The China Effect on Colombia's Manufacturing Labor Market

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Abstract

In this paper, I use Colombian data from 1996–2013 to construct two datasets that are used to assess whether the China Shock has affected the future growth rates of productivity, employment level, workforce composition, wages, export performance, and informal employment levels within Colombia's manufacturing sector. Empirically, I use a two-stage estimation approach that instruments regional import market share in Colombia with exogenous regional export market shares in markets outside Latin America. The results validate that the China Shock has significant effects on future growth rates for employment, workforce composition, wages per employee, productivity, and domestic sales. While the current growth rate of export performance is affected by the China Shock, the future growth rates of export performance and informality are not.

JEL Classification: F1, J2.

Keywords: China shock, workforce composition, productivity, and informal employment.

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1. INTRODUCTION

Over the last 20 years, the world has witnessed the rapid economic transformation of China. Since 1990, China's world exports have grown at a yearly average growth rate of 16%,[1] and its gross domestic product (GDP) has increased ninefold.[2] As of 2015, China accounted for 13.8%[3] of the world's trade while experiencing a ten-year average GDP growth rate of 9.54%.[4] This unprecedented economic expansion is what recent economic literature refers to as the "China Shock."

In developed countries[5], this shock has implied a surge in imported products from China while simultaneously leading to the exit of manufacturing firms, a loss of manufacturing employment, and an overall transformation in the composition of the labor force, in which low-skilled jobs have been offshored to less developed economies. In developing economies, the scant evidence available[6] seems to confirm a similar pattern. That is, the increase in Chinese manufacturers' market share has reduced employment levels in manufacturing sectors in the least developed economies.

This paper contributes to the China Shock literature by testing whether, in a developing country like Colombia, this shock has negatively affected the country's manufacturing sector. Specifically, I test whether the China Shock has changed the growth rate of employment, workforce composition, wages, productivity, domestic sales, export performance, and informal employment among manufacturers. Estimates reveal that a 1-percentage-point increase in China's import market share decreases current productivity growth in Colombia by 0.6 percentage points and decreases the current growth rate of the number of export destinations by 0.23 percentage points. It also decreases the current growth rate of the number of exported products by 0.53 percentage points and decreases the current growth rate of the number of exported products per destination by 0.4 percentage points of Colombia's manufacturing sector.

I extend this analysis by testing whether the increase in China's import market share affects the future growth rates of employment, workforce composition, wages, productivity, domestic sales, exports, and informality one, two and three years ahead. My findings confirm that in the next three periods, the growth rates of employment, wages per employee, and productivity are all affected by the China Shock, while the growth rates for workforce composition and domestic sales are only affected by the China Shock two and three years ahead.

With regard to exports, my results suggest that the China Shock only has immediate consequences on export growth rate. The results one period ahead and beyond are not statistically different from zero.

Data availability on informal employment in Colombia required the construction of two datasets to complete this analysis. First, I used the country's Annual Manufacturing Survey, the Transactional Import Dataset, and the Transactional Export Dataset to build a firm-level panel dataset that allowed me to test whether the increase in the market penetration of Chinese products leads to: i) a decrease in firms' employment levels; ii) an increase in the share of nonproduction workers; iii) a change in workers' wages; iv) a change in firms' productivity levels; and v) a decrease in manufacturers' domestic sales and export performance.

Controlling for unobserved firm heterogeneity and year-specific aggregate shocks, this paper uses the exogenous variation in sector-specific import market penetration in other foreign markets outside Latin America to implement a two-stage estimation strategy. This strategy isolates a foreign country's import market penetration from a firm's decisions to adjust its future growth in productivity, employment level, workforce composition, wages, and export performance.

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[1] This corresponds to the average growth rate of Chinese exports to the world for the sample period 1990–2015.

[2] This corresponds to the ratio of China's real GDP in 2015 to China's real GDP in 1990, according to data from the World Development Indicators, 2016.

[3] This corresponds to the ratio of Chinese trade to total world trade, according to data from the World Integrated Trade Solution Database (WITS).

[4] This corresponds to the average GDP growth rate for 2004–2015. This result is not very different from a twenty-six-year period estimate. That is, between 1990–2015 the country's average GDP growth rate was 9.72%.

[5] For the US, see Autor, Dorn, and Hanson (2013). For Belgium, see Mion and Zhu (2013.)

[6] According to Paz (2015), the import penetration of Chinese products has produced a negative effect on Brazil's manufacturing levels of employment and informality.

Second, the paper uses Colombia's Household Survey and the Transactional Import Dataset and Transactional Export Dataset to build a sector- and city-specific panel dataset of informal employment for the industrial clusters of Barranquilla, Bogotá, Bucaramanga, Cali, Cartagena, Cúcuta, Ibagué, Manizales, Medellín, Montería, Villavicencio, Pasto, and Pereira. This dataset is used to validate whether the China Shock has increased Colombia's informal employment levels. In this case, the estimation strategy isolates the sector-specific changes in foreign market penetration from sector-city–specific changes in informal employment levels by implementing a two-stage estimation approach that instruments regional sector-specific foreign market penetration with the exogenous import market penetration in other countries outside Latin America, while controlling for unobserved city- and sector-specific heterogeneity. This allows the paper to control for aggregate sector-city shocks that may also affect levels of regional informal employment in Colombia.

The findings in this paper contribute to the current literature in the field not only because they provide evidence of the effect of the China Shock on a developing country's labor market but also because they reveal that the effects of a higher degree of competition extend beyond each manufacturer's decisions regarding future workforce size. As I show, the China Shock affects the growth rates of employment, workforce composition, productivity, domestic sales, and export performance among manufacturers. However, the timing of the effect of the China Shock seems to vary by firm statistic: employment, workforce composition, productivity, and domestic sales are all firm-level statistics that are affected significantly by the China Shock one, two, and three years into the future, while export performance is a firm statistic that is only affected by the China Shock in the current period.

