

Trade as Engine of Creative Destruction

*The Mexican experience with Chinese competition**

PRELIMINARY AND INCOMPLETE - PLEASE DO NOT CITE WITHOUT PERMISSION

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Abstract

This paper exploits the surge in Chinese exports from 1994 to 2004 as a natural experiment to evaluate the effects of an exogenous shock from competition on Mexican producers. The effect of this competition operates a selection at both firm and product-level as its effects are highly heterogenous both on the intensive and extensive margins. Sales of smaller plants and more marginal products are compressed and are more likely to exit, while larger plants and products exhibit an opposite effect. Similar results hold both on the domestic market as well as for competition facing Mexican exporters on a third market (i.e. US).

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1 Introduction

Between 1990 and 2007 Chinese exports grew from 62 billions USD to 1.2 trillions USD, at the staggering average rate of more than 20% per year. The emergence of China and its impact on producers worldwide has been the focus of the attention of both policy-makers and researchers. Winters and Yusuf (2007) write that ”‘In terms of exports, China is arguably the largest shock we have seen thus far [...] in short the shock it is administering to the world is unprecedented’”. At the same time, policy makers concerned about the adverse consequences of such shock have been voicing their concerns and argued for the importance of protecting their industries.¹

In this study we treat the emergence of China as a natural experiment to evaluate the impact of a strong and sudden surge of competition on manufacturing producers of a middle-income country (Mexico). In this study we do not limit ourselves to study the impact of this competition surge on the domestic market, but also evaluate the impact on export markets (ie. the United States), which to our knowledge has not been done before. The objective of this study is to provide an example of how trade can work as a force of creative destruction that leads to competition enhancing readjustments within and across firms. For this reason we focus on both reallocation between firms and within firms, at product level.

There have been several recent studies that investigate the impact of Chinese competition on sectoral level.² Some studies have gone one step further by looking at the impact on firm level (see for example Bernard, Jensen and Schott (2006)). However, none of studies investigate the impact of competition on product level, nor analyze the impact of Chinese competition on firm- and product-level in a third export market.

The main contributions of our paper are to fill two gaps in the literature. On the one hand we provide a detailed investigation of the causal impact of competition on the intensive and extensive margin of products in addition to plants. On the other hand we evaluate this same impact on a third country market.³ On both these markets we find strong heterogenous effects of the competition shock on the extensive (firm exit and survival) and intensive (sales of plants) margin of plants. In addition we find evidence of product reallocation within plants as competition pressures them to focus on their core competencies.

The rest of the article is organized as follows: Section 2 discusses some related literature, section

¹For example: ”[We] must not repeat the mistakes of the nineties, when an ‘invasion’ of Chinese products destroyed entire sectors of our industry [...]” (Medium Enterprises Association of Argentina, April 6, 2004), or: ”‘I made it very clear to Minister Bo Xilai that we will take the legal steps to give Brazilian industry the right to protect itself’” (Brazilian minister for Industry, Development and Commerce after meeting with his Chinese counterpart, October 4, 2005.)

²See for example Freund, Ozden (2006), Hanson, Robertson (2007), Lederman et al. (2008), Jenkins et al. (2008), Soloaga et al. (2007), Devlin et al. (2006), Lall et al. (2005).

³We should underscore that the share of Mexican exports to the US is larger than 85%, in this sense we are analyzing the impact on the near universe of the Mexican exports.

3 describes the applied data and strategy. Section 4 describes the results of the investigation. Section 5 concludes.

2 Related Literature

Our work is related to several areas of research. First, there exists a large number of studies that rely on sectoral trade flows data to assess the competition threat from Chinese exports to Latin American producers (Freund, Ozden (2006), Hanson, Robertson (2007), Lederman et al. (2008), Jenkins et al. (2008), Soloaga et al. (2007), Devlin et al. (2006), Lall et al. (2005)). Other studies have evaluated the impact Chinese exports on wages and employment for various parts of Latin America, see Levinsohn (1999) for Chile, Pavcnik and Goldberg (2005) and Eslava, Haltiwanger, Kugler and Kugler (2009) for Colombia, Blom, Goldberg, Pavcnik and Schady (2004) for Brazil and Pavcnik (2002) for Chile.

Previous firm level studies highlight that trade does not only hurt producers but pushes them to improve their efficiency and organization. Bloom, Draca and Van Reenen (2008) find that imports from China to Europe increases the innovation activity of surviving firms in Europe, while it decreases the chances of survival and employment. Bernard, Jensen and Schott (2004) show that Chinese competition to the US make high wage and high skill companies there grow and cause the decline of low wage and low skill industries. Bernard, Jensen and Schott (2006) investigate how firms react to exposure to international trade and show that plant survival and growth are negatively correlated with competition while skill intensity, and industry switching positively.⁴

The question of the impact of trade on product level and within-firm reallocations however is with a few exceptions unexplored. Bernard, Redding and Schott (2009a) find that the impact of product switching on US manufacturing growth is as large as that of firm exit and entry to the market, Baldwin and Gu (2005) find evidence that competition reduces diversification of Canadian producers. Eckel, Iacovone, Javorcik and Neary (2009) show that Mexican producers tend to focus on their core competencies.

Further numerous theoretical articles are closely related to our analysis. Bernard, Redding and Schott (2009b) create a model of multi-product firms that predicts the drop of the less productive firms and products as a consequence of trade liberalization. The model by Eckel and Neary (2009) suggests that within-firm adjustments, as a consequence of trade reforms might generate substantial gains due to higher efficiency. Related models are further Melitz (2003), Melitz and Ottaviano (2009), Aghion et al. (2005).

⁴In this context see also Arroba et al. (2008), Bernard and Jensen (2007) and Yusuf et al. (2007).

Mayer, Melitz and Ottaviano (2009) is the model most closely related to our study as it extends Melitz and Ottaviano (2009), by introducing a multi-product dimension. They find that domestically an increase in the toughness of competition leads firms to drop their marginal products (the ones that also have a lower share in production), and reallocate their resources to an increased production of the remaining goods. The inter-firm reallocations generate an additional aggregate productivity increase. For export markets they predict that more competition will lead to a drop of the marginal products and firms.

3 Data and Empirical Strategy

Mexico is one of the countries most intensely affected by the emergence of Chinese exports (see Freund, Ozden 2006, Hanson Robertson 2007). Between 1994 and 2004 the value of Chinese imports to Mexico increased from 0.5 to 14.4 million USD, which corresponds to an increase of the share of Chinese imports in total imports from 0.6 to 7.3 percent (source: COMTRADE). Firms that were faced with above median average competition from China between 1994 and 2004 have a seven percent higher probability of adding one or more products to their portfolio during that period and a six percent higher probability of adding and dropping a product within a five year period than firms with below median competition.

To investigate this relationship further we rely on the Monthly Industrial Survey (EIM) data on Mexican plants provided by the Mexican Institute of Statistics (INEGI) which covers about 85 percent of Mexican industrial output. These unique survey contains detailed information on sales and exports of each of the products manufactured by Mexican plants as well as information on employment broken down by skills.⁵ Further, we use trade data from COMTRADE at HS-1996.⁶

Because the production database relies on the Mexican Industrial Classification CMAP-1994 (Clasificacin Mexicana de Actividades y Productos) at product level (i.e. 8-digit), while the trade data is based on the HS-1996 classification provided by the World Custom Organization at 6-digit level we had to match manually the individual product code using its description.⁷ In cases when a correspondence was not found we exclude those products from our dataset. Whenever more than one HS code corresponds to one CMAP product we use the average trade

⁵These datasets have been used and described in previous studies, see for example Iacovone 2008b and Iacovone and Javorcik 2008

⁶For the bilateral trade transaction we rely on the reported imports since it is generally believed that the importer-reported data tend to be more accurate.

