.222***	-1.184***	-1.689***	-0.222***	-0.984***	-1.311***	-0.818***	-0.229**	-1.237***	-1.577***	-1.000***	-1.352***	-0.832***
	(0.0779)	(0.0833)	(0.0833)	(0.0900)	(0.118)	(0.0835)	(0.0886)	(0.122)	(0.0904)	(0.0900)	(0.108)	(0.135)	(0.105)	(0.136)	(0.105)
new_USA	3.133***	8.036***	8.036***	6.254***	5.885***	8.053***	5.807***	5.469***	5.883***	8.035***	6.294***	5.767***	5.957***	5.595***	6.012***
	(0.415)	(0.362)	(0.362)	(0.395)	(0.495)	(0.360)	(0.523)	(0.596)	(0.659)	(0.423)	(0.471)	(0.606)	(0.514)	(0.615)	(0.575)
new_product_USA		-7.768***	-7.769***	-6.331***	-5.701***	-7.789***	-5.803***	-4.737***	-5.327***	-7.948***	-6.416***	-5.428***	-6.026***	-4.756***	-5.452***
		(0.426)	(0.426)	(0.438)	(0.493)	(0.425)	(0.516)	(0.605)	(0.648)	(0.493)	(0.523)	(0.643)	(0.563)	(0.684)	(0.635)
gr_ln_effective_tariff	2.498	3.605	3.591	10.04***	3.634	3.726	6.919***	1.425	6.716***	3.622	10.12***	1.850	7.150***	1.563	6.889***
	(2.197)	(2.479)	(2.481)	(2.460)	(2.714)	(2.484)	(2.413)	(2.482)	(2.263)	(2.495)	(2.477)	(2.655)	(2.440)	(2.511)	(2.291)
fta_new_product		-5.172**	-5.170**	-11.68***	-14.82***	-5.196**	-9.110***	-11.92***	-8.855***	-5.234**	-12.07***	-13.04***	-9.249***	-12.21***	-8.964***
		(2.573)	(2.574)	(2.572)	(2.643)	(2.576)	(2.657)	(2.505)	(2.510)	(2.625)	(2.651)	(2.705)	(2.727)	(2.574)	(2.581)
fta_new_USA		-13.07	-13.07	-20.88**	-22.25**	-12.97	-19.05*	-20.17*	-19.16*	-13.08	-20.61**	-19.31*	-17.85*	-19.25*	-18.15*
		(9.044)	(9.038)	(9.068)	(9.826)	(9.093)	(9.975)	(10.99)	(10.37)	(8.636)	(8.684)	(9.961)	(9.270)	(10.20)	(9.521)
fta_new_product_USA		8.726	8.718	18.12**	22.13***	8.811	19.85**	27.72***	24.27**	7.465	17.54**	23.38***	18.28**	27.58***	23.39***
		(7.861)	(7.860)	(8.028)	(8.555)	(7.844)	(8.822)	(9.331)	(9.054)	(7.803)	(7.987)	(8.896)	(8.524)	(9.121)	(8.637)
d_atpdea			0.0234	0.0460			-0.0111	0.176**	0.0838	0.0162	0.0218	0.0920	-0.154	0.0960	-0.0268
			(0.0612)	(0.0832)			(0.0915)	(0.0779)	(0.0820)	(0.0702)	(0.0869)	(0.0984)	(0.109)	(0.101)	(0.0998)
ln_rer_usa_peru				13.53***			15.94***		16.41***		13.53***	.	15.97***		16.44***
				(0.851)			(1.071)		(1.122)		(0.853)		(1.067)		(1.119)
lag_ln_real_annual_ev_tot							-0.227***					-0.282***	-0.225***		
							(0.0214)					(0.0164)	(0.0215)		
lag_ln_real_ev_USA_tot								-0.366***	-0.394***					-0.366***	-0.392***
								(0.0185)	(0.0220)					(0.0186)	(0.0221)
d_mfn												-0.109	-0.260***	-0.115*	-0.205***
												(0.0678)	(0.0732)	(0.0685)	(0.0700)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402
r2_o	0.0120	0.0279	0.0279	0.0607	0.0740	0.0270	0.0641	0.0956	0.0876	0.0279	0.0608	0.0756	0.0640	0.0956	0.0875
N_clust	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C6

Model 1: Intensive Margin (Export Growth) considering experience exporting in the sector - medium firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-0.564***	-0.224***	-0.224***	-1.187***	-1.702***	-0.226***	-0.976***	-1.314***	-0.818***	-0.236***	-1.249***	-1.589***	-1.008***	-1.361***	-0.842***
	(0.0820)	(0.0845)	(0.0844)	(0.0908)	(0.120)	(0.0844)	(0.0894)	(0.123)	(0.0908)	(0.0912)	(0.110)	(0.136)	(0.105)	(0.137)	(0.106)
new_sector_USA	2.715***	7.960***	7.960***	6.200***	5.724***	7.969***	5.811***	5.458***	5.962***	7.964***	6.187***	5.562***	5.853***	5.482***	5.985***
	(0.389)	(0.339)	(0.339)	(0.361)	(0.475)	(0.338)	(0.462)	(0.507)	(0.549)	(0.446)	(0.489)	(0.623)	(0.527)	(0.616)	(0.562)
new_product_sector_USA		-7.750***	-7.751***	-6.267***	-5.481***	-7.754***	-5.890***	-4.813***	-5.511***	-7.832***	-6.205***	-5.132***	-5.853***	-4.606***	-5.393***
		(0.385)	(0.385)	(0.387)	(0.468)	(0.386)	(0.440)	(0.510)	(0.527)	(0.503)	(0.531)	(0.655)	(0.566)	(0.675)	(0.611)
gr_ln_effective_tariff	2.299	3.527	3.516	9.983***	3.807	3.639	6.851***	1.577	6.675***	3.540	10.06***	2.003	7.085***	1.720	6.844***
	(2.204)	(2.477)	(2.480)	(2.458)	(2.711)	(2.483)	(2.411)	(2.472)	(2.262)	(2.493)	(2.476)	(2.650)	(2.438)	(2.504)	(2.290)
fta_new_product		-5.105**	-5.103**	-11.62***	-14.85***	-5.135**	-8.999***	-11.90***	-8.826***	-5.195**	-12.08***	-13.06***	-9.244***	-12.24***	-8.994***
		(2.573)	(2.574)	(2.571)	(2.647)	(2.576)	(2.656)	(2.509)	(2.509)	(2.625)	(2.652)	(2.707)	(2.727)	(2.576)	(2.581)
fta_new_sector_USA		-14.57	-14.57	-22.28**	-24.13**	-14.49	-20.22**	-21.93*	-20.71*	-14.55*	-22.38**	-21.49**	-19.83**	-21.74**	-20.47**
		(9.357)	(9.352)	(9.351)	(10.07)	(9.410)	(10.22)	(11.26)	(10.60)	(8.771)	(8.815)	(10.14)	(9.425)	(10.44)	(9.757)
fta_new_product_sector_USA		10.23	10.21	19.92**	24.69***	10.36	20.78**	29.10***	25.35***	9.654	20.35**	26.44***	21.06**	30.54**	26.18***
		(8.012)	(8.012)	(8.135)	(8.649)	(8.011)	(8.950)	(9.463)	(9.137)	(7.865)	(8.052)	(9.031)	(8.677)	(9.324)	(8.835)
d_atpdea			0.0204	0.0447			-0.0145	0.171**	0.0808	0.0125	0.0182	0.0873	-0.159	0.0923	-0.0290
			(0.0614)	(0.0833)			(0.0925)	(0.0778)	(0.0828)	(0.0699)	(0.0865)	(0.0973)	(0.109)	(0.0995)	(0.0993)
ln_rer_usa_peru				13.54***			15.96***		16.43***		13.55***	.	16.00***	.	16.46***
				(0.854)			(1.076)		(1.128)		(0.856)	.	(1.072)	.	(1.125)
lag_ln_real_annual_ev_tot							-0.226***					-0.283***	-0.224***		
							(0.0216)					(0.0164)	(0.0217)		
lag_ln_real_ev_USA_tot								-0.368***	-0.395***					-0.368***	-0.394***
								(0.0185)	(0.0220)					(0.0185)	(0.0221)
d_mfn												-0.107	-0.255***	-0.113*	-0.200***
												(0.0678)	(0.0724)	(0.0683)	(0.0696)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N		19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402	19402
r2_o		0.0275	0.0275	0.0602	0.0731	0.0269	0.0637	0.0955	0.0876	0.0275	0.0602	0.0751	0.0636	0.0955	0.0875
N_clust		582	582	582	582	582	582	582	582	582	582	582	582	582	582

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C7

Model 1: Intensive Margin (Export Growth) - large firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-0.700***	-0.584***	-0.584***	-1.453***	-2.200***	-0.585***	-1.203***	-1.772***	-1.054***	-0.517***	-1.451***	-2.099***	-1.198***	-1.845***	-1.038***
	(0.116)	(0.123)	(0.123)	(0.122)	(0.147)	(0.123)	(0.0898)	(0.145)	(0.106)	(0.112)	(0.116)	(0.150)	(0.112)	(0.166)	(0.122)
new_USA	2.972***	9.971***	9.976***	8.313***	7.668***	9.979***	8.063***	8.165***	8.766***	10.77***	9.025***	8.608***	8.846***	9.050***	9.962***
	(0.570)	(1.008)	(1.009)	(0.913)	(0.684)	(1.008)	(0.912)	(0.761)	(1.044)	(0.944)	(0.860)	(0.745)	(0.816)	(0.783)	(0.880)
new_product_USA		-9.765***	-9.771***	-8.448***	-7.283***	-9.772***	-8.324***	-7.682***	-8.552***	-10.39***	-9.081***	-8.329***	-8.935***	-8.595***	-9.632***
		(1.031)	(1.031)	(0.952)	(0.848)	(1.030)	(0.971)	(0.892)	(1.088)	(1.008)	(0.988)	(1.179)	(1.076)	(1.202)	(1.121)
gr_ln_effective_tariff	4.610**	4.968**	4.949**	10.23***	4.274*	5.010**	8.464***	2.998	8.406***	4.857**	10.21***	3.829*	8.564***	3.115	8.491***
	(1.858)	(2.106)	(2.107)	(2.055)	(2.236)	(2.113)	(1.939)	(2.119)	(1.932)	(2.125)	(2.074)	(2.186)	(1.964)	(2.135)	(1.959)
fta_new_product		-5.092*	-5.109*	-10.75***	-17.57***	-5.043*	-8.506***	-14.19***	-7.715***	-4.571	-10.74***	-16.54***	-8.376**	-14.77***	-7.497***
		(2.777)	(2.776)	(2.719)	(2.959)	(2.771)	(2.433)	(2.831)	(2.586)	(2.826)	(2.789)	(3.027)	(2.552)	(3.028)	(2.678)
fta_new_USA		7.028	7.073	0.154	-1.784	7.031	1.009	0.410	2.883	11.53	4.138	3.822	5.289	5.294	9.466
		(7.497)	(7.500)	(7.050)	(5.909)	(7.497)	(7.426)	(7.442)	(8.356)	(7.326)	(6.884)	(6.453)	(7.269)	(7.406)	(7.929)
fta_new_product_USA		-7.484	-7.505	0.224	8.680	-7.581	-2.424	2.431	-5.538	-10.96	-3.268	0.676	-5.841	-2.626	-11.65
		(8.106)	(8.108)	(7.734)	(7.214)	(8.100)	(7.786)	(7.844)	(8.425)	(8.271)	(8.141)	(9.091)	(8.653)	(9.540)	(9.142)
d_atpdea			0.0597	0.0786			0.0412	0.104	0.0502	0.0932	0.0844	0.0124	-0.0864	0.0167	-0.0730
			(0.0582)	(0.0665)			(0.0840)	(0.0699)	(0.0784)	(0.0644)	(0.0720)	(0.104)	(0.111)	(0.103)	(0.105)
ln_rer_usa_peru				12.57***			12.99***		13.95***		12.57***		12.98***		13.95***
				(0.842)			(0.870)		(0.950)		(0.841)		(0.869)		(0.950)
lag_ln_real_annual_ev_tot							-0.142***					-0.247***	-0.143***		
							(0.0382)					(0.0211)	(0.0378)		
lag_ln_real_ev_USA_tot								-0.376***	-0.420***					-0.376***	-0.422***
								(0.0248)	(0.0402)					(0.0248)	(0.0400)
d_mfn												-0.0984	-0.217**	-0.0958	-0.220**
												(0.103)	(0.0936)	(0.103)	(0.0937)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008
r2_o	0.00595	0.0127	0.0129	0.0412	0.0607	0.0108	0.0385	0.0729	0.0564	0.0130	0.0412	0.0617	0.0384	0.0729	0.0566
N_clust	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C8

Model 1: Intensive Margin (Export Growth) considering experience exporting in the sector - large firms