The empirical strategy of this paper builds on Mion and Zhu's (2013) estimation strategy using Belgian firm-level data to provide evidence of labor skill upgrading due to the increase in competition from Chinese products. Though their approach was novel, prior evidence by Rodrik (2006), Schott (2008), and Bloom et al. (2011) showed that Chinese manufacturers were responsible for technological upgrading in other economies.

As with the recent literature in the field, this paper provides evidence supporting the hypothesis that skill upgrading is a byproduct of more competitive trade markets. This skill upgrading may imply hiring more efficient CEO's[7] or, as in Labanca et al. (2014), hiring away employees with prior experience at other exporting firms, or, as in Feenstra and Hanson (1998) and Rossi-Hansberg (2008), offshoring and outsourcing from other producers.

This paper supports the notion that changes in trade patterns have significant effects on manufacturers' decisions regarding how to upgrade. These effects seem to be most significant for successful exporters hoping to maintain their success over time. As proposed by Head and Ries (2002) and Castellani et al. (2008), productivity upgrading seems to be a more important process for multinational firms.

In turn, these results are in line with prior evidence from other developing economies where upgrading of skills, productivity, quality, and wages are a natural consequence of more competitive foreign markets. Bustos (2010) for Argentina, Verhoogen (2008), and Iacovone and Javorcik (2012) for Mexico, and Paz (2016) show that manufacturers in developed economies are not the only ones to experience this process.

The remainder of this paper is organized as follows: Section 2 provides a brief description of China's import market penetration in Colombia and provides an overview of Colombia's labor market. Section 3 describes the datasets used for this study. Section 4 presents the econometric models, section 5 discusses the econometric results, and section 6 concludes.

2. COLOMBIA'S IMPORT MARKET PENETRATION

For the last 55 years, the US has been Colombia's most important trade partner. On average, exports to the US market have accounted for 38%[8] of Colombia's aggregate export volume, while imports that originated in the US correspond to 36% of the country's total import volume, on average (figure 1). But this stable and long-lasting trade

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[7] See, for example, Mion and Opromolla (2014).
[8] This corresponds to the average US export share for 1962–2014.

relationship has recently started to change. Though the value of aggregate exports and imports has continued to grow, the US market share of Colombia's exports and imports has consistently decreased since the late 1990s. In 2000, the US accounted for nearly 50% of Colombia's exports, but by 2014, it accounted for only 26% of these. On the import side, US market concentration has decreased by a lower magnitude. In 1998, the US concentration of Colombia's imports was around 32%, but by 2014 this import market share had decreased to 29%.

FIGURE 1. US IMPORT AND EXPORT MARKET SHARE, 1962–2014
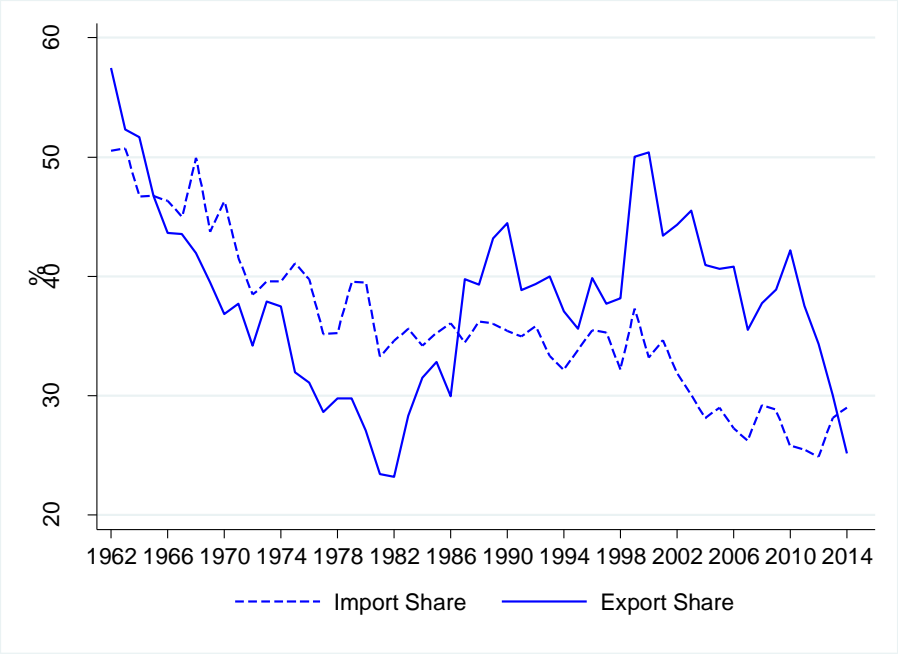
Source: Author's own calculations. Data extracted from WITS (2016).

Though Colombian manufacturers seem to be exporting more, their foreign market reach has changed. As a result of the country's global trade reform of the 1990s, manufacturers started to develop trade relationships with nontraditional trade partners. As figure 2 reveals, imports from China began to be consolidated in 1992, while exports to China began in 1998. As of 2014, 18% of the country's imports were produced by China, while 10% of the country's exports go to China.