⁷We conduct the match of these databases relying on the English and Spanish HS 1996 classification obtained from the Export Helpdesk from the European Union (Export Helpdesk, 2009) and the Spanish language HS classification obtained from the SICA project from the Ecuatorian Ministry of Agriculture and Livestock (SICA, 2009).

value across the different HS codes. After merging the trade and plant-product level datasets we obtain a specific measure of exposure to foreign competition at individual plant-product-level and we are left with information on 2744 individual products and a number of plants varying between 6219 and 4439 because of attrition during our sample period (from 1994 to 2004). Using this dataset we estimate the following equation:

$$y_{it} = \beta_1 Z_{it-1} + \beta_2 Z_{it-1} x_{it-1} + \beta_3 X_{it-1} + \lambda_t + \mu_i + \epsilon_{it}, \quad (1)$$

where y_{it} is a plant specific outcome variable of interest for plant i at time t , Z_{it} a measure of the Chinese competition shock, X_{it} a set of control variables and $Z_{it}x_{it}$ the interaction of the Chinese competition with x_{it} , a subset of X_{it} . λ_t denotes a year fixed effect and μ_i is a plant fixed effect. As a measure of Chinese competition Z_{it} we use the share of Chinese imports in total imports to Mexico for domestic and to the US for third market regressions.

We apply the same methodology to investigate the effect on product level. In these regressions we rewrite variables in terms of product i , which involves product specific outcomes, control variables on product and plant level, and product fixed effects.

Aware of the potential endogeneity concerns that could bias our estimates of β_1 and β_2 , our main variable of interests, we rely on instrumental variable estimators to tackle for the possible exogeneity of Z_{it} . As instruments we use Chinese exports to the EU and separately Chinese exports to the world excluding US and the EU, both of which we believe to be exogenous with respect to Mexican producers. Further we create the interactions of these instruments with x_{it} which provides us with additional instruments for the regressions that involve interaction terms.

4 Results

Sectoral level

First we investigate the relationship of Mexican competition and sales at sectoral level, for which we aggregate the data to six digit CMAP level (table 1). In the OLS regressions we find no significant effect of the Chinese import share on sales in Mexico on sectoral level. This is in line with the results of other studies involving aggregate data, who also find a small or insignificant impact (for example Wood and Mayer (2009)).

There is a positive effect of the Chinese import share to the US on exports of Mexican plants to the US. The instrumental variable estimates however are negative and significant at 1 percent level, reversing the sign of the coefficient on the export market. Thus we find evidence of a crowding out of Mexican manufactures due to Chinese competition both domestically and in

the third market. The difference between the OLS and the IV regressions highlights the need to take into account endogeneity problems. The first stage shows a strong correlation with the instruments, and we cannot reject the hypothesis of overidentification, suggesting that our instruments are appropriately exogenous.

These results at sectoral level could still hide an important amount of heterogeneity at firm and product level, with this objective in mind we move to a finer degree of disaggregation and investigate the impact of Chinese competition on both the extensive and intensive margin.

Extensive margin

At plant level we first investigate the relationship between the Chinese competition and plant exit from the market (see table 2 for the OLS and table 3 for the IV results while the first-stage results are reported by table 4). In all the following regressions we exclude some outliers⁸ such as plants reporting to export more than they what sell and plants characterized by extreme values in the rates of Chinese imports growth.⁹ Further we use robust standard errors and we cluster them at product-level which is the level of variation at which we measure the degree of Chinese competition.¹⁰

The plant exit variable used as an outcome in table 2 is a dummy variable that is equal to one if a plant has positive sales at times $t - 1$ and t , and no sales at time $t + 1$, and zero otherwise. Hence this variable indicates the year during which a plant leaves the market. We control for the following lagged variables on plant level: an index of plant price (which is derived as weighted average of a price index of the products produced in that plant), Herfindahl index as a measure of sectoral competition (a measure which is also a weighted mean of the competition for each of the product manufactured by the plants), the log number of employees as a control for plant size, the export share of producers and the ratio of white to blue collar workers. Further we use plant and year fixed effects.

We find in the first column that domestically Chinese competition in $(t - 1)$ has no significant conditional mean effect on plant exit in the OLS regressions, a result which is confirmed in the IV regression.¹¹ The second column shows that Chinese competition affects plants asymmetrically depending on the degree of market concentration. The more a market is concentrated, the more

⁸Our results are robust to the inclusion of these outliers.

⁹We exclude those instances when Chinese imports increase by more than 300 percent or decrease by more than 90 percent.

¹⁰Such clustering treatment is consistent with Moulton (1990).

¹¹Table 4 shows the results of first stage regressions, in which "China comp. world-EU-US" shows the export share of China to the world with the exception of the EU and the US, and "China exp EU" shows the export value of China to the EU. The terms "Int. 1" to "Int. 4" are the interactions of these instruments with the variables interacted in the IV regressions. For example: "Int. 1" in the regression with the export share interaction is equal to the first instrument ("China exp world-EU-US (t-1)") times the lagged export share. The p-value of a Sargan test of exogeneity of instruments, the p-value of a test of underidentification and the F-value of the first stage are also displayed.

Chinese competition reduces the chances of survival of Mexican plants, and this result holds also in the IV regression. In the third column we find that more productive plants (measured by the share of exports) are less likely to exit as a result of competition, but this result is not significant in IV estimation.

Finally we include an interaction between plant sales and Chinese competition (forth column). As suggested by the literature (see for example Mayer et al. (2009), Melitz (2003), Melitz et al. (2009)) we think of plant size to be correlated with productivity and/or managerial ability. In this case we uncover a significant asymmetric effect: plants with smaller overall sales are more affected than larger plants. The marginal effect of competition on the probability of exit is estimated to be $0.75 - 0.05\ln(\text{sales})$ in OLS. The mean and median log plant size are around a value of eleven, the percentile at which the mean estimated effect is zero is 70. This significant result for the extensive margin also holds qualitatively in the IV regression.

We repeat a similar estimation with outcome variable plant exit from export market in tables 5 (OLS), 6 (IV) and 7 (first stage). A similar pattern emerges as an increase of Chinese competitive pressures in the export market increases the probability of Mexican plants to withdraw from exports. This mean effect is however not significant in the IV regression. What is significant in both the OLS and IV estimation is the evidence on the asymmetric effect of competition. In fact, the interaction between plant sales and Chinese competition abroad is negative and significant while the coefficient on the competition alone is positive and significant. An increase in competitive pressures on the export market makes Mexican exporters more likely to stop serving it, but this average effect is weaker for larger and more productive plants.