Dependent Variable	gr_ln_real_ev														
Estimation	FE Robust														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
new_product	-0.703***	-0.577***	-0.577***	-1.456***	-2.219***	-0.579***	-1.198***	-1.795***	-1.053***	-0.514***	-1.452***	-2.109***	-1.193***	-1.858***	-1.035***
	(0.113)	(0.120)	(0.120)	(0.120)	(0.147)	(0.120)	(0.0898)	(0.147)	(0.106)	(0.112)	(0.115)	(0.151)	(0.112)	(0.167)	(0.121)
new_sector_USA	2.325***	9.582***	9.588***	8.026***	7.427***	9.606***	7.766***	7.883***	8.392***	10.61***	8.976***	8.710***	8.738***	9.086***	9.787***
	(0.452)	(0.838)	(0.837)	(0.726)	(0.572)	(0.833)	(0.658)	(0.577)	(0.786)	(0.854)	(0.771)	(0.695)	(0.722)	(0.713)	(0.798)
new_product_sector_USA		-9.560***	-9.568***	-8.088***	-6.858***	-9.559***	-8.037***	-7.199***	-8.250***	-10.37***	-8.928***	-8.225***	-8.890***	-8.458***	-9.577***
		(0.884)	(0.884)	(0.768)	(0.679)	(0.874)	(0.739)	(0.676)	(0.847)	(0.929)	(0.868)	(0.971)	(0.907)	(0.981)	(0.962)
gr_ln_effective_tariff	4.431**	4.967**	4.947**	10.24***	4.290*	5.010**	8.466***	3.022	8.413***	4.855**	10.22***	3.847*	8.566***	3.140	8.497***
	(1.860)	(2.105)	(2.107)	(2.054)	(2.236)	(2.113)	(1.937)	(2.118)	(1.931)	(2.125)	(2.073)	(2.185)	(1.963)	(2.134)	(1.959)
fta_new_product		-5.035*	-5.052*	-10.77***	-17.72***	-4.996*	-8.479***	-14.37***	-7.721***	-4.548	-10.75***	-16.61***	-8.349***	-14.86***	-7.488***
		(2.772)	(2.771)	(2.713)	(2.964)	(2.766)	(2.432)	(2.845)	(2.586)	(2.828)	(2.790)	(3.036)	(2.551)	(3.038)	(2.677)
fta_new_sector_USA		4.863	4.917	-1.456	-3.143	4.958	-0.676	-1.176	0.775	10.69	3.857	4.378	4.657	5.486	8.469
		(6.792)	(6.792)	(6.344)	(5.547)	(6.779)	(6.744)	(6.940)	(7.580)	(6.964)	(6.554)	(6.274)	(6.975)	(7.194)	(7.645)
fta_new_product_sector_USA		-6.486	-6.520	2.312	11.24*	-6.515	-0.811	5.341	-3.876	-10.95	-2.329	1.427	-5.626	-1.706	-11.42
		(7.508)	(7.508)	(7.022)	(6.547)	(7.465)	(6.978)	(7.075)	(7.532)	(7.921)	(7.609)	(8.042)	(7.857)	(8.485)	(8.359)
d_atpdea			0.0632	0.0816			0.0449	0.108	0.0540	0.0991	0.0908	0.0142	-0.0817	0.0188	-0.0687
			(0.0577)	(0.0660)			(0.0839)	(0.0697)	(0.0783)	(0.0637)	(0.0713)	(0.104)	(0.111)	(0.103)	(0.106)
ln_rer_usa_peru				12.58***			13.01***	.	13.97***		12.58***	.	13.00***	.	13.97***
				(0.839)			(0.869)	.	(0.948)		(0.839)	.	(0.868)	.	(0.948)
lag_ln_real_annual_ev_tot							-0.142***					-0.247***	-0.144***		
							(0.0380)					(0.0209)	(0.0376)		
lag_ln_real_ev_USA_tot								-0.375***	-0.420***					-0.376***	-0.421***
								(0.0249)	(0.0405)					(0.0249)	(0.0401)
d_mfn												-0.111	-0.219**	-0.108	-0.225**
												(0.103)	(0.0933)	(0.102)	(0.0935)
Year FE					Yes			Yes				Yes		Yes	
Sector FE						Yes		Yes				Yes		Yes	
Past Performance Variables							Yes		Yes				Yes		Yes
ATPDEA Interactions										Yes	Yes	Yes	Yes	Yes	Yes
N	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008	19008
r2_o	0.00519	0.0125	0.0127	0.0411	0.0609	0.0103	0.0385	0.0729	0.0563	0.0129	0.0412	0.0616	0.0384	0.0729	0.0566
N_clust	445	445	445	445	445	445	445	445	445	445	445	445	445	445	445

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

Appendix C9
Model 2: Extensive Margin (Entry) - very small firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_USA	0.214***	0.102***	0.0788**	0.219***	0.215***	0.0873***	0.0943**	0.214***	0.198***	0.159***	0.100**	0.0904***	0.201***	0.196***	0.527***	0.198	0.523***	0.198
	(0.0258)	(0.0318)	(0.0316)	(0.0259)	(0.0259)	(0.0323)	(0.0329)	(0.0258)	(0.0265)	(0.0261)	(0.0324)	(0.0323)	(0.0283)	(0.0278)	(0.0942)	(0.106)	(0.0931)	(0.107)
gr_ln_effective_tariff	-0.215	0.251	0.246	-0.343	-0.272	-0.0253	-0.113	-0.0568	0.289	0.220	0.133	0.124	-0.164	0.108	-0.792	-0.0631	-0.614	-0.0637
	(0.272)	(0.243)	(0.248)	(0.283)	(0.290)	(0.255)	(0.260)	(0.282)	(0.269)	(0.232)	(0.255)	(0.257)	(0.248)	(0.244)	(1.009)	(1.043)	(0.990)	(1.044)
fta_new_USA				1.073	1.052	0.757	1.085	1.062	1.001	0.733	1.131	1.097	1.010	1.004	2.063	1.845	2.040	1.847
				(0.799)	(0.798)	(0.771)	(0.843)	(0.797)	(0.789)	(0.727)	(0.842)	(0.844)	(0.743)	(0.741)	(2.608)	(2.674)	(2.610)	(2.675)
ln_lag_n_sec_exp_USA		0.0166	0.0128					0.0328***	1.085***	0.316***	0.00155	-0.00187		0.00347			0.0645	0.178
		(0.0146)	(0.0136)					(0.00833)	(0.0971)	(0.0865)	(0.0142)	(0.0141)		(0.0125)			(0.0586)	(0.326)
gr_ln_real_sector_USA_exports		-0.115***	-0.118***					-0.0964***	-0.0480***	-0.0777***	-0.120***	-0.121***		0.0167			-0.200***	-0.0436
		(0.0152)	(0.0151)					(0.0163)	(0.0184)	(0.0163)	(0.0153)	(0.0153)		(0.0142)			(0.0600)	(0.0668)
d_atpdea		-0.00539	-0.00415			-0.00932	-0.00169			-0.00715	-0.00162	-0.00202	0.000417	-0.113***		-0.0387		-0.0385
		(0.0110)	(0.0107)			(0.0102)	(0.0117)			(0.00998)	(0.0112)	(0.0112)	(0.0131)	(0.0147)		(0.0427)		(0.0427)
ln_rer_usa_peru		-1.460***	-1.487***			-1.518***	-1.453***			-1.475***	-1.477***	-1.488***	-1.501***	-1.524***				
		(0.0708)	(0.0698)			(0.0676)	(0.0735)			(0.0780)	(0.0730)	(0.0727)	(0.0731)	(0.0724)				
lag_ln_real_annual_ev_tot		0.0111***									0.00767**							
		(0.00215)									(0.00302)							
lag_ln_real_ev_USA_tot			0.0133***			0.0120***	0.00889**					0.00878**				0.0428***		0.0429***
			(0.00235)			(0.00237)	(0.00304)					(0.00300)				(0.00915)		(0.00916)
d_mfn													-0.00262	-0.00660				
													(0.0103)	(0.0101)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	13252	12318	12318	13252	13252	12318	12318	13252	13252	13252	12318	12318	13252	13252	12988	12054	12988	12054
r2_p	0.0230	0.114	0.116	0.0233	0.0268	0.117	0.113	0.0290	0.0536	0.125	0.121	0.121	0.110	0.118	n.d.	n.d.	n.d.	n.d.
N_clust	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C10

Model 2: Extensive Margin (Entry) considering experience exporting in the sector - very small firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_sector_USA	0.214***	0.103***	0.0781***	0.223***	0.219***	0.0925***	0.0868***	0.215***	0.197***	0.165***	0.0925***	0.0810***	0.205***	0.200***	0.536***	0.189**	0.529***	0.189**
	(0.0239)	(0.0292)	(0.0285)	(0.0237)	(0.0235)	(0.0288)	(0.0292)	(0.0235)	(0.0237)	(0.0241)	(0.0286)	(0.0284)	(0.0294)	(0.0289)	(0.0878)	(0.0956)	(0.0855)	(0.0958)
gr_ln_effective_tariff	-0.193	0.253	0.248	-0.357	-0.297	-0.0676	-0.144	-0.0833	0.264	0.186	0.106	0.0914	-0.185	0.0823	-0.903	-0.220	-0.768	-0.221
	(0.273)	(0.244)	(0.249)	(0.282)	(0.289)	(0.253)	(0.259)	(0.282)	(0.269)	(0.231)	(0.254)	(0.255)	(0.246)	(0.243)	(1.006)	(1.039)	(0.987)	(1.040)
fta_new_sector_USA				1.434*	1.410*	1.181	1.415*	1.395*	1.322*	1.082	1.417*	1.412*	1.349*	1.333*	3.228	3.134	3.166	3.129
				(0.804)	(0.803)	(0.769)	(0.837)	(0.804)	(0.794)	(0.732)	(0.844)	(0.840)	(0.756)	(0.755)	(2.612)	(2.660)	(2.611)	(2.659)
ln_lag_n_sec_exp_USA		0.0138	0.0105					0.0281***	1.087***	0.305***	0.000613	-0.00322		0.00209			0.0495	0.163
		(0.0145)	(0.0135)					(0.00842)	(0.0970)	(0.0864)	(0.0143)	(0.0141)		(0.0121)			(0.0582)	(0.325)
gr_ln_real_sector_USA_exports		-0.115***	-0.117***					-0.0954***	-0.0452**	-0.0751***	-0.119***	-0.121***		0.0129			-0.199***	-0.0413
		(0.0153)	(0.0152)					(0.0164)	(0.0186)	(0.0166)	(0.0154)	(0.0153)		(0.0140)			(0.0598)	(0.0671)
d_atpdea		-0.00527	-0.00402			-0.00912	-0.00132			-0.00664	-0.00150	-0.00198	-0.000116	-0.112***		-0.0384		-0.0382
		(0.0110)	(0.0107)			(0.0103)	(0.0118)			(0.0101)	(0.0112)	(0.0112)	(0.0129)	(0.0147)		(0.0429)		(0.0429)
ln_rer_usa_peru		-1.470***	-1.494***			-1.525***	-1.462***			-1.497***	-1.486***	-1.497***	-1.520***	-1.544***				
		(0.0713)	(0.0704)			(0.0684)	(0.0744)			(0.0788)	(0.0736)	(0.0736)	(0.0738)	(0.0733)				
lag_ln_real_annual_ev_tot		0.0115***									0.00892***							
		(0.00205)									(0.00281)							
lag_ln_real_ev_USA_tot			0.0138***			0.0124***	0.0103***					0.0102***				0.0448***		0.0449***
			(0.00225)			(0.00225)	(0.00284)					(0.00281)				(0.00897)		(0.00899)
d_mfn													-0.000777	-0.00554				
													(0.0103)	(0.0101)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	13252	12318	12318	13252	13252	12318	12318	13252	13252	13252	12318	12318	13252	13252	12988	12054	12988	12054
r2_p	0.0193	0.114	0.115	0.0199	0.0234	0.117	0.112	0.0252	0.0499	0.123	0.120	0.120	0.109	0.116	n.d.	n.d.	n.d.	n.d.
N_clust	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C11
Model 2: Extensive Margin (Entry) - small firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_USA	0.190***	0.140***	0.130***	0.204***	0.196***	0.140***	0.150***	0.194***	0.180***	0.175***	0.152***	0.142***	0.189***	0.183***	0.556***	0.324***	0.550***	0.328***
	(0.0217)	(0.0230)	(0.0237)	(0.0228)	(0.0227)	(0.0244)	(0.0253)	(0.0229)	(0.0216)	(0.0224)	(0.0242)	(0.0251)	(0.0251)	(0.0251)	(0.0772)	(0.0829)	(0.0769)	(0.0827)
gr_ln_effective_tariff	-0.218	0.343**	0.312*	-0.443**	-0.340*	0.00244	-0.0869	-0.174	0.284	0.0628	0.146	0.116	-0.172	0.0341	-1.577**	-0.423	-1.344*	-0.393
	(0.187)	(0.173)	(0.174)	(0.203)	(0.203)	(0.186)	(0.191)	(0.206)	(0.198)	(0.182)	(0.192)	(0.192)	(0.180)	(0.182)	(0.782)	(0.797)	(0.772)	(0.793)
fta_new_USA				0.990**	0.936**	0.748*	0.820*	0.927**	0.865*	0.855**	0.728*	0.766*	0.943**	0.902**	2.407	1.340	2.376	1.388
				(0.454)	(0.452)	(0.443)	(0.435)	(0.454)	(0.444)	(0.418)	(0.430)	(0.436)	(0.424)	(0.425)	(1.460)	(1.484)	(1.459)	(1.482)
ln_lag_n_sec_exp_USA		0.0239**	0.0208					0.0460***	1.286***	0.256***	0.0103	0.00584		-0.0235*			0.0726	-0.0381
		(0.0121)	(0.0126)					(0.00775)	(0.0705)	(0.0792)	(0.0122)	(0.0122)		(0.0121)			(0.0495)	(0.336)
gr_ln_real_sector_USA_exports		-0.0861***	-0.0850***					-0.0683***	-0.00909	-0.0395***	-0.0878***	-0.0881***		0.0132			-0.0253	0.200**
		(0.0151)	(0.0161)					(0.0165)	(0.0169)	(0.0147)	(0.0156)	(0.0159)		(0.0123)			(0.0694)	(0.0741)
d_atpdea		-0.0179*	-0.0182*			-0.0208***	-0.0163			-0.0196***	-0.0149	-0.0147	-0.0294**	-0.0861***		-0.0804***		-0.0802***
		(0.00999)	(0.0104)			(0.00735)	(0.0105)			(0.00678)	(0.00965)	(0.00973)	(0.0119)	(0.0151)		(0.0281)		(0.0282)
ln_rer_usa_peru		-1.502***	-1.509***			-1.547***	-1.502***			-1.514***	-1.520***	-1.517***	-1.567***	-1.577***				
		(0.0555)	(0.0569)			(0.0581)	(0.0557)			(0.0674)	(0.0553)	(0.0560)	(0.0526)	(0.0537)				
lag_ln_real_annual_ev_tot		0.0107***									0.00852***							
		(0.00197)									(0.00237)							
lag_ln_real_ev_USA_tot			0.00915***			0.00834***	0.00822***					0.00799***				0.0290***		0.0291***
			(0.00177)			(0.00184)	(0.00226)					(0.00225)				(0.00709)		(0.00703)
d_mfn													-0.0124	-0.0115				
													(0.00933)	(0.00854)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	20978	19295	19295	20978	20978	19295	19295	20978	20978	20978	19295	19295	20978	20978	20595	18912	20595	18912
r2_p	0.0171	0.110	0.109	0.0178	0.0209	0.115	0.114	0.0214	0.0550	0.121	0.116	0.117	0.111	0.114	n.d.	n.d.	n.d.	n.d.
N_clust	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C12