FIGURE 2. CHINA'S IMPORT AND EXPORT MARKET SHARE, 1962–2014
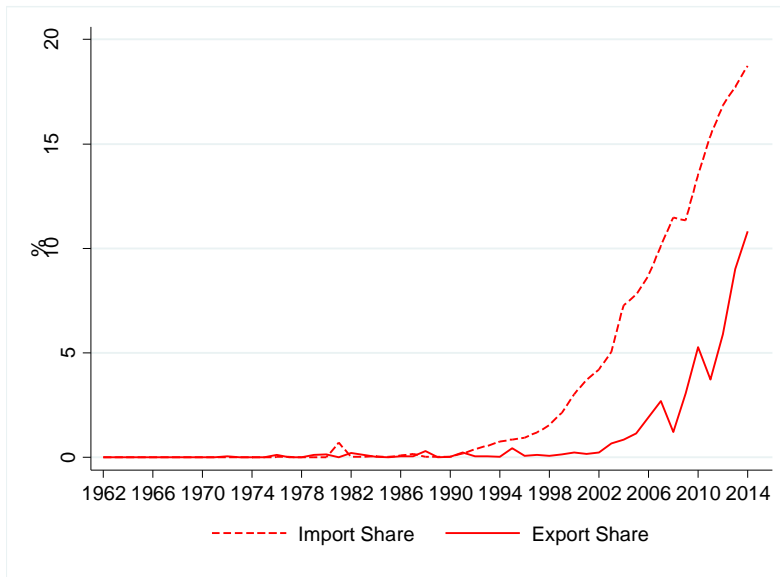
Source: Author's own calculations. Data extracted from WITS (2016).

Though not surprising, Colombia's trade relationship with China appears to be systematically different from its historical trade relationship with the US. As figure 3 reveals, Colombia's trade relationship with China has always operated at a deficit, while the reverse was true of Colombia's bilateral trade relationship with the US until 2011. As of 2014, Colombia's trade deficit with China was around US$6 billion, while its trade deficit with the US was around US$5 billion. The latter is a result of the recent implementation of the free trade agreement with Colombia, where the years of unilateral import trade benefits given to Colombian products were adjusted by applying import tariff reductions to US products.

FIGURE 3. COLOMBIA'S TRADE IMBALANCE WITH US AND CHINA, 1962–2014
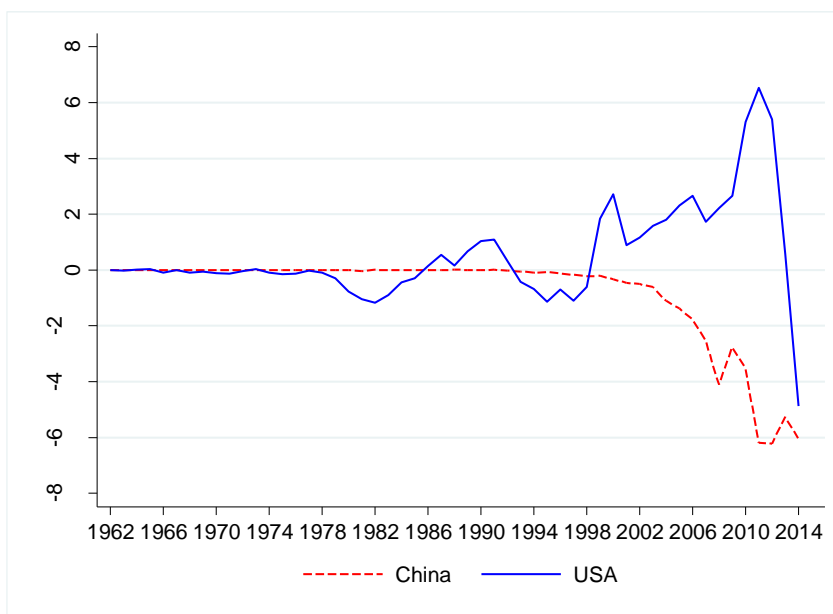
Source: Author's own calculations. Data extracted from WITS (2016).

China's new trade relationship with Colombia seems to be starting to affect the market share of other agents within Colombia's manufacturing sector. Since 2000, the market penetration of Chinese products in the manufacturing sector has increased by 10 percentage points, while the market penetration of US products has decreased by 4 percentage points. The rise of China as a major new trade partner seems to be displacing other foreign market players.

FIGURE 4. AVERAGE IMPORT MARKET PENETRATION OF CHINESE PRODUCTS IN COLOMBIA'S MANUFACTURING SECTOR, 2000–2014
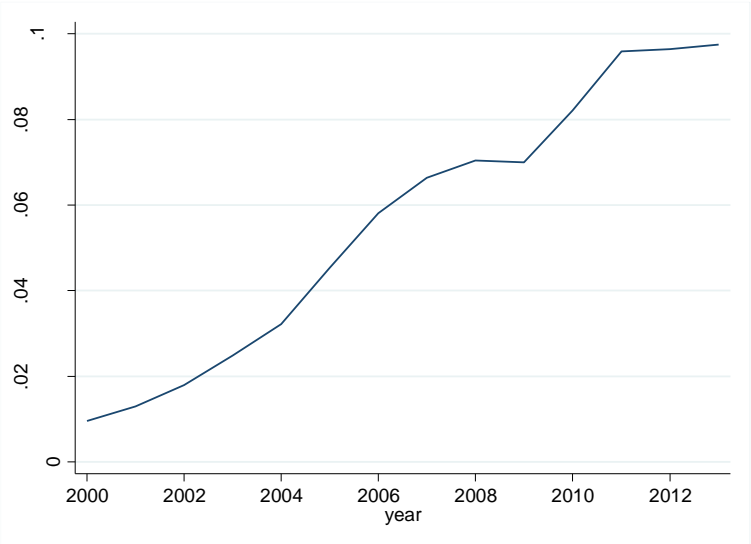
Source: Author's own calculations. Import data was obtained from Colombia's Transactional Import Dataset, while local production data was obtained from Colombia's Annual Manufacturing Survey.