Next we investigate the extensive margin responses at product-level. Product drop at time t is equal to one if a product is manufactured at time $t - 1$ and t , but not at $t + 1$ and $t + 2$.¹² Table 8 shows the overall drop of products as a consequence of Chinese competition. In this exercise we restrict the sample to those plants that produce more than one product only. In all product regressions we use product fixed effects (such that product i produced in plant j differs from product i produced in plant k) and cluster robust standard errors by product categories (CMAP 8-digit). On average, we find a positive and significant effect of Chinese competition on the probability of exit in the OLS and the IV regressions. The second and forth column introduce an interaction with the share of products within plants. We think of a product with a larger share as a more profitable product (Mayer et al. 2009) or “core products” (Eckel and Neary 2008, Eckel et al 2009). Also at product level we find evidence of selection effects as the impact of Chinese competition is asymmetric across products. Core products, or the ones that represent a larger a larger share of plant’s sales, are less likely to be dropped. This heterogeneous responses at product level are confirmed in our IV regressions as shown in the

¹²Alternatively we have tested the robustness of our results by defining product drop at time t equal to one if a product is manufactured at time $t - 1$ and t , but not at $t + 1$ and our results are substantially unchanged.

forth column of Table 8.

We repeat the exercise for products in the export market, restricting the sample to exporting plants. Product drop from export at time t is defined, as before, equal to one when a product is exported at time $t - 1$, in t , but not $t + 1$ and $t + 2$. In these regressions we control additionally for the exit of plants from all markets, and from export markets. The coefficients on the variable measuring the degree of Chinese competition in the US market are not significant when this variable is not interacted with the share of product on total plant sales. However, once more we find, both in OLS and IV regressions, evidence of reallocation and heterogeneous responses as the interaction between the degree of Chinese competition and the share of products sales is negative and significant. This indicates that the more a product is “core” the less likely it is to exit export market in the face of Chinese competition.

Hence we find significant evidence that in response to the increased competition from China led to heterogenous responses both at firm- and product-level with smaller plants and less important products facing larger probability of exiting from the market. In this way, competition operates as a selection mechanism that destroys less productive firms and products while, as we will show in the next section, spurring the expansion of more productive ones.

Intensive margin

When analyzing the responses at firm- and product-level along the intensive margin we confirm the existence of heterogeneous responses and a process of selection operating in the same direction as shown for extensive margin.

Table 10 shows the OLS results where log sales on plant level is the explained variable. First of all, we show in the first column that we do not find any average affect due to increased Chinese competition. However, when we include an interaction term between the degree of Chinese competition and plant size we find that while on average an increase in competition reduces plant-level sales, this effect is highly asymmetric as the larger a plant is the less it responds by reducing its sales. In other words, Chinese competition pushes smaller and less productive plants to become even smaller while larger and more productive ones actually expand their sales (column 4). This result also holds qualitatively in the IV regressions (table 11). In terms of magnitude we find in both the OLS and the IV results that the mean estimated impact of increasing Chinese competition on sales is negative for plants up to the 60th sales percentile and positive for the ones above it.

In the corresponding export market regressions for exporting plants (see table 12 for OLS and table 13 for IV) the same pattern emerges. While there is no average effect of competition from China on the export markets, we find, both in OLS and IV, that the impact of competition is asymmetric forcing smaller plants to reduce their exports sales while larger ones response is the opposite as shown by the coefficient on the interaction term between Chinese competition

on the export market and plant’s sales (column 4 in both tables 12 and 13).

Next we investigate the responses along the intensive margin at product level. Table 14 confirms once more the “creative destruction” effect of competition and its reallocative consequences with less important products being forced to contract while “core” products expand. In column 1 of Table 14 we show there is actually no mean effect of competition, however when we introduce an interaction term between competition and product’s share in column 2 we find that there is a significant asymmetric effect as while the coefficient on the variable capturing competition alone is negative and significant, this is counterbalanced by the interaction term pointing toward the fact that while competition forces a contraction along the intensive margin on average this effect is attenuated, and eventually reverted, for the “core products”. This results are consistent across OLS and IV estimation (column 2 and 4 in Table 14). The only case when this “asymmetric” effect of competition does not emerge is Table 15 where we present the product-level response to the Chinese competition on the export market. In this case, both in the OLS and IV estimation, we find a significant and negative effect of Chinese competition on product-level sales but the coefficient on the interaction term between Chinese competition and the product relevance, captured by its share over total plant sales, is positive but not significant.

To explore further the nature of this asymmetric effect given by our interaction term between plant size and degree of competition we perform quantile regressions and quantile IV regressions of the domestic size regression (see Table 16).¹³ The results reveal a similar relationship with a negative distributional effect below the median and a positive effect above in OLS and IV. The relationship is increasing and seems to be of a concave nature.

The quantile regression technique allows us to further estimate the competition effect on a size - skill surface (see figure 1, which uses the coefficients estimated in table 17), whereby we use the ratio of white to blue collar workers as a measure of skill intensity of plants. The figure suggests that among the small plants the competition hurts only those that have a low skill intensity, while small plants with a high skill intensity might even grow. Also among large plants those with a high skill intensity might grow as a result of competition, while large plants with a low share of white collar workers remain unaffected.

Employment

As a third outcome of interest we analyze changes in the number of workers as a consequence of increased competitive pressures from Chinese competition. This question is of high policy interest and often raised by both previous researchers and politicians in the context of Chinese imports. Tables 18 and 19 show the results for the overall log number of white and blue collars as explained variables respectively. OLS (columns one and three) shows no significant change of either in the regressions with no interaction terms. In the IV regressions we find a significant

¹³For the implementation of the quantile IV regressions we use the strategy and codes developed by Chernozhukov and Hansen (2006).

mean reduction of blue collar, but not of white collar workers. The regressions with the size interaction (columns two and four) show a reduction of blue and white collar workers that is again less apparent for large plants. The coefficient on the Chinese import share is stronger on blue collar workers (in OLS the coefficients on Chinese competition compare as -3.1 for blue and -1.9 for white collar workers, in IV as -7.1 for blue and -4 for white collar workers).

In the corresponding regressions for the export market (tables 20 and 21) we find that there is no mean effect on blue and a positive significant effect on white collar workers in OLS that disappears in the IV regression. The interacted variables show in IV a significant decrease for both that is more pronounced on the coefficient of competition for blue collar workers.

5 Conclusions

The surge of Chinese exports provided us with a quasi-natural experiment to evaluate the impact of a surge in competition on the extensive and intensive margin both at plant and product-level. In this study, for the first time to our knowledge, we analyzed the impact of such competitive pressures both on the domestic market as well as on the export market and uncovered a number of important results. First, and most crucially, we show that indeed the effect of competition is highly asymmetric because while smaller and less productive plants are forced to shrink and exit from the market, this effect is attenuated and eventually reverted for larger and more productive plants. Second, we show that this process of “creative destruction” and market selection does not operate only at firm- but also at product-level. Third, such heterogenous micro-level results are hidden by average effects at sectoral level pointing towards the need to use firm- and product level data and allow for heterogenous effect through interaction terms. Forth, crucially for policy makers, this asymmetric effects are not confined to sales and exports but are also present when we analyze the employment impact on smaller plants, and blue collars, being particularly strong and adverse.

These results reinforce the messages emerging from the recent theoretical literature on heterogenous firms spurred by the seminar paper of Melitz (2003) and recently expanded towards the introduction of a further layer of heterogeneity at product-level (Eckle and Neary 2008, Bernard et al 2008, Mayer et al 2009).

Still pending for our future research agenda is to understand more in details the mechanisms through which this “heterogenous” responses operates at firm- and product-level, such as the role of innovation, firm organizational practices, skills and workers’ training.