Model 2: Extensive Margin (Entry) considering experience exporting in the sector - small firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_sector_USA	0.180***	0.125***	0.114***	0.195***	0.187***	0.126***	0.132***	0.185***	0.172***	0.164***	0.136***	0.125***	0.187***	0.181***	0.517***	0.281***	0.510***	0.284***
	(0.0200)	(0.0212)	(0.0218)	(0.0209)	(0.0209)	(0.0226)	(0.0238)	(0.0210)	(0.0202)	(0.0208)	(0.0227)	(0.0237)	(0.0250)	(0.0250)	(0.0701)	(0.0754)	(0.0697)	(0.0749)
gr_ln_effective_tariff	-0.228	0.336*	0.303*	-0.461**	-0.365*	-0.0205	-0.109	-0.183	0.271	0.0551	0.138	0.104	-0.201	0.0167	-1.604**	-0.495	-1.380*	-0.461
	(0.188)	(0.173)	(0.174)	(0.205)	(0.205)	(0.187)	(0.194)	(0.207)	(0.199)	(0.182)	(0.193)	(0.194)	(0.182)	(0.183)	(0.779)	(0.791)	(0.767)	(0.786)
fta_new_sector_USA				1.046**	0.994**	0.782*	0.825*	0.981**	0.927**	0.880**	0.735*	0.777*	1.038**	1.005**	2.523*	1.516	2.480*	1.546
				(0.452)	(0.450)	(0.439)	(0.439)	(0.453)	(0.444)	(0.417)	(0.433)	(0.440)	(0.426)	(0.427)	(1.447)	(1.464)	(1.446)	(1.462)
ln_lag_n_sec_exp_USA		0.0240**	0.0208					0.0450***	1.293***	0.267***	0.0122	0.00730		-0.0180			0.0687	-0.0157
		(0.0122)	(0.0127)					(0.00746)	(0.0691)	(0.0760)	(0.0123)	(0.0123)		(0.0121)			(0.0500)	(0.334)
gr_ln_real_sector_USA_exports		-0.0901***	-0.0889***					-0.0732***	-0.0127	-0.0428***	-0.0917***	-0.0920***		0.0137			-0.0396	0.193***
		(0.0154)	(0.0164)					(0.0168)	(0.0172)	(0.0150)	(0.0160)	(0.0163)		(0.0122)			(0.0698)	(0.0744)
d_atpdea		-0.0164	-0.0168			-0.0200***	-0.0156			-0.0186***	-0.0137	-0.0136	-0.0241**	-0.0915***		-0.0782***		-0.0780***
		(0.0100)	(0.0104)			(0.00740)	(0.0105)			(0.00678)	(0.00967)	(0.00976)	(0.0119)	(0.0152)		(0.0281)		(0.0282)
ln_rer_usa_peru		-1.498***	-1.505***			-1.543***	-1.497***			-1.508***	-1.514***	-1.512***	-1.563***	-1.575***				
		(0.0555)	(0.0570)			(0.0582)	(0.0559)			(0.0656)	(0.0552)	(0.0562)	(0.0521)	(0.0531)				
lag_ln_real_annual_ev_tot		0.0109***									0.00918***							
		(0.00198)									(0.00237)							
lag_ln_real_ev_USA_tot			0.00943***			0.00861***	0.00882***					0.00855***				0.0298***		0.0300***
			(0.00178)			(0.00185)	(0.00226)					(0.00225)				(0.00707)		(0.00702)
d_mfn													-0.0109	-0.0100				
													(0.00952)	(0.00860)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	20978	19295	19295	20978	20978	19295	19295	20978	20978	20978	19295	19295	20978	20978	20595	18912	20595	18912
r2_p	0.0145	0.108	0.107	0.0153	0.0186	0.112	0.111	0.0191	0.0531	0.118	0.113	0.115	0.107	0.111	n.d.	n.d.	n.d.	n.d.
N_clust	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C13
Model 2: Extensive Margin (Entry) - medium firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_USA	0.120**	0.0839**	0.0770**	0.128*	0.124*	0.0828**	0.103***	0.115*	0.0798	0.0857**	0.0908**	0.0911**	0.0975***	0.0879**	0.126	-0.00632	0.0959	-0.00607
	(0.0607)	(0.0366)	(0.0352)	(0.0660)	(0.0684)	(0.0388)	(0.0385)	(0.0681)	(0.0528)	(0.0400)	(0.0392)	(0.0399)	(0.0358)	(0.0360)	(0.0991)	(0.0877)	(0.0938)	(0.0873)
gr_ln_effective_tariff	-0.310*	0.293**	0.223	-0.411**	-0.294*	-0.0332	-0.0974	-0.0441	0.473***	0.260*	0.202	0.152	-0.0689	0.193	-0.639	0.542	0.133	0.528
	(0.164)	(0.136)	(0.138)	(0.176)	(0.165)	(0.147)	(0.153)	(0.173)	(0.159)	(0.142)	(0.146)	(0.152)	(0.142)	(0.142)	(0.789)	(0.709)	(0.702)	(0.706)
fta_new_USA				0.555	0.524	0.329	0.425	0.451	0.192	0.265	0.279	0.334	0.358	0.282	-0.274	-0.998	-0.522	-0.995
				(0.645)	(0.655)	(0.496)	(0.482)	(0.654)	(0.568)	(0.487)	(0.473)	(0.489)	(0.469)	(0.471)	(1.610)	(1.584)	(1.592)	(1.583)
ln_lag_n_sec_exp_USA		0.0492***	0.0522***					0.0627***	1.428***	0.403***	0.0431***	0.0427***		-0.0213**			0.231***	-0.127
		(0.0121)	(0.0124)					(0.00789)	(0.0646)	(0.0806)	(0.0128)	(0.0130)		(0.00972)			(0.0693)	(0.312)
gr_ln_real_sector_USA_exports		-0.0860***	-0.0869***					-0.0857***	-0.0485***	-0.0732***	-0.0840***	-0.0856***		0.0481***			-0.0710	0.0326
		(0.0151)	(0.0146)					(0.0149)	(0.0166)	(0.0154)	(0.0158)	(0.0150)		(0.0129)			(0.0588)	(0.0642)
d_atpdea		-0.00982	-0.0152**			-0.0223***	-0.0250***			-0.0196***	-0.00995	-0.0136*	-0.0408***	-0.0961***		-0.0905***		-0.0905***
		(0.00761)	(0.00737)			(0.00583)	(0.00913)			(0.00552)	(0.00771)	(0.00767)	(0.0122)	(0.0135)		(0.0244)		(0.0244)
ln_rer_usa_peru		-1.467***	-1.508***			-1.543***	-1.490***			-1.439***	-1.472***	-1.500***	-1.555***	-1.560***				
		(0.0794)	(0.0746)			(0.0678)	(0.0783)			(0.0931)	(0.0777)	(0.0746)	(0.0851)	(0.0803)				
lag_ln_real_annual_ev_tot		0.0147***									0.0135***							
		(0.00439)									(0.00393)							
lag_ln_real_ev_USA_tot			0.00947***			0.00926***	0.00788***					0.00762***				0.0314***		0.0315***
			(0.00292)			(0.00274)	(0.00243)					(0.00238)				(0.0102)		(0.0102)
d_mfn													-0.0232**	-0.0123				
													(0.00999)	(0.00783)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	25275	24340	24340	25275	25275	24340	24340	25275	25275	25275	24340	24340	25275	25275	24643	23708	24643	23708
r2_p	0.00484	0.124	0.122	0.00500	0.00824	0.123	0.120	0.0123	0.0563	0.122	0.127	0.125	0.108	0.115	n.d.	n.d.	n.d.	n.d.
N_clust	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C14

Model 2: Extensive Margin (Entry) considering experience exporting in the sector - medium firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_sector_USA	0.101**	0.0752***	0.0681***	0.107**	0.103**	0.0693***	0.0847***	0.0980**	0.0678*	0.0800***	0.0783***	0.0769***	0.0857***	0.0782***	0.129	-0.000454	0.120	-0.000500
	(0.0433)	(0.0260)	(0.0249)	(0.0467)	(0.0481)	(0.0269)	(0.0257)	(0.0462)	(0.0370)	(0.0293)	(0.0262)	(0.0263)	(0.0304)	(0.0300)	(0.0792)	(0.0675)	(0.0767)	(0.0672)
gr_ln_effective_tariff	-0.332**	0.288**	0.217	-0.408**	-0.289*	-0.0311	-0.0956	-0.0333	0.480***	0.265*	0.210	0.159	-0.0671	0.199	-0.642	0.525	0.117	0.511
	(0.162)	(0.134)	(0.138)	(0.174)	(0.165)	(0.145)	(0.152)	(0.170)	(0.157)	(0.141)	(0.145)	(0.150)	(0.141)	(0.141)	(0.778)	(0.703)	(0.695)	(0.701)
fta_new_sector_USA				0.414	0.385	0.248	0.311	0.337	0.119	0.232	0.199	0.248	0.284	0.219	-0.217	-0.901	-0.315	-0.899
				(0.556)	(0.560)	(0.452)	(0.437)	(0.553)	(0.505)	(0.448)	(0.427)	(0.441)	(0.452)	(0.451)	(1.569)	(1.550)	(1.561)	(1.549)
ln_lag_n_sec_exp_USA		0.0501***	0.0530***					0.0638***	1.434***	0.407***	0.0441***	0.0437***		-0.0218**			0.233***	-0.127
		(0.0125)	(0.0128)					(0.00782)	(0.0651)	(0.0829)	(0.0131)	(0.0134)		(0.00952)			(0.0701)	(0.312)
gr_ln_real_sector_USA_exports		-0.0877***	-0.0884***					-0.0880***	-0.0503***	-0.0751***	-0.0862***	-0.0878***		0.0490***			-0.0724	0.0326
		(0.0149)	(0.0144)					(0.0147)	(0.0165)	(0.0153)	(0.0156)	(0.0148)		(0.0129)			(0.0593)	(0.0643)
d_atpdea		-0.00986	-0.0151**			-0.0224***	-0.0253***			-0.0198***	-0.00996	-0.0136*	-0.0414***	-0.0978***		-0.0905***		-0.0905***
		(0.00761)	(0.00734)			(0.00582)	(0.00919)			(0.00551)	(0.00773)	(0.00767)	(0.0119)	(0.0135)		(0.0244)		(0.0244)
ln_rer_usa_peru		-1.471***	-1.512***			-1.547***	-1.496***			-1.442***	-1.477***	-1.505***	-1.561***	-1.566***				
		(0.0747)	(0.0704)			(0.0636)	(0.0728)			(0.0899)	(0.0728)	(0.0693)	(0.0787)	(0.0744)				
lag_ln_real_annual_ev_tot		0.0146***									0.0137***							
		(0.00441)									(0.00409)							
lag_ln_real_ev_USA_tot			0.00941***			0.00923***	0.00802**					0.00772***				0.0314***		0.0315**
			(0.00297)			(0.00279)	(0.00255)					(0.00249)				(0.0102)		(0.0102)
d_mfn													-0.0233**	-0.0121				
													(0.00995)	(0.00784)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	25275	24340	24340	25275	25275	24340	24340	25275	25275	25275	24340	24340	25275	25275	24643	23708	24643	23708
r2_p	0.00369	0.124	0.121	0.00378	0.00706	0.123	0.119	0.0114	0.0558	0.122	0.127	0.125	0.108	0.115	n.d.	n.d.	n.d.	n.d.
N_clust	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633	633