FIGURE 5. AVERAGE IMPORT MARKET PENETRATION OF US PRODUCTS IN COLOMBIA'S MANUFACTURING SECTOR, 2000–2014
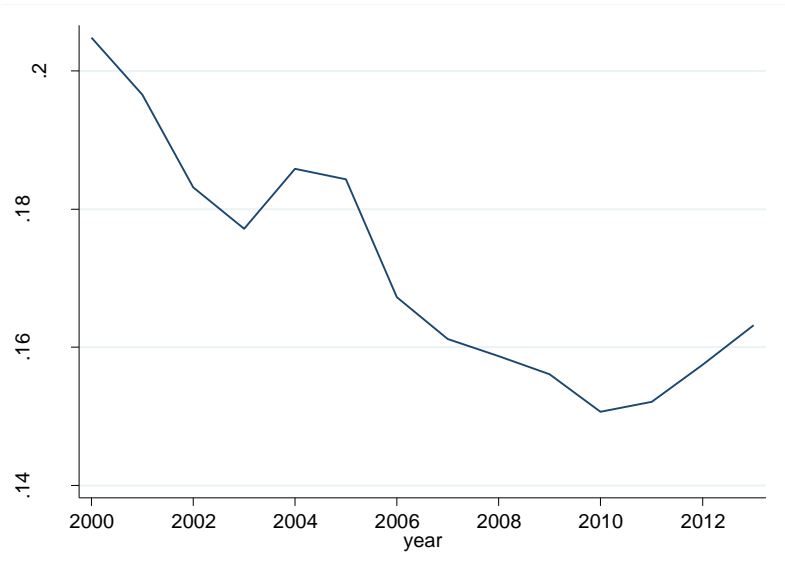
Source: Author's own calculations. Import data was obtained from Colombia's Transactional Import Dataset, while local production data was obtained from Colombia's Annual Manufacturing Survey.

FIGURE 6. UNEMPLOYMENT RATE IN COLOMBIA, 2001–2014
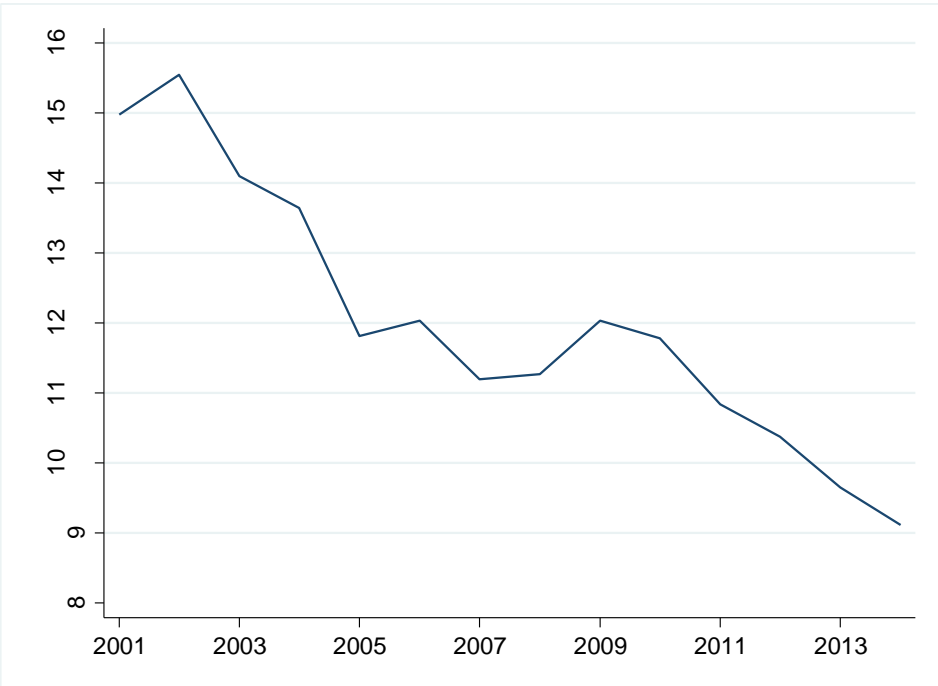
Source: Author's own calculations. The monthly unemployment rate was extracted from the Central Bank of Colombia's webpage: http://www.banrep.gov.co/es/tasas-empleo-desempleo. Note: yearly estimates correspond to the monthly average.

In contrast, the rise of China as a major local market competitor within the country's manufacturing sector does not seem to be linked to changes in Colombia's labor market. Since 2001, the country's employment rate has been constant at an average rate of 54%,[9] while unemployment and informality rates have decreased. As figure 6 shows, Colombia's unemployment rate has fluctuated at around 12%, while health-pension informality has fluctuated around an average of 58% (figure 7). These patterns suggest that the China Shock has not had a negative impact on Colombia's labor market.

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[9] For the sample period of 2001–2014. The sample average was calculated using the Central Bank's Labor Participation Rate as published at http://www.banrep.gov.co/es/tasas-empleo-desempleo.
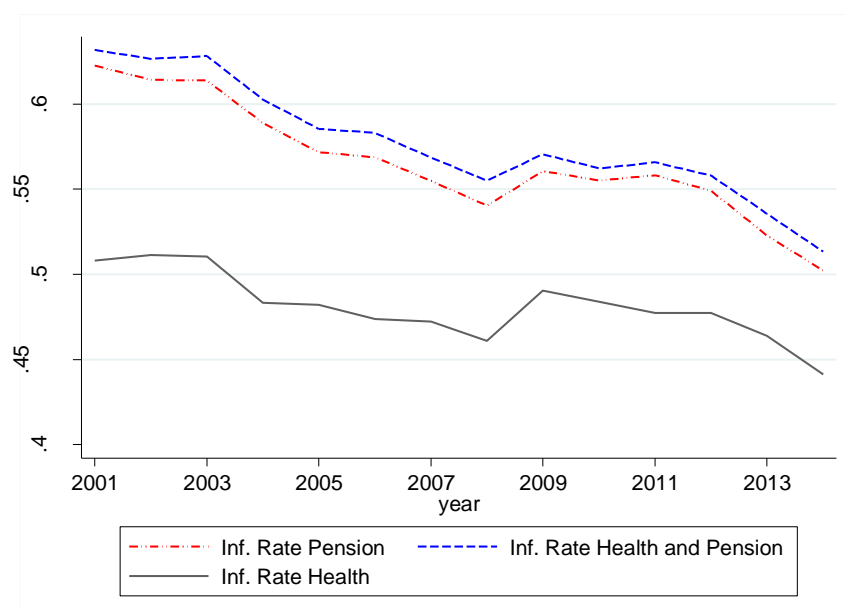
I now address whether the market penetration of China has produced an adverse effect on manufacturers' optimal choices regarding employment, workforce composition, wages, productivity, sales, domestic sales, export performance, and informal employment.