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Table 1: Sectoral regressions

	OLS		IV	
	Log domestic sales	Log export sales	Log domestic sales	Log export sales
China comp. Mex (t-1)	-0.735 (0.628)		-4.5*** (0.743)	
China comp. US (t-1)		4.049** (2.19)		-11.44*** (3.58)
Year fe.	Yes	Yes	Yes	Yes
Sector fe.	Yes	Yes	Yes	Yes
N	2050	2050	2050	2050
First stage				
China comp.-EU-US (t-1)			0.1165*** (0.0261)	0.1783*** (0.0221)
China comp. EU (t-1)			0.4224*** (0.0376)	0.1982*** (0.3184)
Sargan p-value			0.292	0.1219
Underid. P-value			0	0
First stage F-value			41.91	34.95

Table 2: Domestic plant exit, OLS

Domestic exit - OLS				
China comp. Mex (t-1)	0.0232 (0.0457)	-0.0842 (0.0633)	0.0607 (0.0561)	0.745** (0.334)
ln(Employees) (t-1)	-0.0658*** (0.00532)	-0.0663*** (0.00533)	-0.0656*** (0.00532)	-0.0241*** (0.00572)
Herfindahl (t-1)	0.0776 (0.0479)	0.0584 (0.0484)	0.0780 (0.0479)	0.0397 (0.0474)
Price (t-1)	-7.07e-05*** (2.07e-05)	-7.11e-05*** (2.07e-05)	-7.12e-05*** (2.08e-05)	1.70e-05 (2.13e-05)
Export share (t-1)	-0.0111 (0.0138)	-0.0112 (0.0138)	-0.00842 (0.0139)	0.00634 (0.0137)
Skill share (t-1)	-0.0136 (0.0186)	-0.0143 (0.0186)	-0.0137 (0.0186)	-0.0118 (0.0182)
ln(Sales) (t-1)				-0.0578*** (0.00406)
Herfindahl int.		0.658** (0.331)		
Exportshare int.			-0.231** (0.114)	
Sales int.				-0.0647** (0.0285)
Firm f.e.	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes
Observations	33998	33998	33998	33998

Table 3: Domestic plant exit (IV)

Domestic exit - IV				
China comp. Mex (t-1)	0.036 (0.11)	-0.100 (0.13)	0.014 (0.11)	1.638*** (0.50)
ln(Employees) (t-1)	-0.067*** (0.00)	-0.067*** (0.00)	-0.067*** (0.00)	-0.025*** (0.00)
Herfindahl (t-1)	0.126*** (0.04)	0.092** (0.04)	0.125*** (0.04)	0.086** (0.04)
Price (t-1)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	0.000 (0.00)
Export share (t-1)	-0.015 (0.01)	-0.015 (0.01)	-0.019 (0.01)	0.003 (0.01)
Skill share (t-1)	-0.018 (0.02)	-0.019 (0.02)	-0.018 (0.02)	-0.017 (0.02)
ln(Sales) (t-1)				-0.056*** (0.00)
Herfindahl int.		0.941** (0.41)		
Exportshare int.			0.292 (0.31)	
Sales int.				-0.141*** (0.04)
Firm f.e.	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes
N	30073	30073	30073	30073

Table 4: Plant exit domestic - First stage

	First stage for Chinese comp.			
ln(Employees) (t-1)	0.002*** (0.00)	0.002*** (0.00)	0.002*** (0.00)	0.000 (0.00)
Herfindahl (t-1)	0.005 (0.01)	-0.052*** (0.01)	0.004 (0.01)	0.005 (0.01)
Price (t-1)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
Export share (t-1)	-0.004** (0.00)	-0.003* (0.00)	-0.007*** (0.00)	-0.005*** (0.00)
Skill share (t-1)	0.002 (0.00)	0.002 (0.00)	0.002 (0.00)	0.003 (0.00)
China exp world-EU-US (t-1)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
China exp EU (t-1)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	-0.000** (0.00)
China comp. world-EU-US (t-1)	0.060*** (0.00)	0.031*** (0.01)	0.058*** (0.00)	-0.066*** (0.02)
China comp. EU (t-1)	0.214*** (0.01)	0.214*** (0.01)	0.201*** (0.01)	-0.244*** (0.05)
Int. 1		-0.000* (0.00)	0.000 (0.00)	-0.000*** (0.00)
Int. 2		0.000*** (0.00)	-0.000** (0.00)	0.000*** (0.00)
Int. 3		0.457*** (0.05)	0.013 (0.01)	0.012*** (0.00)
Int. 4		-0.250*** (0.07)	0.120*** (0.04)	0.043*** (0.01)
ln(Sales) (t-1)				-0.000 (0.00)
Firm f.e.	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes
N	30073	30073	30073	30073
Sargan p-value	0.15	0.07	0.11	0.12
Underid. P-value	0.00	0.00	0.00	0.00
First stage F-value	386.29	331.21	314.12	190.45

Table 5: Exit from export, plant, OLS

	Exit from export			
China comp. US (t-1)	0.305*** (0.0492)	0.312*** (0.0577)	0.479*** (0.0611)	1.509*** (0.279)
China comp. Mex (t-1)	-0.191** (0.0798)	-0.190** (0.0788)	-0.196** (0.0793)	-0.119 (0.0804)
ln(Employees) (t-1)	-0.0447*** (0.00896)	-0.0448*** (0.00898)	-0.0421*** (0.00893)	-0.0254*** (0.00966)
Herfindahl (t-1)	0.0481 (0.0809)	0.0538 (0.0876)	0.0582 (0.0809)	0.0378 (0.0809)
Price (t-1)	2.68e-05 (4.24e-05)	2.68e-05 (4.24e-05)	2.45e-05 (4.23e-05)	6.99e-05 (4.28e-05)
Export share (t-1)	0.00546 (0.0159)	0.00541 (0.0160)	0.0338** (0.0164)	0.00824 (0.0160)
Skill share (t-1)	-0.0109 (0.0407)	-0.0109 (0.0407)	-0.00962 (0.0406)	-0.0150 (0.0406)
Overall exit	0.922*** (0.0112)	0.922*** (0.0112)	0.923*** (0.0113)	0.915*** (0.0112)
ln(Sales) (t-1)				-0.0250*** (0.00815)
Herfindahl int.		-0.0766 (0.332)		
Exportshare int.			-0.894*** (0.105)	
Sales int.				-0.109*** (0.0236)
Firm f.e.	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes
Observations	12369	12369	12369	12369

Table 6: Exit from export, plant, IV

Exit from export - IV				
China comp. US (t-1)	-0.211 (0.56)	-0.099 (0.31)	-0.250 (0.51)	1.814** (0.92)
China comp. Mex (t-1)	0.426 (0.72)	0.243 (0.47)	0.508 (0.61)	1.34 (0.82)
ln(Employees) (t-1)	-0.059*** (0.01)	-0.059*** (0.01)	-0.059*** (0.01)	-0.034*** (0.01)
Herfindahl (t-1)	-0.055 (0.11)	-0.055 (0.13)	-0.058 (0.11)	-0.107 (0.11)
Price (t-1)	-0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)	0.000 (0.00)
Export share (t-1)	0.002 (0.03)	-0.000 (0.03)	0.009 (0.03)	0.021 (0.03)
Skill share (t-1)	-0.065 (0.05)	-0.066 (0.05)	-0.064 (0.05)	-0.071 (0.05)
ln(Sales) (t-1)				-0.035*** (0.01)
Herfindahl int.		0.049 (0.84)		
Exportshare int.			-0.157 (0.39)	
Sales int.				-0.218* (0.11)
Firm f.e.	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes
N	10249	10249	10249	10249