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C15
Model 2: Extensive Margin (Entry) - large firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_USA	0.0684	0.0793	0.0751	0.0612	0.0572	0.0673	0.0778	0.0554	0.0454	0.0672	0.0753	0.0750	0.117	0.114	0.232	0.180	0.213	0.172
	(0.0651)	(0.0600)	(0.0630)	(0.0686)	(0.0629)	(0.0623)	(0.0713)	(0.0650)	(0.0666)	(0.0626)	(0.0683)	(0.0709)	(0.0829)	(0.0806)	(0.197)	(0.169)	(0.191)	(0.172)
gr_ln_effective_tariff	-0.245	0.268*	0.281*	-0.188	-0.0698	0.216	0.213	0.0247	0.576***	0.350**	0.331*	0.335**	0.149	0.290*	-1.625*	-0.545	-1.135	-0.566
	(0.195)	(0.162)	(0.161)	(0.205)	(0.198)	(0.159)	(0.163)	(0.206)	(0.191)	(0.166)	(0.169)	(0.165)	(0.167)	(0.167)	(0.864)	(0.709)	(0.810)	(0.716)
fta_new_USA				-0.614	-0.650	-0.505	-0.355	-0.670	-0.745	-0.495	-0.367	-0.380	-0.144	-0.182	-1.813	-2.324	-1.971	-2.368
				(0.735)	(0.714)	(0.658)	(0.668)	(0.719)	(0.708)	(0.649)	(0.665)	(0.664)	(0.738)	(0.727)	(2.374)	(2.292)	(2.347)	(2.300)
ln_lag_n_sec_exp_USA		0.0331***	0.0259*					0.0470***	1.335***	0.271***	0.0129	0.0125		-0.0290***			0.160***	-0.427
		(0.0112)	(0.0118)					(0.00689)	(0.0855)	(0.0971)	(0.0116)	(0.0112)		(0.00949)			(0.0422)	(0.362)
gr_ln_real_sector_USA_exports		-0.0374**	-0.0384**					-0.0310	-0.00641	-0.0344**	-0.0445***	-0.0454***		0.0326***			0.0418	0.0907
		(0.0171)	(0.0172)					(0.0190)	(0.0185)	(0.0159)	(0.0164)	(0.0165)		(0.00960)			(0.0636)	(0.0719)
d_atpdea		-0.0202***	-0.0173**			-0.0252***	-0.0147**			-0.0247***	-0.0113*	-0.0112	-0.0415***	-0.0469***		-0.103***		-0.103***
		(0.00712)	(0.00713)			(0.00622)	(0.00716)			(0.00631)	(0.00680)	(0.00719)	(0.0103)	(0.0161)		(0.0266)		(0.0266)
ln_rer_usa_peru		-1.568***	-1.594***			-1.611***	-1.589***			-1.542***	-1.589***	-1.596***	-1.614***	-1.617***				
		(0.0535)	(0.0596)			(0.0605)	(0.0589)			(0.0933)	(0.0564)	(0.0592)	(0.0611)	(0.0623)				
lag_ln_real_annual_ev_tot		0.0102***									0.00834**							
		(0.00324)									(0.00405)							
lag_ln_real_ev_USA_tot			0.00771***			0.00721***	0.00630***					0.00604***				0.0283***		0.0285**
			(0.00226)			(0.00224)	(0.00215)					(0.00215)				(0.00910)		(0.00909)
d_mfn													-0.0274***	-0.0169**				
													(0.00869)	(0.00781)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	20908	20502	20502	20908	20908	20502	20502	20908	20908	20908	20502	20502	20908	20908	20483	20077	20483	20077
r2_p	0.000940	0.128	0.129	0.00103	0.00323	0.130	0.133	0.00430	0.0443	0.129	0.134	0.135	0.122	0.125	n.d.	n.d.	n.d.	n.d.
N_clust	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.
[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C16

Model 2: Extensive Margin (Entry) considering experience exporting in the sector - large firms

Dependent Variable	Entry_ijt																	
Estimation	Probit																	
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)[a]	(16)[a]	(17)[a]	(18)[a]
new_sector_USA	0.0991**	0.0925**	0.0883**	0.0946**	0.0916**	0.0776*	0.0883*	0.0939**	0.0839**	0.0852**	0.0914*	0.0898*	0.118*	0.121*	0.295**	0.238**	0.284**	0.227*
	(0.0420)	(0.0410)	(0.0432)	(0.0437)	(0.0391)	(0.0424)	(0.0505)	(0.0401)	(0.0397)	(0.0410)	(0.0467)	(0.0489)	(0.0687)	(0.0653)	(0.135)	(0.117)	(0.130)	(0.121)
gr_ln_effective_tariff	-0.233	0.278*	0.290*	-0.193	-0.0718	0.217	0.215	0.0227	0.576***	0.355**	0.336**	0.340**	0.151	0.296*	-1.643*	-0.553	-1.153	-0.573
	(0.193)	(0.161)	(0.160)	(0.205)	(0.198)	(0.159)	(0.163)	(0.206)	(0.192)	(0.166)	(0.169)	(0.164)	(0.167)	(0.167)	(0.874)	(0.724)	(0.822)	(0.732)
fta_new_sector_USA				-0.427	-0.457	-0.469	-0.317	-0.449	-0.529	-0.407	-0.290	-0.312	-0.172	-0.168	-1.519	-2.059	-1.630	-2.135
				(0.652)	(0.640)	(0.590)	(0.596)	(0.640)	(0.619)	(0.575)	(0.594)	(0.589)	(0.679)	(0.664)	(2.186)	(2.152)	(2.170)	(2.163)
ln_lag_n_sec_exp_USA		0.0336***	0.0264**					0.0472***	1.335***	0.273***	0.0131	0.0126		-0.0299***			0.161***	-0.417
		(0.0113)	(0.0118)					(0.00697)	(0.0857)	(0.0976)	(0.0117)	(0.0112)		(0.00962)			(0.0426)	(0.359)
gr_ln_real_sector_USA_exports		-0.0394**	-0.0403**					-0.0324*	-0.00798	-0.0364**	-0.0464***	-0.0474***		0.0329***			0.0341	0.0836
		(0.0170)	(0.0172)					(0.0190)	(0.0187)	(0.0160)	(0.0165)	(0.0166)		(0.00967)			(0.0646)	(0.0736)
d_atpdea		-0.0204***	-0.0175**			-0.0251***	-0.0148**			-0.0247***	-0.0113*	-0.0112	-0.0426***	-0.0488***		-0.102***		-0.103***
		(0.00707)	(0.00709)			(0.00621)	(0.00713)			(0.00630)	(0.00675)	(0.00715)	(0.0104)	(0.0162)		(0.0266)		(0.0265)
ln_rer_usa_peru		-1.565***	-1.591***			-1.609***	-1.585***			-1.539***	-1.587***	-1.593***	-1.611***	-1.615***				
		(0.0540)	(0.0603)			(0.0613)	(0.0594)			(0.0943)	(0.0569)	(0.0597)	(0.0620)	(0.0631)				
lag_ln_real_annual_ev_tot		0.0102***									0.00822**							
		(0.00324)									(0.00400)							
lag_ln_real_ev_USA_tot			0.00764***			0.00715***	0.00623***					0.00594***				0.0282***		0.0283***
			(0.00225)			(0.00224)	(0.00212)					(0.00212)				(0.00908)		(0.00907)
d_mfn													-0.0275***	-0.0170**				
													(0.00870)	(0.00786)				
Year FE															Yes	Yes	Yes	Yes
Sector FE					Yes	Yes			Yes	Yes						Yes		Yes
Past Export Experience							Yes				Yes	Yes						
ATPDEA Interactions													Yes	Yes				
N	20908	20502	20502	20908	20908	20502	20502	20908	20908	20908	20502	20502	20908	20908	20483	20077	20483	20077
r2_p	0.00189	0.129	0.129	0.00194	0.00411	0.131	0.134	0.00528	0.0452	0.130	0.135	0.136	0.122	0.125	n.d.	n.d.	n.d.	n.d.
N_clust	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C17
Model 3: Exit - very small firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.521***	0.520***	0.520***	0.513***	0.520***	0.395***	0.375***	0.494***	0.374***	0.354***	0.355***	1.875***	1.924***	1.841***	1.833***
	(0.00855)	(0.00883)	(0.00885)	(0.00912)	(0.00889)	(0.00637)	(0.00618)	(0.0134)	(0.00981)	(0.00942)	(0.00964)	(0.0588)	(0.0515)	(0.0612)	(0.0615)
new_USA	-0.0497***	-0.0477***	-0.0477***	-0.0469***	-0.0475***	-0.0300**	-0.0341***	-0.0512***	-0.0277*	-0.0329**	-0.0318**	-0.217***	-0.213***	-0.214**	-0.219**
	(0.0162)	(0.0166)	(0.0166)	(0.0163)	(0.0167)	(0.0133)	(0.0132)	(0.0198)	(0.0154)	(0.0148)	(0.0151)	(0.0666)	(0.0701)	(0.0811)	(0.0808)
gr_ln_effective_tariff	0.0383	-0.0719	-0.0679	-0.0660	-0.0298	-0.652***	-0.705***	-0.00538	-0.685***	-0.770***	-0.743***	0.0724	-1.199	-1.463	-1.642
	(0.207)	(0.281)	(0.290)	(0.287)	(0.306)	(0.214)	(0.213)	(0.286)	(0.217)	(0.224)	(0.216)	(0.998)	(1.091)	(1.135)	(1.175)
fta_new_product		0.209	0.209	0.182	0.212	0.748**	0.812***	0.0446	0.636**	0.693**	0.709**	-0.170	3.762**	3.247*	3.247*
		(0.408)	(0.408)	(0.404)	(0.407)	(0.304)	(0.295)	(0.407)	(0.303)	(0.294)	(0.295)	(1.578)	(1.585)	(1.595)	(1.603)
fta_new_USA		7.924***	7.924***	8.259***	7.885***	7.202***	7.016***	7.602***	6.760***	6.691***	6.612***	29.20***	40.77***	39.51***	40.05***
		(2.158)	(2.160)	(2.194)	(2.154)	(1.591)	(1.584)	(2.185)	(1.563)	(1.605)	(1.561)	(8.266)	(9.771)	(10.00)	(10.22)
fta_new_product_USA		-7.986***	-7.986***	-8.317***	-7.949***	-7.180***	-6.998***	-7.683***	-6.716***	-6.630***	-6.573***	-29.61***	-40.91***	-39.58***	-40.12***
		(2.182)	(2.183)	(2.218)	(2.176)	(1.612)	(1.602)	(2.198)	(1.573)	(1.613)	(1.568)	(8.319)	(9.803)	(10.00)	(10.22)
d_atpdea			-0.00132	-0.00154		0.0217***	0.0241***	-0.0139	0.0237**	0.00855	0.0286***		0.0977***	0.120*	0.0547
			(0.00658)	(0.00645)		(0.00579)	(0.00601)	(0.0102)	(0.00927)	(0.00973)	(0.00911)		(0.0344)	(0.0529)	(0.0547)
ln_rer_usa_peru				-0.331***		-0.607***	-0.589***		-0.595***	-0.555***	-0.577***				
				(0.0725)		(0.0645)	(0.0655)		(0.0627)	(0.0629)	(0.0637)				
lag_ln_real_annual_ev_tot						0.0247***			0.0250***						
						(0.00134)			(0.00133)						
lag_ln_real_ev_USA_tot							0.0274***			0.0295***	0.0278***		0.156***	0.161***	0.167***
							(0.00130)			(0.00119)	(0.00130)		(0.00569)	(0.00561)	(0.00589)
d_mfn									0.0287***	0.00735	0.0289***			0.122**	0.0264
									(0.00689)	(0.00606)	(0.00703)			(0.0379)	(0.0338)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	16828	16828	16828	16828	16828	15092	15092	16828	15092	15092	15092	16828	15092	15092	15092
r2_p	0.327	0.327	0.327	0.331	0.327	0.497	0.509	0.332	0.503	0.514	0.515	n.d.	n.d.	n.d.	n.d.
N_clust	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C18