3. DATASET AND EMPIRICAL STRATEGY

The limited availability of data on informality obliged me to construct two datasets for use in this paper. First, I used Colombia's Annual Manufacturing Survey (AMS) and the country's Transactional Export Dataset (TED), Transactional Import Dataset (TID) datasets, and the COMTRADE dataset to obtain a firm-level dataset that I use to assess whether the rise of China has led to changes in the growth rates for labor demand, workforce composition[10], per-worker wages, productivity, domestic sales, and export performance among manufacturers. Second, I used Colombia's Household Survey to construct a city- and sector-specific measure of informal employment that was used to test whether the China Shock has caused an increase in the country's informal employment levels.

A. Firm-level data on manufacturers

I used the AMS, TED, and TID to construct a firm-level panel dataset on manufacturers with detailed information on employment, the share of nonproduction workers, per-worker wages, productivity, domestic sales, and export performance for 14,022 firms within 153 industries for 1996–2013. Hereafter, an industry is defined at the four-digit level of the International Standard Industry Classification (ISIC) revision 3. I was only able to obtain data from the AMS on manufacturing firms classified within sectors 15 through 37.[11]

While employment, the share of nonproduction workers, per-worker wages, productivity, and domestic sales are all manufacturer-specific statistics that were extracted from the AMS, export performance is a set of manufacturer-specific statistics that were extracted from the TED database. Specifically, a manufacturer's export performance refers to its

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[10] The share of nonproduction workers is the only endogenous firm-level statistic that is not estimated as a growth rate in t+1. It corresponds to the share of nonproduction workers in t+1.

[11] At the two-digit level, ISIC rev. 3 defines these economic activities as Divisions. From hereafter and for simplicity, I refer to them as sectors.

total export value, which I was able to break down by export destination, a manufacturer's total number of exported products (product scope), the number of exported products per destination, and exports per destination (market penetration).

In addition, productivity is a manufacturer-specific statistic that I obtained by implementing Levinsohn and Petrin's (2003) TFP estimation procedure for all the firms classified within sectors 15–37 of ISIC revision 3 reported in table 1.[12] The sector-specific production function estimates reported in table 2 show that regardless of the sector, labor and intermediate inputs are the factors of production that exhibit the highest marginal productivity. The marginal productivity of labor is estimated to be within the range of 0.35 to 0.79. The marginal productivity of capital is estimated within the range of 0.08 to 0.38, while the marginal productivity of intermediate inputs is estimated within the range of 0.19 to 0.46. These estimates are consistent with recent sector-specific production function estimates for Colombia's manufacturing sector. Casas and Gonzalez (2016) show that sector estimates for Colombia's manufacturing sector for the sample period 2005–2013 on the marginal productivity of labor are between 0.49 and 0.78, while estimates on the marginal productivity of capital and other inputs of production are between 0.25 and 0.53.

With these results to hand, I proceeded to calculate manufacturers' productivity levels, which I used to calculate a manufacturer's growth in productivity at different points in time: t, one year ahead (t+1), two years ahead (t+2), and three years ahead (t+3). This enabled me to test whether the Chinese Shock had a differential effect on the productivity growth of Colombian manufacturing firms.

B. Sector-specific foreign market share

I used the TID to calculate the import market share $simp_{c,s,t} = \dfrac{imp_{c,s,t}}{imp_{s,t}}$ (1) for China and low-wage countries excluding China (LWAGE),[13] in which subindex c identifies China or LWAGEs, subindex s identifies the sector, and subindex t identifies time. $imp_{c,s,t}$ is a sector's total value of imported goods from China or LWAGE countries c at time t, and $imp_{s,t}$ is the total value of imported goods for a sector.

While foreign import market share can shape a manufacturer's decisions on employment, workforce composition, wages, productivity, and export performance, the statistics they choose to base these on may, in turn, affect how far foreign competitors penetrate the local market. I use COMTRADE's product-specific country export data to address this simultaneity bias by instrumenting China's and LWAGEs' industry-specific import market share in Colombia (equation 1) with these same shares for Latin America $iv\exp_{c,s,t} = \dfrac{\sum\limits_{c \in C} lacimp_{c,s,t}}{timp_{s,t}}$ (2a). Excluding Colombia, $\sum\limits_{c \in C} lacimp_{c,s,t}$ corresponds to LAC's sector-specific import value coming from China and LWAGE, and $timp_{s,t}$ is LAC's sector-specific total import value.

For the purpose of robustness and on the assumption that no manufacturer is big enough to affect Colombia's real exchange rate, I also instrumented China's and LWAGEs' import market shares in Colombia with bilateral weighted real exchange rates:

$$ivexch_{c,s,t} = \sum_{c \in C} simp_{c,s,1996} \times \ln(rexch_{c,t}) \quad (2b)$$

where $simp_{c,s,1996}$ is a country's import-industry share in year 1996 and $rexch_{c,t}$ is a country's real exchange rate in year t. For LWAGE countries, $ivexch_{c,s,t}$ in equation (2b) is a weighted average of the logarithm of real

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[12] For specific details on the estimation of a firm's productivity level, see Appendix A.
[13] Low Wage Countries are countries for which per capital GDP in 1996 is lower than 5% of US per capita GDP. China is excluded from this list.

exchange rates. The nominal exchange rate is from Colombia's Central Bank, and price deflators were proxied by country-specific Consumer Price Indexes (CPIs). CPIs are from the IMF's International Financial Statistics (IFS).