Table 7: Exit from export, plant, first stage

	First stage for Chinese comp.			
ln(Employees) (t-1)	0.002 (0.00)	0.002 (0.00)	0.002 (0.00)	0.001 (0.00)
Herfindahl (t-1)	-0.035** (0.02)	0.041** (0.02)	-0.035** (0.02)	-0.034** (0.02)
Price (t-1)	-0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)	-0.000** (0.00)
Export share (t-1)	0.007* (0.00)	0.005 (0.00)	0.011** (0.00)	0.007* (0.00)
Skill share (t-1)	0.010 (0.01)	0.009 (0.01)	0.010 (0.01)	0.005 (0.01)
China exp world-EU-US (t-1)	0.163*** (0.01)	0.252*** (0.02)	0.185*** (0.02)	0.470*** (0.08)
China exp EU (t-1)	0.414*** (0.03)	0.335*** (0.04)	0.396*** (0.04)	0.293 (0.20)
China comp. world-EU-US (t-1)	0.000*** (0.00)	0.000* (0.00)	0.000*** (0.00)	0.000*** (0.00)
China comp. EU (t-1)	-0.000 (0.00)	0.000*** (0.00)	-0.000*** (0.00)	-0.000** (0.00)
Int. 1		-1.077*** (0.15)	-0.084** (0.03)	-0.028*** (0.01)
Int. 2		1.013*** (0.20)	0.057 (0.08)	0.012 (0.02)
Int. 3		0.000*** (0.00)	-0.000 (0.00)	-0.000*** (0.00)
Int. 4		-0.000*** (0.00)	0.000*** (0.00)	0.000** (0.00)
ln(Sales) (t-1)				0.005*** (0.00)
Firm f.e.	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes
N	10249	10249	10249	10249
Sargan p-value	0.253145	0.328361	0.663169	0.150845
Underid. P-value	5.40E-17	6.10E-19	3.48E-15	2.62E-09
First stage F-value	123.1224	108.5149	102.2418	103.4939

Table 8: Product drop overall

	Product drop (OLS)		Product drop (IV)		First stage	
China comp. Mex (t-1)	0.120*** (0.0409)	0.190*** (0.0592)	0.466*** (0.131)	0.707*** (0.178)		
Nr of products (t-1)	-0.0287*** (0.00675)	-0.0291*** (0.00675)	-0.0294*** (0.00618)	-0.0309*** (0.0062)	-0.001 (0.00)	-0.001 (0.00)
Product add (t-1)	-0.104*** (0.00644)	-0.104*** (0.00644)	-0.101*** (0.00587)	-0.101*** (0.00588)	0.001 (0.00)	0.001 (0.00)
Share (t-1)	5.64e-06* (0)	5.81e-06* (0)	5.84e-06** (0)	6.41e-06*** (0)	-0.000 (0.00)	-0.000 (0.00)
Share int. (t-1)		-0.283** (0.136)		-0.958*** (0.302)		
China comp. world-EU-US (t-1)					0.095*** (0.02)	0.095*** (0.02)
China comp. EU (t-1)					0.418*** (0.06)	0.433*** (0.06)
Int. 1						-0.052 (0.09)
Int. 2						0.000 (0.03)
Product f.e.	Yes	Yes	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	81183	81183	75911	75911	75911	75911
Sargan p-value					0.124	0.153
Underid. P-value					0	0
First stage F-value					20.45	69.89

Table 9: Product drop from export

	Product drop (OLS)		Product drop (IV)		First stage	
China comp. US (t-1)	-0.0637 (0.0583)	0.0722 (0.0845)	-0.0348 (0.100)	0.205 (0.133)		
Nr of products (t-1)	0.0205 (0.0129)	0.0210 (0.0129)	0.0203* (0.0113)	0.0213* (0.0112)	0.004 (0.00)	0.004 (0.00)
Product add (t-1)	-0.0786*** (0.0162)	-0.0779*** (0.0161)	-0.0762*** (0.0142)	-0.0751*** (0.0141)	0.002 (0.00)	0.002 (0.00)
Share (t-1)	-0.0769*** (0.0270)	-0.0506* (0.0282)	-0.0745*** (0.0233)	-0.0261 (0.0257)	-0.004 (0.01)	0.005 (0.01)
Share int. (t-1)		-0.416*** (0.123)		-0.754*** (0.186)		
Plant exit	0.188*** (0.0355)	0.186*** (0.0354)	0.192*** (0.0314)	0.189*** (0.0313)	0.009*** (0.00)	0.009*** (0.00)
Plant exp. exit	0.881*** (0.0151)	0.883*** (0.0150)	0.879*** (0.0134)	0.882*** (0.0133)	-0.002 (0.00)	-0.002 (0.00)
China comp. world-EU-US (t-1)					0.302*** (0.04)	0.323*** (0.06)
China comp. EU (t-1)					0.759*** (0.09)	0.824*** (0.10)
Int. 1						-0.171 (0.17)
Int. 2						-0.057 (0.07)
Product f.e.	Yes	Yes	Yes	Yes	Yes	Yes
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15987	15987	14855	14855	14855	14855
Sargan p-value					0.5541	0.3949
Underid. P-value					0	0
First stage F-value					25.59	23.52

Table 10: Ln Plant Sales - OLS

	Plant sales			
China comp. Mex (t-1)	0.00491 (0.117)	0.0311 (0.150)	-0.0858 (0.132)	-8.974*** (0.760)
Herfindahl (t-1)	-1.203*** (0.135)	-1.198*** (0.137)	-1.204*** (0.135)	-1.215*** (0.134)
Export share (t-1)	0.473*** (0.0530)	0.473*** (0.0530)	0.465*** (0.0537)	0.457*** (0.0527)
Skill share (t-1)	-0.393*** (0.0584)	-0.393*** (0.0584)	-0.392*** (0.0584)	-0.363*** (0.0587)
Herfindahl int.		-0.177 (0.610)		
Export share int.			0.563* (0.341)	
ln(Sales) int.				0.836*** (0.0678)
Year f.e.	Yes	Yes	Yes	Yes
Plant f.e.	Yes	Yes	Yes	Yes
Observations	43894	43894	43894	43894

Table 11: Ln Sales - IV

	Ln sales				First stage			
China comp. Mex (t-1)	-0.226 (0.270)	0.255 (0.354)	-0.350 (0.278)	-27.38*** (1.312)				
Herfindahl (t-1)	-1.201*** (0.0958)	-1.103*** (0.107)	-1.205*** (0.0959)	-1.243*** (0.0971)	-0.002 ((0.00))	-0.000 ((0.00))	-0.002 ((0.00))	-0.003 ((0.00))
Export share (t-1)	0.472*** (0.0318)	0.473*** (0.0318)	0.454*** (0.0340)	0.424*** (0.0323)	-0.001 ((0.00))	-0.001 ((0.00))	-0.000 ((0.00))	-0.001 ((0.00))
Skill share (t-1)	-0.393*** (0.0414)	-0.392*** (0.0414)	-0.392*** (0.0414)	-0.301*** (0.0422)	-0.001 ((0.00))	-0.001 ((0.00))	-0.001 ((0.00))	-0.001 ((0.00))
Herfindahl int.		-3.531** (1.753)						
Exportshare int.			1.294 (0.867)					
Sales int.				2.564*** (0.122)				
China exp world-EU-US (t-1)					0.000*** ((0.00))	0.000*** ((0.00))	0.000** ((0.00))	0.000*** ((0.00))
China exp EU (t-1)					0.000*** ((0.00))	0.000*** ((0.00))	0.000*** ((0.00))	0.000*** ((0.00))
Int. 1						-0.000*** ((0.00))	0.000 ((0.00))	-0.000*** ((0.00))
Int. 2						0.000** ((0.00))	-0.000*** ((0.00))	0.000*** ((0.00))
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Plant f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	43417	43417	43417	43417	43417	43417	43417	43417
Sargan p-value					0.14	0.01	0.25	0.00
Underid. P-value					0.00	0.00	0.00	0.00
First stage F-value					703.97	616.62	617.21	424.90