Model 3: Exit considering experience exporting in the sector - very small firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.508***	0.454***	0.453***	0.447***	0.453***	0.339***	0.315***	0.431***	0.320***	0.299***	0.298***	1.603***	1.599***	1.515***	1.505***
	(0.00986)	(0.0110)	(0.0110)	(0.0110)	(0.0110)	(0.00875)	(0.00866)	(0.0153)	(0.0121)	(0.0119)	(0.0121)	(0.0615)	(0.0562)	(0.0700)	(0.0704)
new_sector_USA	-0.0203	-0.437***	-0.437***	-0.436***	-0.438***	-0.322***	-0.329***	-0.442***	-0.320***	-0.330***	-0.327***	-1.899***	-1.956***	-1.960***	-1.976***
	(0.0163)	(0.0564)	(0.0564)	(0.0565)	(0.0566)	(0.0433)	(0.0421)	(0.0676)	(0.0517)	(0.0501)	(0.0504)	(0.214)	(0.221)	(0.270)	(0.270)
new_product_sector_USA		0.482***	0.482***	0.480***	0.484***	0.356***	0.362***	0.482***	0.358***	0.364***	0.362***	2.083***	2.133***	2.141***	2.155***
		(0.0570)	(0.0570)	(0.0572)	(0.0572)	(0.0431)	(0.0418)	(0.0681)	(0.0516)	(0.0501)	(0.0503)	(0.216)	(0.221)	(0.271)	(0.270)
gr_ln_effective_tariff	0.0543	-0.0163	-0.00576	-0.00395	0.0446	-0.555***	-0.607***	0.0562	-0.584***	-0.667***	-0.640***	0.311	-0.618	-0.745	-0.899
	(0.211)	(0.278)	(0.286)	(0.283)	(0.302)	(0.211)	(0.210)	(0.283)	(0.214)	(0.221)	(0.214)	(0.999)	(1.113)	(1.154)	(1.196)
fta_new_product		-0.208	-0.208	-0.229	-0.209	0.427	0.470	-0.366	0.307	0.345	0.362	-2.051	1.687	1.095	1.082
		(0.409)	(0.409)	(0.406)	(0.409)	(0.302)	(0.293)	(0.412)	(0.304)	(0.297)	(0.296)	(1.606)	(1.608)	(1.621)	(1.632)
fta_new_sector_USA		3.953***	3.942***	4.291***	3.902***	4.761***	4.665***	3.873***	4.733***	4.575***	4.653***	12.94***	26.47***	26.23***	26.43***
		(1.049)	(1.050)	(1.104)	(1.055)	(1.053)	(1.039)	(1.048)	(1.065)	(1.029)	(1.041)	(3.910)	(6.582)	(6.575)	(6.528)
fta_new_product_sector_USA		-3.421***	-3.409***	-3.764***	-3.364***	-4.353***	-4.230***	-3.366**	-4.295***	-4.090***	-4.194***	-10.71**	-24.13***	-23.79***	-23.97***
		(1.111)	(1.112)	(1.166)	(1.115)	(1.098)	(1.079)	(1.108)	(1.088)	(1.058)	(1.067)	(4.141)	(6.696)	(6.705)	(6.650)
d_atpdea			-0.00341	-0.00359		0.0203***	0.0227***	-0.0237**	0.0101	-0.00650	0.0134		0.0902**	0.0174	-0.0434
			(0.00646)	(0.00633)		(0.00578)	(0.00599)	(0.0101)	(0.00912)	(0.00949)	(0.00897)		(0.0352)	(0.0538)	(0.0548)
ln_rer_usa_peru				-0.331***		-0.580***	-0.560***		-0.575***	-0.536***	-0.555***				
				(0.0699)		(0.0611)	(0.0621)		(0.0606)	(0.0604)	(0.0615)				
lag_ln_real_annual_ev_tot						0.0249***			0.0250***						
						(0.00135)			(0.00133)						
lag_ln_real_ev_USA_tot							0.0277***			0.0298***	0.0278***		0.164***	0.166***	0.171***
							(0.00132)			(0.00121)	(0.00130)		(0.00578)	(0.00559)	(0.00587)
d_mfn									0.0273***	0.00566	0.0273***			0.110**	0.0168
									(0.00683)	(0.00598)	(0.00696)			(0.0382)	(0.0340)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	16828	16828	16828	16828	16828	15092	15092	16828	15092	15092	15092	16828	15092	15092	15092
r2_p	0.325	0.335	0.335	0.339	0.335	0.506	0.518	0.336	0.508	0.519	0.520	n.d.	n.d.	n.d.	n.d.
N_clust	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977	1977

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C19
Model 3: Exit - small firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.425***	0.421***	0.421***	0.423***	0.419***	0.430***	0.420***	0.388***	0.407***	0.403***	0.398***	1.252***	1.544***	1.463***	1.453***
	(0.00848)	(0.00886)	(0.00885)	(0.00846)	(0.00884)	(0.00581)	(0.00572)	(0.00996)	(0.00801)	(0.00823)	(0.00790)	(0.0492)	(0.0355)	(0.0395)	(0.0396)
new_USA	-0.148***	-0.141***	-0.141***	-0.132***	-0.140***	-0.0992***	-0.0965***	-0.143***	-0.0922***	-0.0929***	-0.0903***	-0.472***	-0.404***	-0.385***	-0.390***
	(0.0197)	(0.0205)	(0.0206)	(0.0201)	(0.0203)	(0.0171)	(0.0169)	(0.0215)	(0.0175)	(0.0175)	(0.0173)	(0.0637)	(0.0644)	(0.0644)	(0.0645)
gr_ln_effective_tariff	-0.0322	-0.0510	-0.0564	-0.188	-0.0524	-0.763***	-0.777***	0.0225	-0.762***	-0.819***	-0.777***	0.836	-0.236	-0.327	-0.408
	(0.166)	(0.205)	(0.208)	(0.209)	(0.214)	(0.154)	(0.152)	(0.207)	(0.153)	(0.149)	(0.151)	(0.668)	(0.658)	(0.666)	(0.666)
fta_new_product		-0.144	-0.144	-0.0625	-0.156	0.531**	0.540**	-0.377	0.374*	0.371*	0.390*	-1.015	1.760**	1.174	1.105
		(0.260)	(0.260)	(0.250)	(0.260)	(0.227)	(0.225)	(0.252)	(0.223)	(0.223)	(0.222)	(0.791)	(0.841)	(0.831)	(0.830)
fta_new_USA		12.51***	12.50***	13.43***	12.50***	10.39***	10.76***	12.50***	10.38***	11.38***	10.73***	44.62***	52.39***	52.02***	51.51***
		(4.093)	(4.091)	(4.149)	(4.096)	(2.749)	(2.817)	(4.141)	(2.746)	(3.151)	(2.814)	(14.56)	(13.92)	(13.99)	(13.93)
fta_new_product_USA		-12.43**	-12.42***	-13.30***	-12.42***	-10.22***	-10.58***	-12.45***	-10.17***	-11.20***	-10.53***	-44.58***	-52.20***	-51.69***	-51.22***
		(4.101)	(4.099)	(4.159)	(4.104)	(2.762)	(2.827)	(4.143)	(2.755)	(3.161)	(2.821)	(14.53)	(13.97)	(14.03)	(13.97)
d_atpdea			0.00216	0.00368		0.0219***	0.0220***	-0.0224**	0.0117	-0.000939	0.0125		0.0825***	0.0341	-0.0120
			(0.00759)	(0.00758)		(0.00762)	(0.00783)	(0.00978)	(0.00999)	(0.0105)	(0.00998)		(0.0281)	(0.0358)	(0.0405)
ln_rer_usa_peru				-0.705***		-1.102***	-1.085***		-1.095***	-1.070***	-1.078***				
				(0.0941)		(0.0613)	(0.0617)		(0.0601)	(0.0605)	(0.0605)				
lag_ln_real_annual_ev_tot						0.0182***			0.0182***						
						(0.00220)			(0.00219)						
lag_ln_real_ev_USA_tot							0.0189***			0.0204***	0.0189***		0.0735***	0.0747***	0.0784***
							(0.00160)			(0.00153)	(0.00160)		(0.00598)	(0.00595)	(0.00601)
d_mfn									0.0294***	0.0129*	0.0291***			0.0898***	0.0239
									(0.00714)	(0.00735)	(0.00731)			(0.0269)	(0.0284)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	23855	23855	23855	23855	23855	21968	21968	23855	21968	21968	21968	23855	21968	21968	21968
r2_p	0.157	0.157	0.157	0.172	0.159	0.260	0.266	0.161	0.264	0.267	0.269	n.d.	n.d.	n.d.	n.d.
N_clust	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C20

Model 3: Exit considering experience exporting in the sector - small firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.423***	0.388***	0.388***	0.392***	0.385***	0.408***	0.397***	0.359***	0.390***	0.385***	0.380***	1.142***	1.455***	1.390***	1.381***
	(0.00878)	(0.0103)	(0.0103)	(0.0100)	(0.0102)	(0.00672)	(0.00665)	(0.0111)	(0.00879)	(0.00907)	(0.00871)	(0.0553)	(0.0379)	(0.0422)	(0.0422)
new_sector_USA	-0.104***	-0.717***	-0.717***	-0.690***	-0.714***	-0.551***	-0.551***	-1.620***	-1.345***	-1.340***	-1.327***	-2.383***	-2.140***	-5.684***	-5.703***
	(0.0182)	(0.0874)	(0.0874)	(0.0853)	(0.0880)	(0.0897)	(0.0887)	(0.0316)	(0.0279)	(0.0227)	(0.0270)	(0.282)	(0.314)	(0.355)	(0.359)
new_product_sector_USA		0.688***	0.688***	0.662***	0.688***	0.522***	0.526***	1.574***	1.308***	1.304***	1.293***	2.279***	2.009***	5.520***	5.530***
		(0.0870)	(0.0870)	(0.0842)	(0.0872)	(0.0885)	(0.0876)	(0.0338)	(0.0296)	(0.0272)	(0.0287)	(0.274)	(0.308)	(0.344)	(0.349)
gr_ln_effective_tariff	0.00285	0.000820	-0.00154	-0.135	0.00837	-0.716***	-0.731***	0.0797	-0.720***	-0.777***	-0.736***	0.957	-0.107	-0.204	-0.279
	(0.168)	(0.205)	(0.208)	(0.209)	(0.215)	(0.153)	(0.151)	(0.208)	(0.152)	(0.148)	(0.150)	(0.678)	(0.662)	(0.670)	(0.671)
fta_new_product		-0.346	-0.346	-0.248	-0.360	0.409*	0.416*	-0.550**	0.283	0.275	0.296	-1.732**	1.244	0.771	0.709
		(0.258)	(0.258)	(0.250)	(0.258)	(0.225)	(0.223)	(0.250)	(0.222)	(0.221)	(0.221)	(0.791)	(0.831)	(0.821)	(0.821)
fta_new_sector_USA		6.366***	6.366***	7.730***	6.372***	6.465***	7.049***	-0.0797	0.377	0.195	0.376	23.90***	37.85***	0.479	0.310
		(1.823)	(1.822)	(2.078)	(1.828)	(1.501)	(1.602)	(0.247)	(0.239)	(0.168)	(0.231)	(7.117)	(8.721)	(1.407)	(1.410)
fta_new_product_sector_USA		-5.611**	-5.611**	-6.993***	-5.603***	-5.914***	-6.490***	0.706	0.0956	0.269	0.107	-21.62***	-36.16***	0.977	1.088
		(1.887)	(1.886)	(2.123)	(1.891)	(1.553)	(1.652)	(0.439)	(0.401)	(0.371)	(0.397)	(7.174)	(8.870)	.	.
d_atpdea			0.000930	0.00296		0.0225***	0.0224***	-0.0315***	0.00566	-0.00718	0.00624		0.0844***	0.00720	-0.0381
			(0.00764)	(0.00763)		(0.00737)	(0.00759)	(0.00980)	(0.0100)	(0.0105)	(0.00998)		(0.0282)	(0.0356)	(0.0405)
ln_rer_usa_peru				-0.698***		-1.090***	-1.071***		-1.088***	-1.060***	-1.069***				
				(0.0921)		(0.0592)	(0.0595)		(0.0590)	(0.0593)	(0.0594)				
lag_ln_real_annual_ev_tot						0.0181***			0.0180***						
						(0.00218)			(0.00217)						
lag_ln_real_ev_USA_tot							0.0191***			0.0206***	0.0191***		0.0749***	0.0756***	0.0793***
							(0.00159)			(0.00152)	(0.00158)		(0.00591)	(0.00589)	(0.00597)
d_mfn									0.0305***	0.0138*	0.0302***			0.0948***	0.0287
									(0.00709)	(0.00734)	(0.00726)			(0.0270)	(0.0286)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	23855	23855	23855	23855	23855	21968	21968	23855	21968	21968	21968	23855	21968	21968	21968
r2_p	0.153	0.162	0.162	0.177	0.163	0.263	0.269	0.164	0.265	0.268	0.270	n.d.	n.d.	n.d.	n.d.
N_clust	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C21