C. Regional sector-specific data

Because the AMS does not have the data required to calculate informal employment levels, I used Colombia's Household Survey Datasets (HS) to construct city-sector–specific series on informal employment levels. Since the households included within each HS vary by year, I used yearly data on worker employment status, health benefits, and pension benefits to construct a sector-city–specific panel of informal employment for 2000–2012.

The data structure of the country's HS implies that the series on informal employment levels was only calculated for the 13 capital cities of Barranquilla, Bogotá, Bucaramanga, Cali, Cartagena, Cúcuta, Ibagué, Manizales, Medellín, Montería, Villavicencio, Pasto, and Pereira. Though this data does not include all of the country's major cities, data representation is not expected to be a problem, as in 2015 these 13 cities accounted for 79% of the country's GDP and 72% of the total population.[14] All the informal employment calculations were obtained by taking into account the sample representation of each household unit. In turn, one should take into account that informal employment is defined as the share of sector-city–specific workers that do not receive healthcare or pension benefits from their current employers as legally established by Colombian law. Taking advantage of the information included in HS, in this dataset, I also included two additional statistics on Colombia's regional labor markets: wages and employed workers' years in education.

4. ECONOMETRIC MODEL

First, I used these datasets to assess whether China's import market share affected the growth rate $\Delta y_{i,s,t}$ of labor demand, workforce composition[15], per-worker wages, productivity, domestic sales, and export performance among manufacturers. Equation (3a) corresponds to the baseline specification, which does not take into account the fact that a manufacturer's decisions on employment, workforce composition, wages, and export performance affect China's or the LWAGEs' import market share in Colombia. Equation (3b) addresses this simultaneity bias by instrumenting a region's import market share in Colombia with China's and or the LWAGEs' sector-specific import market share in other Latin American economies outside Colombia $iv\exp_{c,s,t}$. Equation (3b) also instruments a region's import market share in Colombia with its corresponding weighted real exchange rate.

$$\Delta y_{i,s,t} = \alpha_1 + \sum_{c \in C} \delta_c simp_{c,s,t} + \vec{\beta}' \vec{X}_{i,s,t-1} + \kappa s \exp_{s,t}^{usa} + \theta_i D_i + \theta_t D_t + \mu_{i,s,t}. \qquad (3a)$$

where

$$simp_{c,s,t} = \alpha_2 + \sum_c \lambda_c iv\exp_{c,s,t} + \vec{\gamma}' \vec{X}_{i,s,t-1} + \rho s \exp_{s,t}^{usa} + \Lambda_i D_i + \Lambda_t D_t + \varepsilon_{i,s,t}. \qquad (3b)$$

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In equations (3a) and (3b) α_1 and α_2 correspond to the intercepts. $\vec{X}_{i,s,t-1}$ is a vector that includes the following lagged firm-specific control variables: the size of manufacturer's labor force, firm age, the ratio of a manufacturer's capital to the size of its labor force, the share of nonproduction workers,[16] and a manufacturer's value-added per employee. As an alternative to the latter, I included a firm's lagged estimated productivity level.

Although import market share from China and LWAGEs can have a direct effect on a manufacturer's choices around labor, productivity, sales, and exports, there is also a third market effect arising from competition from China and

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[14] GDP and population data were obtained from DANE and the reported shares correspond to the shares of these 13 departments.

[15] The share of nonproduction workers is the only endogenous firm-level statistic that is not estimated as a growth rate. In this case only, the endogenous variable corresponds to the share of nonproduction workers in t, t+1, t+2, or t+3.

[16] This control is omitted from the specifications that relate the change in the share of nonproduction workers to China's import market penetration.

LWAGEs in other foreign export markets. Higher competition in final goods markets may lead to Colombian manufacturers decreasing their export sales, implying changes to the labor force, productivity, and domestic sales. To account for this third market effect, all estimates control for the export market share of Colombian industry in $s \exp_{s,t}^{usa}$ for the US, Colombia's most important export destination.

While D_i corresponds to a manufacturer's fixed effect, D_t corresponds to a year fixed effect. The former controls for nonobserved firm heterogeneity that could be related to a foreign country's share in import market penetration or could be related to China's penetration of the export market. The latter controls for common nonobserved aggregate macro shocks that could affect the estimates of δ_c and λ_c. Since each manufacturer is classified within a fixed industry[17] (4-digit ISIC, rev. 3), industry-specific fixed effects do not need to be included, as the set of firm-level fixed effects already controls for nonobserved sector-specific covariates. $\mu_{i,s,t}$ and $\varepsilon_{i,s,t}$ are error terms. All estimates cluster standard errors by industry and firm. Two-way clustering allows me to address potential concerns of serially correlated standard errors by industry and/or by firm.

Second, since rising foreign market penetration may be associated with an increase in informal employment, I use regional sector-specific data to test whether the imports from these two regions have affected informal employment levels in Colombia. Specifically, I estimate

$$\inf_{s,r,t} = \alpha + \sum_{c \in R} \delta_c simp_{c,s,t} + \Lambda_s D_s + \Lambda_{r,t} D_{r,t} + \varepsilon_{s,r,t}. \qquad (4)$$

where D_s and $D_{r,t}$ are a set of industry-specific and city-year–specific fixed effects that account for any nonobservable covariates that are either industry-specific and city-year–specific that may affect the estimates of $\hat{\delta}_c \; \forall \, c \in R$. All estimates cluster standard errors by industry and for the purpose of robustness, I also cluster standard errors by industry-city. As in equation (3a), the simultaneity of the penetration of foreign imports and informal employment required me to instrument the penetration of foreign imports with the corresponding industry export market share in other destinations outside Latin America.