Table 12: Ln Export Sales - OLS

	Log export sales			
China comp. US (t-1)	0.176 (0.179)	0.561*** (0.213)	-1.074*** (0.203)	-6.105*** (0.960)
Herfindahl (t-1)	-0.770*** (0.259)	-0.490* (0.269)	-0.783*** (0.258)	-0.740*** (0.258)
Export share (t-1)	1.918*** (0.115)	1.913*** (0.115)	1.696*** (0.110)	1.926*** (0.115)
Skill share (t-1)	-0.364** (0.163)	-0.363** (0.163)	-0.347** (0.161)	-0.304* (0.163)
Herfindahl int.		-4.471*** (1.222)		
Export share int.			5.633*** -0.501	
ln(Sales) int.				0.563*** -0.0845
Year f.e.	Yes	Yes	Yes	Yes
Plant f.e.	Yes	Yes	Yes	Yes
N	16021	16021	16021	16021

Table 13: Ln Export Sales - IV

	Log sales - IV				First stage			
China comp. US (t-1)	0.432 (0.451)	1.100* (0.619)	0.00319 (0.692)	-19.50*** (6.595)				
Herfindahl (t-1)	-0.872*** (0.291)	-0.383 (0.479)	-0.884*** (0.290)	-1.010*** (0.286)	-0.051*** ((0.02))	-0.046** ((0.02))	-0.054*** ((0.02))	-0.047*** ((0.01))
Export share (t-1)	2.058*** (0.0716)	2.042*** (0.0720)	2.005*** (0.0918)	2.113*** (0.0714)	0.039*** ((0.00))	0.039*** ((0.00))	0.028*** ((0.00))	0.006* ((0.00))
Skill share (t-1)	-0.236 (0.150)	-0.236 (0.150)	-0.233 (0.149)	-0.00931 (0.168)	0.015* ((0.01))	0.015* ((0.01))	0.014 ((0.01))	0.014* ((0.01))
Herfindahl int.		-6.122 (4.803)						
Exportshare int.			1.255 (1.433)					
Sales int.				1.602*** (0.536)				
China exp world-EU-US (t-1)					0.226*** ((0.02))	0.213*** ((0.02))	0.209*** ((0.02))	0.195*** ((0.01))
China exp EU (t-1)					0.650*** ((0.03))	0.710*** ((0.03))	0.603*** ((0.03))	0.565*** ((0.02))
Int. 1						0.000*** ((0.00))	0.000*** ((0.00))	0.000*** ((0.00))
Int. 2						-0.000*** ((0.00))	0.000* ((0.00))	0.000*** ((0.00))
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Plant f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	13809	13809	13809	12439	13809	13809	13809	12439
Sargan p-value					0.155	0.214	0.336	0.001
Underid. P-value					0.000	0.000	0.000	0.027
First stage F-value					201.520	179.088	186.416	239.878

Table 14: Product sales

	lnVV - OLS		lnVV - IV		First stage	
China comp. MEX (t-1)	-0.272 (0.187)	-0.890*** (0.264)	-1.188** (0.590)	-3.595*** (0.819)		
Skill share (t-1)	-0.280*** (0.0767)	-0.281*** (0.0762)	-0.252*** (0.0759)	-0.250*** (0.0760)	-0.006*** ((0.00))	-0.005** ((0.00))
Herfindahl (t-1)	1.536** (0.620)	1.532** (0.619)	1.779*** (0.685)	1.755** (0.684)	-0.023 ((0.02))	-0.023 ((0.02))
Price Index (t-1)	4.17e-05 (2.82e-05)	3.67e-05 (2.65e-05)	8.75e-05 (9.37e-05)	4.40e-05 (7.37e-05)	0.000* ((0.00))	0.000* ((0.00))
Nr products (t-1)	-0.00429 (0.0236)	-0.000386 (0.0235)	0.0193 (0.0243)	0.0373 (0.0242)	-0.002** ((0.00))	-0.002** ((0.00))
Export share (t-1)	0.430*** (0.0576)	0.432*** (0.0576)	0.387*** (0.0576)	0.408*** (0.0579)	-0.002 ((0.00))	-0.002 ((0.00))
Share (t-1)	6.40e-05 (8.45e-05)	6.26e-05 (8.31e-05)	5.51e-05 (7.01e-05)	4.85e-05 (6.36e-05)	-0.000 ((0.00))	-0.000 ((0.00))
Share int. (t-1)		1.818*** (0.442)		10.10*** (1.862)		
China exp world-EU-US (t-1)					0.135*** ((0.02))	0.134*** ((0.02))
China exp EU (t-1)					0.511*** ((0.07))	0.541*** ((0.07))
Int. 1						-0.115 ((0.08))
Int. 2						0.000 ((0.00))
N	105832	105832	86632	86632	86632	86632
Sargan p-value					0.8372	0.7237
Underid. P-value					0	0
First stage F-value					17.20	15.93
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes
Prod f.e.	Yes	Yes	Yes	Yes	Yes	Yes

Table 15: Export sales product

	lnVE - OLS		lnVE - IV		First stage	
China comp. US (t-1)	-0.832**	-0.893**	-0.970*	-1.016*		
	(0.332)	(0.385)	(0.574)	(0.570)		
Skill share (t-1)	-0.0859	-0.0869	-0.0867	-0.0874	-0.006	-0.006
	(0.218)	(0.219)	(0.193)	(0.193)	((0.01))	((0.01))
Herfindahl (t-1)	0.378	0.377	0.303	0.302	-0.066***	-0.066***
	(0.949)	(0.949)	(0.840)	(0.840)	((0.02))	((0.02))
Price Index (t-1)	8.20e-06	7.42e-06	5.48e-06	4.88e-06	-0.000	-0.000
	(0.000231)	(0.000232)	(0.000203)	(0.000203)	((0.00))	((0.00))
Nr products (t-1)	0.147**	0.147**	0.146**	0.146**	0.002	0.002
	(0.0744)	(0.0744)	(0.0664)	(0.0664)	((0.00))	((0.00))
Export share (t-1)	1.398***	1.398***	1.357***	1.357***	0.002	0.002
	(0.0911)	(0.0912)	(0.0798)	(0.0800)	((0.00))	((0.00))
Share (t-1)	1.683***	1.670***	1.667***	1.658***	-0.001	0.002
	(0.167)	(0.176)	(0.147)	(0.164)	((0.00))	((0.01))
Share int. (t-1)		0.184		0.141		
		(0.753)		(0.792)		
China exp world-EU-US (t-1)					0.313***	0.315***
					((0.04))	((0.05))
China exp EU (t-1)					0.821***	0.861***
					((0.09))	((0.10))
Int. 1						-0.110
						((0.16))
Int. 2						-0.007
						((0.07))
N	20805	20805	19138	19138	19138	19138
Sargan p-value					0.6220	0.8251
Underid. P-value					0	0
First stage F-value					26.78	24.20
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes
Prod f.e.	Yes	Yes	Yes	Yes	Yes	Yes