Model 3: Exit considering experience exporting in the sector - medium firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.372***	0.354***	0.354***	0.374***	0.352***	0.393***	0.388***	0.332***	0.379***	0.375***	0.375***	1.175***	1.383***	1.326***	1.323***
	(0.00920)	(0.0101)	(0.0101)	(0.00957)	(0.0100)	(0.00757)	(0.00754)	(0.00994)	(0.00877)	(0.00894)	(0.00872)	(0.0544)	(0.0432)	(0.0415)	(0.0412)
new_sector_USA	-0.0382*	-1.421***	-1.421***	-1.369***	-1.422***	-1.243***	-1.245***	-1.426***	-1.249***	-1.260***	-1.249***	-5.456***	-5.349***	-5.382***	-5.394***
	(0.0196)	(0.0319)	(0.0319)	(0.0345)	(0.0320)	(0.0244)	(0.0246)	(0.0322)	(0.0258)	(0.0305)	(0.0260)	(0.0631)	(0.0653)	(0.0852)	(0.0866)
new_product_sector_USA		1.446***	1.446***	1.385***	1.447***	1.253***	1.258***	1.452***	1.246***	1.265***	1.252***	5.514	5.398	5.383	5.398
		(0.0326)	(0.0326)	(0.0349)	(0.0327)	(0.0256)	(0.0260)	(0.0368)	(0.0299)	(0.0344)	(0.0305)	.	.	.	.
gr_ln_effective_tariff	-0.190	-0.0716	-0.0785	-0.337*	-0.0585	-0.658***	-0.647***	-0.0227	-0.671***	-0.673***	-0.660***	-0.216	-0.750	-0.856	-0.730
	(0.142)	(0.177)	(0.180)	(0.175)	(0.186)	(0.157)	(0.156)	(0.181)	(0.161)	(0.157)	(0.160)	(0.655)	(0.663)	(0.691)	(0.707)
fta_new_product		-0.707***	-0.707***	-0.445*	-0.717***	-0.0650	-0.0800	-0.865***	-0.155	-0.169	-0.173	-2.288***	-0.693	-1.091	-1.103
		(0.249)	(0.249)	(0.242)	(0.248)	(0.217)	(0.215)	(0.244)	(0.215)	(0.213)	(0.214)	(0.837)	(0.787)	(0.781)	(0.780)
fta_new_sector_USA		0.0716	0.0710	0.209	0.0574	0.453**	0.329*	0.0227	0.417**	0.259	0.296	0.0930	0.630	0.411	0.332
		(0.209)	(0.208)	(0.199)	(0.209)	(0.202)	(0.200)	(0.208)	(0.202)	(0.212)	(0.201)	(1.431)	(1.445)	(1.480)	(1.482)
fta_new_product_sector_USA		1.016**	1.015**	0.786*	1.027**	0.401	0.491	1.072**	0.344	0.522	0.445	3.311	2.363	2.263	2.350
		(0.423)	(0.424)	(0.417)	(0.423)	(0.379)	(0.376)	(0.446)	(0.400)	(0.404)	(0.398)	.	.	.	.
d_atpdea			0.00234	-0.000732		0.00206	0.00139	-0.0167	-0.00494	0.00627	-0.00590		0.000503	-0.0411	0.0164
			(0.00741)	(0.00814)		(0.00708)	(0.00724)	(0.0104)	(0.0108)	(0.0105)	(0.0109)		(0.0278)	(0.0404)	(0.0392)
ln_rer_usa_peru				-0.882***		-1.114***	-1.102***		-1.113***	-1.110***	-1.101***				
				(0.0754)		(0.0660)	(0.0661)		(0.0660)	(0.0700)	(0.0660)				
lag_ln_real_annual_ev_tot						0.00123			0.00142						
						(0.00276)			(0.00275)						
lag_ln_real_ev_USA_tot							0.00747***			0.00797***	0.00752***		0.0296***	0.0301***	0.0325***
							(0.00146)			(0.00170)	(0.00146)		(0.00592)	(0.00593)	(0.00626)
d_mfn									0.0219**	0.0296***	0.0220***			0.0710**	0.103***
									(0.00714)	(0.00762)	(0.00725)			(0.0263)	(0.0289)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	27011	27011	27011	27011	27011	26085	26085	27011	26085	26085	26085	27011	26085	26085	26085
r2_p	0.142	0.147	0.147	0.172	0.148	0.218	0.220	0.148	0.219	0.218	0.221	n.d.	n.d.	n.d.	n.d.
N_clust	825	825	825	825	825	825	825	825	825	825	825	825	825	825	825

Robust standard errors adjusted for clusters in firms.

*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C22
Model 3: Exit - large firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.335***	0.331***	0.330***	0.357***	0.326***	0.352***	0.351***	0.303***	0.331***	0.337***	0.331***	1.319***	1.374***	1.280***	1.276***
	(0.0103)	(0.0108)	(0.0107)	(0.0117)	(0.0101)	(0.0113)	(0.0113)	(0.0107)	(0.0109)	(0.0111)	(0.0108)	(0.0555)	(0.0543)	(0.0535)	(0.0525)
new_USA	-0.196***	-0.173***	-0.176***	-0.145***	-0.163***	-0.136***	-0.135***	-0.112**	-0.0765*	-0.0656*	-0.0754*	-0.612***	-0.634***	-0.348*	-0.318
	(0.0237)	(0.0236)	(0.0236)	(0.0259)	(0.0230)	(0.0273)	(0.0278)	(0.0397)	(0.0434)	(0.0391)	(0.0435)	(0.104)	(0.109)	(0.162)	(0.165)
gr_ln_effective_tariff	-0.232	-0.0673	-0.128	-0.443***	-0.187	-0.558***	-0.556***	-0.0660	-0.529***	-0.515***	-0.528***	-0.266	-0.657	-0.787	-0.725
	(0.142)	(0.156)	(0.158)	(0.152)	(0.163)	(0.149)	(0.149)	(0.158)	(0.150)	(0.155)	(0.149)	(0.691)	(0.707)	(0.745)	(0.763)
fta_new_product		-0.860***	-0.868***	-0.560**	-0.890***	-0.462*	-0.464*	-1.071***	-0.624**	-0.660**	-0.627**	-2.335**	-1.902	-2.669**	-2.706**
		(0.279)	(0.279)	(0.275)	(0.279)	(0.261)	(0.262)	(0.275)	(0.256)	(0.269)	(0.257)	(1.037)	(1.037)	(1.029)	(1.026)
fta_new_USA		22.29***	22.00***	19.35***	21.46***	18.11**	18.14**	24.24***	20.09**	19.80***	20.24**	74.44***	72.16***	80.43*	76.81*
		(8.133)	(8.014)	(6.997)	(7.836)	(7.134)	(7.143)	(9.271)	(8.340)	(7.621)	(8.398)	(27.84)	(27.19)	(32.04)	(30.99)
fta_new_product_USA		-20.66**	-20.37**	-17.61**	-19.74**	-16.23**	-16.26**	-22.18**	-17.82**	-17.56**	-17.96**	-68.33**	-66.11**	-72.40*	-68.59*
		(8.195)	(8.079)	(7.049)	(7.897)	(7.147)	(7.153)	(9.229)	(8.229)	(7.559)	(8.287)	(28.00)	(27.36)	(31.76)	(30.65)
d_atpdea			0.0189***	0.0130*		-0.00472	-0.00458	-0.000112	-0.0160	-0.00120	-0.0157		0.0378	-0.000143	-0.00212
			(0.00731)	(0.00774)		(0.00738)	(0.00742)	(0.00958)	(0.00996)	(0.0102)	(0.0101)		(0.0294)	(0.0421)	(0.0406)
ln_rer_usa_peru				-0.882***		-0.954***	-0.955***		-0.949***	-0.928***	-0.950***				
				(0.0918)		(0.0973)	(0.0963)		(0.0971)	(0.0909)	(0.0962)				
lag_ln_real_annual_ev_tot						-0.000336			-0.000231						
						(0.00507)			(0.00499)						
lag_ln_real_ev_USA_tot							0.000784			-0.000690	0.000875		-0.0110	-0.00877	-0.00554
							(0.00234)			(0.00216)	(0.00233)		(0.00777)	(0.00757)	(0.00770)
d_mfn									0.00922	0.00692	0.00958			0.102**	0.0284
									(0.00823)	(0.00853)	(0.00851)			(0.0342)	(0.0343)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	24038	24038	24038	24038	24038	23874	23874	24038	23874	23874	23874	24038	23874	23874	23874
r2_p	0.147	0.148	0.148	0.181	0.152	0.196	0.197	0.149	0.197	0.193	0.197	n.d.	n.d.	n.d.	n.d.
N_clust	516	516	516	516	516	516	516	516	516	516	516	516	516	516	516

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

Appendix C23
Model 3: Exit considering experience exporting in the sector - large firms

Dependent Variable	Exit_ijt														
Estimation	Probit														
Column	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)[a]	(13)[a]	(14)[a]	(15)[a]
new_product	0.332***	0.321***	0.321***	0.350***	0.318***	0.345***	0.344***	0.296***	0.325***	0.332***	0.325***	1.285***	1.341***	1.253***	1.250***
	(0.0107)	(0.0112)	(0.0111)	(0.0120)	(0.0104)	(0.0115)	(0.0115)	(0.0109)	(0.0112)	(0.0114)	(0.0111)	(0.0561)	(0.0550)	(0.0550)	(0.0541)
new_sector_USA	-0.00942	-0.287***	-0.290***	-0.228***	-0.294***	-0.237***	-0.237***	-1.164***	-1.070***	-1.051***	-1.069***	-0.984***	-0.958***	-5.222***	-5.229***
	(0.0249)	(0.0723)	(0.0719)	(0.0714)	(0.0718)	(0.0715)	(0.0712)	(0.0306)	(0.0341)	(0.0250)	(0.0311)	(0.271)	(0.273)	(0.308)	(0.122)
new_product_sector_USA		0.349***	0.348***	0.277***	0.349***	0.273***	0.274***	1.276***	1.144***	1.136***	1.144***	1.149***	1.095***	5.532***	5.539
		(0.0707)	(0.0704)	(0.0699)	(0.0707)	(0.0702)	(0.0701)	(0.0402)	(0.0431)	(0.0363)	(0.0407)	(0.263)	(0.267)	(0.308)	.
gr_ln_effective_tariff	-0.178	-0.0633	-0.118	-0.435***	-0.173	-0.547***	-0.544***	-0.0603	-0.522***	-0.505***	-0.519***	-0.296	-0.650	-0.808	-0.724
	(0.150)	(0.156)	(0.158)	(0.152)	(0.164)	(0.150)	(0.150)	(0.158)	(0.150)	(0.155)	(0.150)	(0.685)	(0.702)	(0.737)	(0.758)
fta_new_product		-0.922***	-0.928***	-0.608**	-0.946***	-0.507*	-0.510*	-1.119***	-0.654**	-0.694**	-0.658**	-2.554*	-2.117*	-2.836***	-2.870***
		(0.282)	(0.282)	(0.277)	(0.281)	(0.262)	(0.264)	(0.278)	(0.258)	(0.272)	(0.259)	(1.044)	(1.043)	(1.041)	(1.039)
fta_new_sector_USA		19.09***	18.67***	17.31***	17.69***	15.05**	15.07**	0.0603	0.380	0.390	0.377	64.36*	63.74*	0.615	0.547
		(7.384)	(7.165)	(6.635)	(6.843)	(6.509)	(6.477)	(0.267)	(0.291)	(0.247)	(0.285)	(25.90)	(25.64)	(1.663)	(1.660)
fta_new_product_sector_USA		-16.02**	-15.62**	-14.42**	-14.67**	-12.16*	-12.18*	3.388***	2.777***	2.725***	2.784***	-53.57*	-53.09*	11.34	11.38
		(7.482)	(7.260)	(6.716)	(6.935)	(6.560)	(6.525)	(0.442)	(0.435)	(0.390)	(0.420)	(26.21)	(25.95)	.	.
d_atpdea			0.0170**	0.0115		-0.00587	-0.00568	-0.000907	-0.0164	0.000261	-0.0160		0.0333	-0.000753	0.00416
			(0.00740)	(0.00781)		(0.00743)	(0.00747)	(0.00965)	(0.00997)	(0.0101)	(0.0102)		(0.0299)	(0.0424)	(0.0402)
ln_rer_usa_peru				-0.883***		-0.950***	-0.951***		-0.946***	-0.927***	-0.948***				
				(0.0915)		(0.0973)	(0.0963)		(0.0970)	(0.0908)	(0.0961)				
lag_ln_real_annual_ev_tot						-0.000294			-0.0000438						
						(0.00500)			(0.00494)						
lag_ln_real_ev_USA_tot							0.00111			-0.000154	0.00122		-0.00892	-0.00663	-0.00329
							(0.00233)			(0.00215)	(0.00232)		(0.00762)	(0.00744)	(0.00763)
d_mfn									0.00903	0.00773	0.00945			0.104***	0.0325
									(0.00829)	(0.00863)	(0.00857)			(0.0349)	(0.0348)
Year FE												Yes	Yes	Yes	Yes
Sector FE					Yes					Yes					Yes
Past Export Experience						Yes	Yes		Yes		Yes				
ATPDEA Interactions								Yes	Yes	Yes	Yes			Yes	Yes
N	24038	24038	24038	24038	24038	23874	23874	24038	23874	23874	23874	24038	23874	23874	23874
r2_p	0.144	0.147	0.148	0.180	0.151	0.196	0.196	0.149	0.197	0.193	0.197	n.d.	n.d.	n.d.	n.d.
N_clust	516	516	516	516	516	516	516	516	516	516	516	516	516	516	516