5. RESULTS

A. Firm-level estimates

Tables 3 through 12 report the results obtained from estimating the benchmark specification in equation (3a) with and without correcting for the simultaneity bias between the regional import market penetration in Colombia and a manufacturer's decisions affecting productivity, employment, workforce composition, wages, and export performance as measured by total exports, number of export destinations, number of exported products, number of exported products per destination, and exports per destination. In these tables, columns (1)–(3) control for the value-added per worker, while the results in columns (4)–(6) control for a manufacturer's productivity level as estimated in equations (1) and (2). The results in (1)–(3) should be understood as the main baseline specification, while the results in (4)–(6) are included as an alternative specification that controls for a firm's productivity level as estimated in equations (1) and (2). The results in columns (1) and (5) do not correct for the simultaneity bias, but the results in columns (2), (3), (5), and (6) instrument China's and the LWAGEs' industry import market share in Colombia with China's and the LWAGEs' industry-specific import market shares in LAC countries other than Colombia and with a weighted real exchange rate. Columns (2) and (5) instrument the former set of instruments, while columns (3) and (6) instrument China's and the LWAGEs' import market share in Colombia with the industry-specific weighted real exchange rate. As proposed, in all instrumented estimations, the two endogenous import market shares are instrumented with two industry-specific variables. Hence, the system of equations in (3a) and (3b) is perfectly identified.

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[17] A manufacturer is linked to one industrial sector for 2000–2012.

Although I do not report the coefficients for the first-stage results, in all the tables (see below), I report the two F-statistics (one for each first stage) that I used to test whether the first-stage instruments were relevant. Two-way clustering does not enable me to use Stock and Yogo's (2005) suggested rule of thumb of an F-statistic above 10 to validate whether the first-stage estimates suffer from weak identification, as they do not provide F-statistics for when there are clustered standard errors. Instead, I report the Kleibergen-Paap statistic (KP), which is robust for clustered standard errors and tests whether the first-stage results suffer from weak identification. Since the acceptance of the null hypothesis implies that coefficients in the main specification are weakly identified, I also report the Sanderson-Windmeijer cluster robust F-stat (SWF), which allows me to test for the source of the weak identification. Therefore, in all IV estimates, I report two SW F-stats; one for each first stage. As Sanderson and Windmeijer (2017) explain, when one has two or more instrumented variables, the KP test implies that one can only assess whether second-stage results suffer from weak identification bias, but one cannot determine if the weak identification is due to a specific first-stage result that has weak instruments. For this paper, this means that it could be the case that the China coefficient does not suffer from weak identification bias but that the LWAGE coefficient is weakly identified, or vice versa. Also, in the worst-case scenario, SWF first-stage results could imply that both first stages are weakly identified, in which case I would then need to find better instruments. I thus used the SWF statistics to determine which second-stage coefficient might be weakly identified. In the best-case scenario, the KP rejects the null for weak identification, and the two SWF F-stats reject the null for weakly conditional identification.

To account for serial correlation, the standard errors in all specifications are two-way clustered at the firm and industry levels. Last but not least, all estimates control for unobserved firm heterogeneity by including a set of firm fixed effects, and they also may include a set of year fixed effects which control for nonobservable common aggregate shocks that could be correlated with the import market share variables.

The initial results for manufacturer employment growth in t (table 3), share of nonproduction workers in t (table 4), and growth rate of wages per employee in t (table 5) reveal that an increase in China's or the LWAGEs' import market share in Colombia does not have a significant effect on any of these statistics. In contrast, the results for productivity growth in t (table 6) reveal that an increase in the import market share of China and LWAGEs in Colombia have a significant negative effect on productivity. The results in column (1) suggest that a 1-percentage-point increase in China's market share decreases productivity by 0.25 percentage points, while a 1-percentage-point increase in the import share of LWAGEs decreases productivity by 0.7 percentage points. After controlling for reverse causality, the results in columns (2) and (5) suggest that only China's import share matters for TFP. A 1-percentage-point increase in China's import share decreases productivity growth in t by 0.6 percentage points. Interestingly the negative effect of China is robust to the change of instruments. The results in columns (3) and (6) confirm that an increase in China's import share decreases productivity growth in t. Furthermore, the first-stage results confirm that across specifications instruments are relevant, and estimates for the second stage do not suffer from weak identification problems as the null hypothesis of the KP test and the SW tests are all rejected at the 1% level.

Although surprising, this result in line with Aghion et al. (2005) and Rafique (2013), where the net effect of competition on innovation is the outcome of two forces working in opposite directions: 1) the Schumpeterian force, where more competition decreases profits and therefore lessens a firm's incentive to invest and innovate; and 2) the escape-competition force, where a firm invests and innovates to escape from the competition from rivals, as profits from being a leader are higher than profits when neck-and-neck with other manufacturers. If the Schumpeterian force dominates the escape-competition force, competition decreases innovation, investment, and productivity. But if the escape-competition force dominates the Schumpeterian force, then import competition causes innovation, investment, and productivity to increase. In the case of Colombia, the results in table 6 seem to favor the Schumpeterian force argument where import competition leads to a decrease in innovation, investment, and productivity.

We now turn to test whether China's import market competition affects a firm's growth rates in t of domestic sales and export performance. While a firm's decrease in domestic sales may be considered a direct outcome of China's higher import market share, we also test whether this intense competition causes changes in export performance that

are not directly linked to changes in final market demand. In the context of a Melitz type model of trade, only firms who exhibit a productivity level higher than the productivity threshold of the zero-profit exporter will start exporting. As is well known, this endogenous entry threshold into exporting is determined by destination-specific market factors like fixed entry costs, route-specific trade costs, and final market demand parameters, as well as by other domestic factors that are not related to foreign market conditions, like wages, which in equilibrium are determined by China's import market share. With this in mind, I proceed to explore whether Chinese import competition in Colombia has an effect on a firm's export performance while controlling for Chinas competition in the destination market, measured by China's export share in the US market.