Table 16: Quantile regression

Log Sales - quantile							
	Q_05	Q_10	Q_25	Q_50	Q_75	Q_90	Q_95
China comp. MEX (t-1)	-0.257 (0.395)	-0.476** (0.211)	-0.03 (0.091)	0.263*** (0.076)	0.382*** (0.085)	0.439*** (0.144)	0.489** (0.228)
Herfindahl (t-1)	-1.585*** (0.485)	-1.139*** (0.234)	-0.744*** (0.089)	-0.496*** (0.071)	-0.54*** (0.078)	-0.649*** (0.153)	-0.657*** (0.232)
Price Index (t-1)	0 (0)	0.001*** (0)	0.001*** (0)	0.001*** (0)	0.002*** (0)	0.002*** (0)	0.002*** (0)
Export share (t-1)	0.41** (0.177)	0.337*** (0.084)	0.296*** (0.03)	0.337*** (0.023)	0.341*** (0.027)	0.417*** (0.055)	0.534*** (0.088)
Skill share (t-1)	-0.631*** (0.198)	-0.52*** (0.098)	-0.371*** (0.036)	-0.277*** (0.029)	-0.246*** (0.034)	-0.29*** (0.069)	-0.379*** (0.104)
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log Sales - quantile IV							
	Q_05	Q_10	Q_25	Q_50	Q_75	Q_90	Q_95
China comp. MEX (t-1)	-10.1933*** (3.0108)	-6.5217*** (2.0916)	-0.7772 (0.6653)	2.1945*** (0.6254)	4.6308*** (1.5505)	6.6551** (2.7687)	6.2452*** (2.0289)
Herfindahl (t-1)	-1.5044*** (0.2607)	-1.0106*** (0.1565)	-0.7063*** (0.1025)	-0.5252*** (0.0958)	-0.5712*** (0.1109)	-0.845*** (0.1628)	-0.8409*** (0.2858)
Price Index (t-1)	-0.0004** (0.0002)	0.0005*** (0.0001)	0.001*** (0.0001)	0.0014*** (0.0001)	0.0017*** (0.0001)	0.0019*** (0.0001)	0.002*** (0.0001)
Export share (t-1)	0.498*** (0.0681)	0.3272*** (0.045)	0.2941*** (0.0338)	0.3524*** (0.0358)	0.3275*** (0.0394)	0.4236*** (0.0511)	0.5983*** (0.0665)
Skill share (t-1)	-0.8657*** (0.1111)	-0.5535*** (0.0674)	-0.3643*** (0.0446)	-0.2868*** (0.0416)	-0.2637*** (0.0503)	-0.2875*** (0.056)	-0.3662*** (0.077)
Year f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Figure 1: This figure shows the marginal effect of competition as estimated in table 17. The axis from left to right displays initial size percentiles, the axis running back and forth skill share percentiles, and the vertical axis the effect of competition on size. For example: The front right corner shows a negative marginal effect of Chinese competition on size for the firm at the 5th percentile of size (Q5) and the 1 percent percentile of skillshare (S1).