Robust standard errors adjusted for clusters in firms.
*Denotes statistical significance at the 10% level; **Denotes statistical significance at the 5% level; ***Denotes statistical significance at the 1% level.

[a] For regressions including year fixed effects, the numbers shown are index coefficients, instead of marginal effects.

APPENDIX D: CORRELATION MATRICES

Appendix D1
Correlation Matrix: Model 1 - Intensive Margin

	new_product	new_USA	new_product_USA	new_sector_USA	new_product_sector_USA	gr_ln_effective_tariff	fta_new_product	fta_new_USA	fta_new_product_USA	fta_new_sector_USA	fta_new_product_sector_USA	d_atpdea	ln_rer_usa_peru	lag_ln_real_annual_ev_tot	lag_ln_real_ev_USA_tot	d_mfn	ATPDEA_new_product	ATPDEA_new_USA	ATPDEA_new_product_USA	ATPDEA_new_sector_USA	ATPDEA_new_product_sector_USA	FE_BMI	FE_CHE	FE_JEW	FE_MME	FE_NMM	FE_TEX	FE_TIM	FE_2007	FE_2008	FE_2009	FE_2010	FE_2011	FE_2012	FE_2013	FE_AGR
new_product	1.000																																		
new_USA	0.310	1.000																																	
new_product_USA	0.378	0.868	1.000																																
new_sector_USA	0.342	0.925	0.828	1.000																															
new_product_sector_USA	0.405	0.810	0.934	0.886	1.000																														
gr_ln_effective_tariff	0.008	-0.047	-0.043	-0.041	-0.035	1.000																													
fta_new_product	-0.191	-0.159	-0.187	-0.151	-0.173	0.386	1.000																												
fta_new_USA	-0.096	-0.299	-0.266	-0.283	-0.249	0.281	0.564	1.000																											
fta_new_product_USA	-0.115	-0.264	-0.304	-0.252	-0.284	0.248	0.640	0.882	1.000																										
fta_new_sector_USA	-0.096	-0.297	-0.266	-0.284	-0.249	0.281	0.563	0.996	0.881	1.000																									
fta_new_product_sector_USA	-0.115	-0.264	-0.304	-0.252	-0.284	0.248	0.640	0.882	1.000	0.881	1.000																								
d_atpdea	0.008	0.002	0.004	0.012	0.016	0.169	0.065	0.044	0.039	0.044	0.039	1.000																							
ln_rer_usa_peru	0.282	0.133	0.110	0.132	0.110	-0.135	-0.052	-0.035	-0.031	-0.035	-0.031	-0.018	1.000																						
lag_ln_real_annual_ev_tot	0.114	-0.027	-0.022	-0.023	-0.019	-0.037	-0.014	0.001	0.002	0.001	0.002	0.030	0.122	1.000																					
lag_ln_real_ev_USA_tot	0.137	-0.012	-0.008	-0.008	-0.006	-0.045	-0.018	0.001	0.001	0.001	0.001	0.017	0.145	0.884	1.000																				
d_mfn	0.001	-0.005	-0.004	0.003	0.006	0.132	0.051	0.035	0.031	0.035	0.031	-0.184	0.003	-0.033	-0.052	1.000																			
ATPDEA_new_product	0.575	0.180	0.219	0.220	0.258	0.058	0.022	0.015	0.013	0.015	0.013	0.343	0.147	0.069	0.078	-0.063	1.000																		
ATPDEA_new_USA	0.190	0.600	0.531	0.544	0.495	0.026	0.010	0.007	0.006	0.007	0.006	0.156	0.078	-0.014	-0.006	-0.030	0.345	1.000																	
ATPDEA_new_product_USA	0.230	0.527	0.607	0.503	0.567	0.023	0.009	0.006	0.005	0.006	0.005	0.137	0.064	-0.011	-0.003	-0.028	0.400	0.879	1.000																
ATPDEA_new_sector_USA	0.222	0.526	0.490	0.618	0.569	0.028	0.011	0.007	0.007	0.007	0.007	0.168	0.078	-0.010	-0.001	-0.027	0.398	0.881	0.814	1.000															
ATPDEA_new_product_sector_USA	0.256	0.471	0.543	0.560	0.632	0.026	0.010	0.007	0.006	0.007	0.006	0.152	0.066	-0.008	0.001	-0.023	0.445	0.789	0.898	0.906	1.000														
FE_BMI	0.005	-0.017	-0.015	-0.007	-0.004	0.031	0.012	0.008	0.007	0.008	0.007	0.079	-0.017	0.048	0.025	0.096	0.031	-0.006	-0.007	0.003	0.005	1.000													
FE_CHE	0.003	-0.007	-0.008	0.007	0.011	0.047	0.018	0.012	0.011	0.012	0.011	0.138	-0.015	0.043	0.004	0.006	0.050	0.010	0.008	0.025	0.026	-0.030	1.000											
FE_JEW	-0.001	0.021	0.022	0.030	0.033	0.036	0.014	0.009	0.008	0.009	0.008	0.213	0.008	-0.062	-0.058	-0.095	0.069	0.067	0.064	0.079	0.078	-0.022	-0.035	1.000										
FE_MME	0.016	-0.032	-0.031	-0.033	-0.032	0.079	0.030	0.021	0.019	0.021	0.019	0.139	-0.052	0.064	0.060	0.207	0.063	-0.016	-0.019	-0.019	-0.022	-0.050	-0.078	-0.058	1.000									
FE_NMM	-0.001	-0.001	0.002	0.004	0.007	0.049	0.019	0.013	0.011	0.013	0.011	0.192	0.020	-0.061	-0.054	0.108	0.063	0.030	0.028	0.035	0.033	-0.030	-0.048	-0.035	-0.078	1.000								
FE_TEX	-0.007	-0.002	-0.005	-0.014	-0.021	-0.235	-0.091	-0.062	-0.055	-0.062	-0.056	-0.631	0.017	-0.022	0.009	-0.383	-0.216	-0.100	-0.089	-0.108	-0.099	-0.127	-0.199	-0.148	-0.328	-0.200	1.000							
FE_TIM	-0.003	0.006	0.008	0.014	0.020	0.080	0.031	0.021	0.019	0.021	0.019	0.084	0.029	-0.092	-0.090	0.359	0.025	0.020	0.018	0.027	0.028	-0.050	-0.078	-0.058	-0.128	-0.078	-0.327	1.000						
FE_2007	0.455	0.146	0.118	0.142	0.116	0.071	0.028	0.019	0.017	0.019	0.017	-0.010	0.523	0.051	0.064	0.000	0.249	0.092	0.073	0.089	0.073	-0.009	-0.006	0.004	-0.030	0.009	0.010	0.012	1.000					
FE_2008	0.082	0.072	0.064	0.079	0.072	0.079	0.030	0.021	0.018	0.021	0.018	-0.006	0.230	0.067	0.078	0.001	0.029	0.045	0.045	0.049	0.049	-0.004	-0.005	0.003	-0.014	0.005	0.005	0.013	-0.112	1.000				
FE_2009	0.006	0.059	0.050	0.060	0.051	-0.572	-0.221	-0.151	-0.133	-0.151	-0.133	-0.004	0.236	0.052	0.056	-0.002	0.012	0.028	0.022	0.030	0.025	-0.005	-0.003	0.002	-0.009	-0.001	0.005	0.006	-0.123	-0.139	1.000			
FE_2010	-0.055	-0.021	-0.012	-0.019	-0.012	0.091	0.035	0.024	0.021	0.024	0.021	-0.003	-0.053	0.004	-0.004	-0.003	-0.031	-0.018	-0.012	-0.016	-0.011	-0.004	-0.002	0.000	-0.006	0.000	0.003	0.000	-0.128	-0.145	-0.159	1.000		
FE_2011	-0.092	-0.053	-0.048	-0.053	-0.049	0.094	0.036	0.025	0.022	0.025	0.022	0.003	-0.192	-0.030	-0.042	-0.002	-0.056	-0.032	-0.031	-0.034	-0.033	0.002	0.003	-0.003	0.007	-0.003	-0.002	-0.005	-0.133	-0.151	-0.165	-0.172	1.000	
FE_2012	-0.102	-0.057	-0.050	-0.061	-0.054	0.097	0.037	0.025	0.023	0.025	0.023	0.010	-0.498	-0.054	-0.062	0.001	-0.050	-0.032	-0.028	-0.035	-0.031	0.010	0.007	-0.003	0.028	-0.009	-0.010	-0.015	-0.137	-0.155	-0.169	-0.177	-0.183	1.000
FE_2013	-0.117	-0.072	-0.060	-0.071	-0.059	0.095	0.037	0.025	0.022	0.025	0.022	0.011	-0.434	-0.087	-0.092	0.001	-0.056	-0.038	-0.030	-0.037	-0.031	0.011	0.008	-0.003	0.028	-0.009	-0.011	-0.016	-0.134	-0.152	-0.166	-0.173	-0.180	-0.184
FE_AGR	-0.004	0.025	0.025	0.018	0.016	0.095	0.038	0.026	0.023	0.026	0.023	0.337	-0.004	0.069	0.054	-0.027	0.107	0.079	0.072	0.067	0.057	-0.066	-0.103	-0.076	-0.169	-0.103	-0.432	-0.169	0.002	-0.006	-0.001	0.003	0.002	0.001