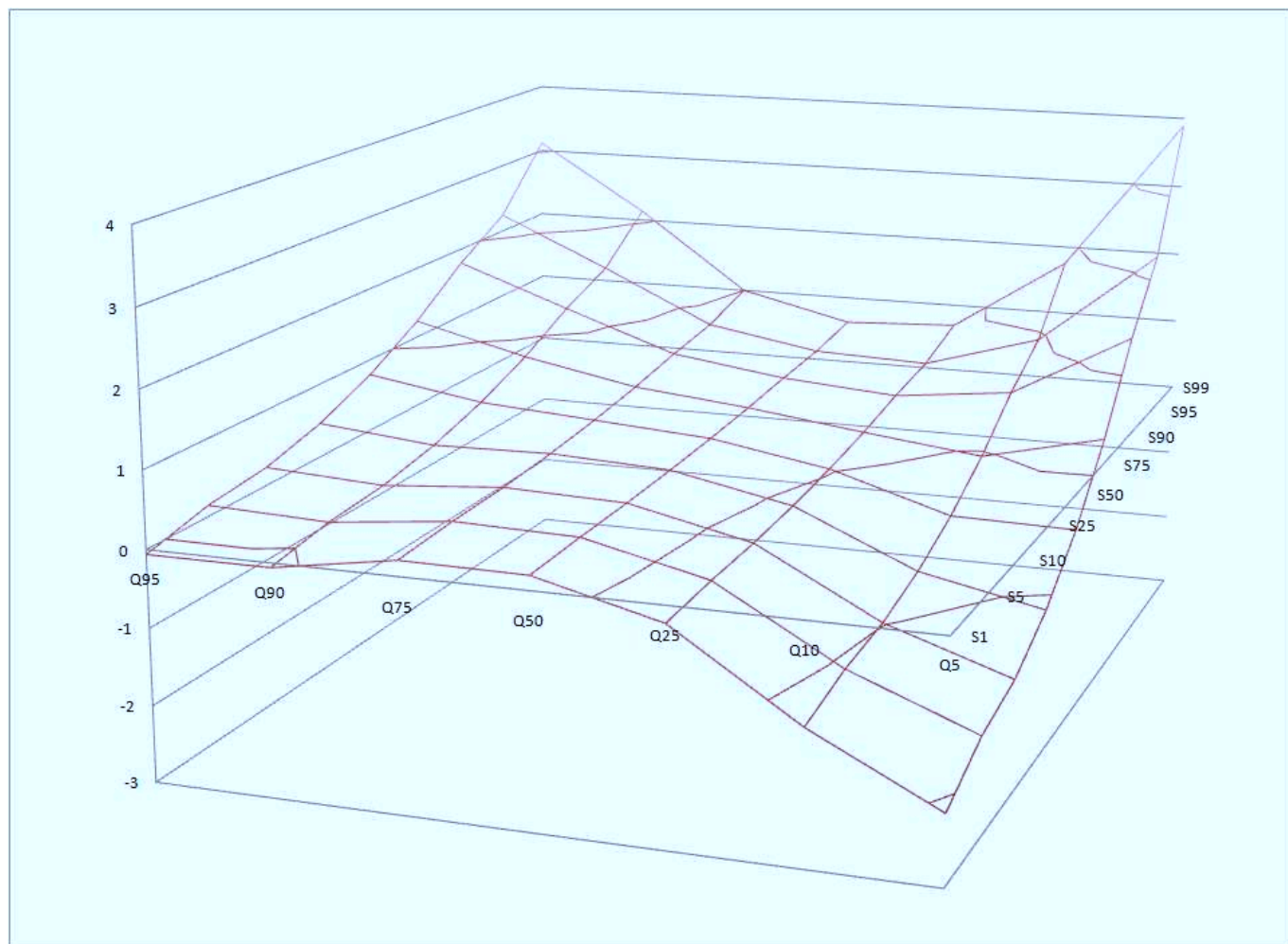


Table 18: Overall log number of blue collar workers

	Ln blue - OLS		Ln blue - IV		First stage	
China comp. Mex (t-1)	-0.0552 (0.0986)	-3.123*** (0.765)	-0.567*** (0.188)	-7.156*** (0.946)		
Log sales (t-1)	0.311*** (0.00909)	0.306*** (0.00898)	0.319*** (0.00494)	0.306*** (0.00523)	0.001*** ((0.00))	-0.001*** ((0.00))
Herfindahl (t-1)	-0.162** (0.0819)	-0.171** (0.0820)	-0.255*** (0.0758)	-0.287*** (0.0759)	0.009 ((0.01))	0.007 ((0.01))
Price (t-1)	-0.000337*** (4.20e-05)	-0.000338*** (4.20e-05)	-0.000389*** (4.10e-05)	-0.000385*** (4.10e-05)	-0.000*** ((0.00))	-0.000*** ((0.00))
Export share (t-1)	0.0334 (0.0300)	0.0308 (0.0300)	0.0514** (0.0242)	0.0461* (0.0242)	-0.005*** ((0.00))	-0.006*** ((0.00))
Skill share (t-1)	-1.345*** (0.0574)	-1.340*** (0.0572)	-1.335*** (0.0306)	-1.321*** (0.0306)	-0.006** ((0.00))	-0.004* ((0.00))
Log sales int.		0.279*** (0.0691)		0.614*** (0.0819)		
China exp world-EU-US (t-1)					0.079*** ((0.00))	-0.032 ((0.02))
China exp EU (t-1)					0.428*** ((0.01))	-0.043 ((0.04))
Int. 1						0.011*** ((0.00))
Int. 2						0.044*** ((0.00))
N	36358	36358	32250	32250	32250	32250
Sargan p-value					0.2277	0.1812
Underid. P-value					0	0
First stage F-value					464.95	437.48

Table 19: Overall log number of white collar workers

	Ln white - OLS		Ln white - IV		First stage	
China comp. Mex (t-1)	-0.0758 (0.0948)	-1.775*** (0.647)	-0.0535 (0.200)	-4.034*** (1.021)		
Log sales (t-1)	0.310*** (0.00890)	0.307*** (0.00890)	0.315*** (0.00526)	0.307*** (0.00555)	0.001*** ((0.00))	-0.001** ((0.00))
Herfindahl (t-1)	-0.0804 (0.0740)	-0.0852 (0.0741)	-0.151* (0.0801)	-0.169** (0.0802)	0.006 ((0.01))	0.004 ((0.01))
Price (t-1)	-0.000227*** (4.27e-05)	-0.000228*** (4.27e-05)	-0.000297*** (4.33e-05)	-0.000295*** (4.33e-05)	-0.000*** ((0.00))	-0.000*** ((0.00))
Export share (t-1)	0.0103 (0.0316)	0.00888 (0.0316)	0.00743 (0.0256)	0.00421 (0.0257)	-0.005*** ((0.00))	-0.006*** ((0.00))
Skill share (t-1)	1.543*** (0.0626)	1.546*** (0.0626)	1.539*** (0.0316)	1.546*** (0.0316)	-0.004* ((0.00))	-0.003 ((0.00))
Log sales int.		0.155*** (0.0568)		0.371*** (0.0885)		
China exp world-EU-US (t-1)					0.076*** ((0.00))	0.003 ((0.02))
China exp EU (t-1)					0.430*** ((0.01))	-0.109** ((0.04))
Int. 1						0.007*** ((0.00))
Int. 2						0.050*** ((0.00))
N	36495	36495	32342	32342	32342	32342
Sargan p-value					0.5819	0.077
Underid. P-value					0	0
First stage F-value					470.44	442.49

Table 20: Export log number of blue collar workers

	Ln blue - OLS		Ln blue - IV		First stage	
China comp. US (t-1)	0.0180 (0.0547)	-0.0200 (0.0594)	-0.0721 (0.157)	-1.202*** (0.284)		
Log sales (t-1)	0.313*** (0.0153)	0.311*** (0.0151)	0.325*** (0.00900)	0.319*** (0.00939)	0.003* ((0.00))	0.003* ((0.00))
Herfindahl (t-1)	-0.249** (0.105)	-0.252** (0.105)	-0.278*** (0.106)	-0.348*** (0.110)	-0.055*** ((0.02))	-0.054*** ((0.02))
Price (t-1)	-0.000256*** (6.75e-05)	-0.000249*** (6.75e-05)	-0.000294*** (6.50e-05)	-0.000278*** (6.74e-05)	-0.000** ((0.00))	-0.000** ((0.00))
Export share (t-1)	-0.0178 (0.0304)	-0.0147 (0.0304)	0.00586 (0.0252)	0.0605** (0.0284)	0.038*** ((0.00))	0.038*** ((0.00))
Skill share (t-1)	-1.262*** (0.0940)	-1.257*** (0.0935)	-1.244*** (0.0539)	-1.217*** (0.0561)	0.015 ((0.01))	0.015 ((0.01))
Log sales int.		0.0311** (0.0139)		0.155*** (0.0328)		
China exp world-EU-US (t-1)					0.230*** ((0.02))	0.172* ((0.09))
China exp EU (t-1)					0.611*** ((0.03))	0.884*** ((0.19))
Int. 1						0.005 ((0.01))
Int. 2						-0.024 ((0.02))
N	13196	13196	11218	11218	11218	11218
Sargan p-value					0.2837	0.4223
Underid. P-value					0	0
First stage F-value					141.82	126.18

Table 21: Export log number of white collar workers

	Ln white - OLS		Ln white - IV		First stage	
China comp. US (t-1)	0.132** (0.0578)	0.117* (0.0614)	0.0441 (0.174)	-0.565* (0.308)		
Log sales (t-1)	0.315*** (0.0148)	0.314*** (0.0147)	0.328*** (0.00986)	0.325*** (0.0100)	0.003* ((0.00))	0.003* ((0.00))
Herfindahl (t-1)	-0.0956 (0.105)	-0.0972 (0.105)	-0.0932 (0.116)	-0.133 (0.118)	-0.057*** ((0.02))	-0.056*** ((0.02))
Price (t-1)	-0.000248*** (6.77e-05)	-0.000245*** (6.78e-05)	-0.000264*** (7.13e-05)	-0.000255*** (7.21e-05)	-0.000** ((0.00))	-0.000** ((0.00))
Export share (t-1)	-0.0216 (0.0341)	-0.0204 (0.0341)	-0.0280 (0.0278)	0.00134 (0.0306)	0.037*** ((0.00))	0.037*** ((0.00))
Skill share (t-1)	1.383*** (0.144)	1.385*** (0.144)	1.335*** (0.0573)	1.349*** (0.0581)	0.014 ((0.01))	0.014 ((0.01))
Log sales int.		0.0127 (0.0130)		0.0838** (0.0356)		
China exp world-EU-US (t-1)					0.234*** ((0.02))	0.203** ((0.09))
China exp EU (t-1)					0.609*** ((0.03))	0.854*** ((0.20))
Int. 1						0.003 ((0.01))
Int. 2						-0.021 ((0.02))
N	13326	13326	11317	11317	11317	11317
Sargan p-value					0.5936	0.2563
Underid. P-value					0	0
First stage F-value					128.65	144.63