Appendix D2
Correlation Matrix: Model 2 - Extensive Margin

	actual_new_USA	new_sector_USA	gr_ln_effective_tariff	fta_new_USA	fta_new_sector_USA	d_atpdea	ln_rer_usa_peru	lag_ln_real_annual_ev_tot	lag_ln_real_ev_USA_tot	d_mfn	ATPDEA_new_USA	ATPDEA_new_sector_USA	FE_BMI	FE_CHE	FE_JEW	FE_MME	FE_NMM	FE_TEX	FE_TIM	FE_2007	FE_2008	FE_2009	FE_2010	FE_2011	FE_2012	FE_2013	FE_AGR
new_USA	1.000																										
new_sector_USA	0.820	1.000																									
gr_ln_effective_tariff	-0.082	-0.084	1.000																								
fta_new_USA	-0.303	-0.302	0.401	1.000																							
fta_new_sector_USA	-0.296	-0.308	0.400	0.981	1.000																						
d_atpdea	-0.025	-0.028	0.177	0.071	0.070	1.000																					
ln_rer_usa_peru	-0.037	-0.033	0.049	0.019	0.019	-0.033	1.000																				
lag_ln_real_annual_ev_tot	0.034	0.048	-0.020	-0.018	-0.018	-0.034	-0.068	1.000																			
lag_ln_real_ev_USA_tot	0.085	0.099	-0.017	-0.030	-0.032	-0.049	-0.041	0.785	1.000																		
d_mfn	-0.014	-0.020	0.132	0.053	0.053	-0.243	-0.002	-0.080	-0.079	1.000																	
ATPDEA_new_USA	0.613	0.431	0.032	0.013	0.013	0.183	-0.027	0.016	0.048	-0.034	1.000																
ATPDEA_new_sector_USA	0.436	0.608	0.031	0.013	0.012	0.177	-0.025	0.032	0.062	-0.041	0.722	1.000															
FE_BMI	-0.029	-0.025	0.041	0.016	0.016	0.082	-0.024	-0.005	-0.022	0.124	-0.010	-0.005	1.000														
FE_CHE	-0.016	-0.014	0.051	0.022	0.022	0.173	-0.010	0.018	-0.010	-0.089	0.016	0.017	-0.058	1.000													
FE_JEW	0.008	-0.002	0.022	0.009	0.009	0.126	0.013	-0.021	-0.023	-0.074	0.041	0.025	-0.023	-0.032	1.000												
FE_MME	-0.061	-0.060	0.121	0.049	0.048	0.204	-0.062	-0.098	-0.128	0.192	-0.010	-0.008	-0.126	-0.176	-0.069	1.000											
FE_NMM	0.002	0.000	0.038	0.016	0.016	0.095	0.011	-0.016	0.001	0.064	0.033	0.029	-0.040	-0.056	-0.022	-0.120	1.000										
FE_TEX	0.048	0.052	-0.259	-0.105	-0.105	-0.568	0.033	0.110	0.134	-0.361	-0.099	-0.095	-0.152	-0.212	-0.084	-0.457	-0.145	1.000									
FE_TIM	0.015	0.005	0.064	0.026	0.025	0.081	0.041	-0.038	-0.019	0.346	0.044	0.034	-0.065	-0.091	-0.036	-0.196	-0.062	-0.237	1.000								
FE_2007	0.062	0.061	0.107	0.043	0.042	-0.015	0.440	-0.011	0.006	-0.002	0.042	0.041	-0.013	-0.003	0.009	-0.035	0.009	0.015	0.022	1.000							
FE_2008	0.013	0.018	0.092	0.037	0.037	-0.002	-0.094	-0.024	-0.029	0.003	0.004	0.006	-0.003	-0.005	0.003	-0.003	0.002	0.001	0.005	-0.246	1.000						
FE_2009	0.093	0.088	-0.483	-0.193	-0.192	0.000	-0.100	-0.001	-0.019	-0.004	0.041	0.038	-0.001	-0.003	-0.001	-0.001	-0.004	0.005	-0.008	-0.219	-0.192	1.000					
FE_2010	-0.017	-0.014	0.069	0.028	0.028	0.010	-0.347	0.018	0.006	0.001	-0.008	-0.006	0.006	0.001	-0.004	0.018	-0.004	-0.007	-0.014	-0.186	-0.163	-0.145	1.000				
FE_2011	-0.019	-0.019	0.059	0.024	0.023	0.016	-0.389	0.028	0.015	0.003	0.000	0.001	0.013	0.005	-0.008	0.032	-0.007	-0.017	-0.017	-0.156	-0.137	-0.122	-0.104	1.000			
FE_2012	-0.022	-0.025	0.045	0.018	0.018	0.015	-0.460	0.040	0.035	0.001	-0.019	-0.019	0.014	0.008	-0.005	0.033	-0.004	-0.020	-0.020	-0.120	-0.106	-0.094	-0.080	-0.067	1.000		
FE_2013	0.023	0.016	0.030	0.012	0.012	0.016	-0.286	0.050	0.057	-0.001	0.032	0.025	0.012	0.011	-0.007	0.026	-0.001	-0.017	-0.016	-0.080	-0.070	-0.062	-0.053	-0.045	-0.034	1.000	
FE_AGR	0.027	0.030	0.064	0.026	0.026	0.202	0.012	0.011	0.025	-0.056	0.082	0.087	-0.073	-0.102	-0.040	-0.219	-0.070	-0.264	-0.113	0.010	0.002	0.008	-0.002	-0.008	-0.010	-0.010	1.000

Appendix D3
Correlation Matrix: Model 3 - Exit

	new_product	new_USA	new_product_USA	new_sector_USA	new_product_sector_USA	gr_ln_effective_tariff	fta_new_product	fta_new_USA	fta_new_product_USA	fta_new_sector_USA	fta_new_product_sector_USA	d_atpdea	ln_rer_usa_peru	lag_ln_real_annual_ev_tot	lag_ln_real_ev_USA_tot	d_mfn	ATPDEA_new_product	ATPDEA_new_USA	ATPDEA_new_product_USA	ATPDEA_new_sector_USA	ATPDEA_new_product_sector_USA	FE_BMI	FE_CHE	FE_JEW	FE_MME	FE_NMM	FE_TEX	FE_TIM	FE_2007	FE_2008	FE_2009	FE_2010	FE_2011	FE_2012	FE_2013	FE_AGR
new_product	1.000																																		
new_USA	0.310	1.000																																	
new_product_USA	0.407	0.869	1.000																																
new_sector_USA	0.376	0.867	0.791	1.000																															
new_product_sector_USA	0.460	0.763	0.884	0.895	1.000																														
gr_ln_effective_tariff	0.002	-0.046	-0.036	-0.032	-0.020	1.000																													
fta_new_product	-0.181	-0.112	-0.136	-0.101	-0.119	0.565	1.000																												
fta_new_USA	-0.076	-0.265	-0.219	-0.237	-0.192	0.396	0.523	1.000																											
fta_new_product_USA	-0.106	-0.226	-0.260	-0.206	-0.230	0.343	0.606	0.866	1.000																										
fta_new_sector_USA	-0.079	-0.259	-0.218	-0.243	-0.197	0.398	0.533	0.981	0.861	1.000																									
fta_new_product_sector_USA	-0.108	-0.223	-0.256	-0.209	-0.234	0.347	0.614	0.855	0.987	0.872	1.000																								
d_atpdea	0.016	0.001	0.008	0.030	0.039	0.184	0.103	0.070	0.060	0.071	0.061	1.000																							
ln_rer_usa_peru	0.089	0.062	0.041	0.051	0.031	-0.059	-0.033	-0.022	-0.019	-0.023	-0.019	-0.021	1.000																						
lag_ln_real_annual_ev_tot	0.040	-0.136	-0.126	-0.127	-0.123	-0.019	-0.009	0.014	0.014	0.014	0.014	-0.016	-0.115	1.000																					
lag_ln_real_ev_USA_tot	0.088	-0.094	-0.086	-0.085	-0.083	-0.021	-0.017	0.013	0.010	0.011	0.010	-0.037	-0.092	0.845	1.000																				
d_mfn	0.020	0.013	0.016	0.034	0.040	0.141	0.079	0.054	0.046	0.055	0.047	-0.193	0.003	-0.088	-0.096	1.000																			
ATPDEA_new_product	0.560	0.176	0.230	0.252	0.303	0.090	0.050	0.034	0.029	0.035	0.030	0.488	0.032	0.020	0.040	-0.084	1.000																		
ATPDEA_new_USA	0.200	0.609	0.549	0.517	0.482	0.046	0.026	0.017	0.015	0.017	0.015	0.248	0.030	-0.092	-0.063	-0.041	0.392	1.000																	
ATPDEA_new_product_USA	0.254	0.543	0.624	0.494	0.552	0.041	0.023	0.016	0.013	0.016	0.014	0.221	0.020	-0.086	-0.058	-0.041	0.454	0.891	1.000																
ATPDEA_new_sector_USA	0.257	0.485	0.469	0.636	0.598	0.052	0.029	0.020	0.017	0.020	0.018	0.285	0.022	-0.080	-0.052	-0.030	0.487	0.818	0.777	1.000															
ATPDEA_new_product_sector_USA	0.301	0.443	0.516	0.586	0.655	0.048	0.027	0.019	0.016	0.019	0.016	0.263	0.014	-0.079	-0.051	-0.028	0.539	0.748	0.843	0.922	1.000														
FE_BMI	0.008	-0.020	-0.014	0.011	0.014	0.036	0.020	0.014	0.012	0.014	0.012	0.080	-0.030	0.027	0.000	0.103	0.041	-0.006	-0.004	0.022	0.021	1.000													
FE_CHE	0.015	0.005	0.004	0.042	0.047	0.052	0.029	0.020	0.018	0.019	0.017	0.155	-0.010	0.010	-0.032	-0.028	0.089	0.039	0.032	0.079	0.079	-0.039	1.000											
FE_JEW	-0.010	0.015	0.016	0.025	0.029	0.035	0.019	0.013	0.011	0.013	0.012	0.189	0.010	-0.058	-0.057	-0.095	0.073	0.069	0.063	0.083	0.081	-0.024	-0.038	1.000										
FE_MME	0.035	-0.020	-0.007	-0.029	-0.016	0.102	0.057	0.039	0.034	0.039	0.034	0.171	-0.085	-0.043	-0.064	0.204	0.109	0.016	0.021	0.004	0.006	-0.071	-0.111	-0.069	1.000									
FE_NMM	0.002	0.009	0.012	0.023	0.026	0.050	0.028	0.019	0.016	0.019	0.016	0.172	0.029	-0.067	-0.049	0.083	0.081	0.059	0.055	0.071	0.067	-0.034	-0.054	-0.034	-0.099	1.000								
FE_TEX	-0.023	-0.011	-0.024	-0.045	-0.061	-0.259	-0.146	-0.100	-0.085	-0.100	-0.086	-0.608	0.029	0.063	0.098	-0.375	-0.293	-0.151	-0.137	-0.175	-0.163	-0.134	-0.210	-0.130	-0.384	-0.187	1.000							
FE_TIM	0.014	0.027	0.023	0.051	0.053	0.081	0.045	0.031	0.027	0.031	0.027	0.085	0.058	-0.083	-0.068	0.359	0.049	0.040	0.029	0.060	0.055	-0.056	-0.088	-0.055	-0.161	-0.078	-0.304	1.000						
FE_2007	0.287	0.104	0.080	0.098	0.077	0.099	0.057	0.039	0.034	0.040	0.035	-0.004	0.542	-0.040	-0.022	0.004	0.156	0.065	0.053	0.061	0.052	-0.013	0.003	0.002	-0.043	0.015	0.009	0.031	1.000					
FE_2008	0.046	0.046	0.034	0.053	0.040	0.095	0.053	0.036	0.031	0.037	0.032	-0.017	0.128	-0.025	-0.020	0.001	0.012	0.027	0.023	0.032	0.028	-0.014	-0.005	0.005	-0.044	0.010	0.018	0.029	-0.178	1.000				
FE_2009	0.011	0.059	0.046	0.058	0.045	-0.549	-0.309	-0.212	-0.181	-0.213	-0.185	-0.017	0.111	-0.017	-0.013	-0.007	-0.003	0.018	0.013	0.021	0.015	-0.008	-0.010	0.005	-0.016	0.000	0.019	0.008	-0.176	-0.175	1.000			
FE_2010	-0.036	0.007	0.014	0.005	0.012	0.088	0.049	0.034	0.029	0.034	0.029	-0.005	-0.169	0.010	-0.001	-0.007	-0.021	0.007	0.008	0.002	0.004	-0.002	-0.002	0.001	0.005	-0.006	0.006	-0.013	-0.164	-0.163	-0.161	1.000		
FE_2011	-0.073	-0.051	-0.043	-0.046	-0.038	0.085	0.048	0.033	0.028	0.033	0.028	0.009	-0.280	0.036	0.002	-0.001	-0.036	-0.028	-0.026	-0.023	-0.023	0.005	0.003	-0.001	0.029	-0.011	-0.010	-0.023	-0.159	-0.158	-0.155	-0.145	1.000	
FE_2012	-0.059	-0.051	-0.040	-0.053	-0.041	0.083	0.047	0.032	0.027	0.032	0.028	0.021	-0.516	0.043	0.040	0.006	-0.019	-0.029	-0.023	-0.030	-0.024	0.023	0.011	-0.010	0.060	-0.014	-0.029	-0.030	-0.155	-0.154	-0.152	-0.142	-0.137	1.000
FE_2013	-0.020	-0.050	-0.034	-0.040	-0.025	0.071	0.040	0.027	0.023	0.027	0.024	0.017	-0.402	0.076	0.084	-0.002	0.005	-0.018	-0.010	-0.012	-0.005	0.020	0.006	-0.006	0.040	-0.011	-0.018	-0.028	-0.132	-0.132	-0.130	-0.121	-0.117	-0.114
FE_AGR	-0.028	0.006	0.011	-0.010	-0.010	0.087	0.050	0.034	0.029	0.034	0.030	0.274	-0.005	0.077	0.065	-0.049	0.094	0.071	0.064	0.047	0.036	-0.065	-0.103	-0.064	-0.187	-0.091	-0.354	-0.148	-0.001	-0.003	-0.008	0.003	0.006	-0.001

	FE_2013	FE_AGR
FE_2013	1.000	
FE_AGR	0.005	1.000