As with labor, the growth of domestic sales in t is not affected by the increase in foreign import share. As reported in table 7, estimates for import market share of China and LWAGE countries are all nonstatistically different from zero at 1%. On the export side, the results in table 8 are not different from the evidence obtained for domestic sales. A manufacturer's export growth in t is not affected by China's import market share increase. Across all specifications, the coefficients of the import market share of China and LWAGE countries are all nonstatistically different from zero at 1%.

In contrast, the results in tables 9–11 show that an increase in China's import market share affects the growth rate of a manufacturer's export margins in t. An increase in China's import market penetration decreases the growth rate of a manufacturer's number of export destinations (table 9), product scope (table 10), and the number of products exported per destination (table 11) in t. In all three cases, the negative effect of an increase in China's import penetration on a manufacturer's extensive margin of trade is robust to the instrument choice—columns (2) and (3)—and the results are also robust when one directly controls for firm productivity—columns (4) and (6). A 1-percentage-point increase in China's import market penetration in Colombia decreases the growth rate of a manufacturer's export destinations in t by 0.2 percentage points[18], decreases the growth rate of a manufacturer's product scope in t by 0.5 percentage points,[19] and decreases the growth rate of the number of products exported per destination by 0.4 percentage points.[20] Surprisingly, the results in table 12 reveal that an increase in China's import market penetration does not affect a the growth rate of manufacturer's intensive export margin.

B. Results in t+1, t+2, and t+3

Since it is likely that the effect of an increase in China's import market share in t may take some time to affect a manufacturer's choices related to labor, TFP, and sales, I extend the baseline specification in equations (3a) and (3b) by estimating the effect of China's import market share in t on a manufacturer's future growth rates one period (t+1), two periods (t+2), and three periods (t+3) ahead. Therefore, the new benchmark specification is

$$\Delta y_{i,s,t+p} = \alpha_1 + \sum_{c \in C} \delta_c simp_{c,s,t} + \vec{\beta}' \vec{X}_{i,s,t-1} + \kappa s \exp_{s,t}^{usa} + \theta_i D_i + \theta_t D_t + \mu_{i,s,t}. \qquad (7)$$

where subindex p is either 1, 2, or 3. Tables 13–21 only report the estimated coefficients for both the China and LWAGE effect on import market share and for China's export share in the US market. In these tables, the results in columns (1)–(4) correspond to the impact of China's and the LWAGEs' import shares on growth rates one period ahead. Columns (5)–(8) correspond to the impact of import shares on growth rates two periods ahead, and columns (9)-(12) correspond to the impact of import shares on growth rates three periods ahead. The estimates in columns (1), (2), (5),(6), (9), and (10) control for value-added per firm size, while the estimates in columns (3), (4), (7),(8), (11), and (12) control for a manufacturer's productivity level as previously estimated in equations (1) and (2). The results in columns (1), (3), (5), (7), (9), and (11) are the estimates without correcting for the simultaneity bias, while the results in columns (2), (4), (6), (8), (10), and (12) instrument China's and the LWAGEs' import shares with their corresponding import shares in LAC destinations other than Colombia. As before, all IV estimates report the KP statistic, F-statistics for the first stage, and SWF statistics.

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[18] See column (2), table 9.
[19] See column (2), table 10.
[20] See column (2), table 11.

The results regarding a manufacturer's future employment growth reveal that an increase in China's import market share has a significant negative effect on this growth two and three periods ahead. As reported in column 6, table 13, a 1-percentage-point increase in China's import market share decreases employment growth in t+2 and t+3 by 0.4 and 0.33 percentage points, respectively. Not only are the results robust when controlling for firm productivity—columns (8) and (12)—but in all cases, the reported KP statistic and the two SWF tests reveal that second stage results are not weakly identified.

The change in a manufacturer's future decisions on employment growth is reflected in its future decisions regarding workforce composition, as an increase in China's import share implies an increase in the share of nonproduction workers two and three years from now. As reported in columns (6) and (10) in table 14, a 1-percentage-point increase in China's import share increases the nonproduction workers in a manufacturer's workforce by 0.12 percentage points in t+2 and 0.22 in t+3. Though surprising, the positive increase in the share of nonproduction workers is due to the fact that, as China import penetration increases, a manufacturer's operational size decreases as a result of it hiring fewer production workers. The results in t+2 and t+3 are robust to the use of a different set of instruments and in all cases the KP statistic and the two SWF tests reveal that second stage results are not weakly identified.

The negative effect on employment growth and workforce composition in t+2 and t+3 go hand in hand with the reduction in the growth rate of wages per employee. As reported in table 15, a 1% increase in China's import share causes wage growth per employee to decrease on average by 1.6 percentage points in t+1 (column [2]), t+2 (column [6]), and t+3 (column [10]). Regardless of the specification, the results are significant at 1%, and IV estimates for t+1 and t+2 do not suffer from weakly identified coefficients as the KP statistic and the two SWF tests reject their corresponding null. The results in t+3 suggest that second-stage coefficients might be weakly identified as the KP statistic only rejects the null at the 5% level. But the results for the SWF statistics show that weak identification is linked to the coefficient associated with LWAGEs as the corresponding SWF statistic is only significant at 5%. The results for the SWF statistic for China are significant at 1%; meaning that the estimated coefficient for China in t+3 is well identified.

Future impacts on productivity growth (table 16) are significant as a 1-percentage-point increase in China's import share causes productivity growth to decrease in t+1, t+2, and t+3 by 1.9 (column [2]), 2 (column [6]), and 2.8% (column ([10]). Regardless of the specification, the results are significant at 1%, and IV estimates in t+1 do not suffer from weakly identified coefficients as the KP statistic and the two SWF tests reject their corresponding null. The results in t+2 and t+3 seem to suggest that second-stage coefficients might be weakly identified as the KP statistic only rejects the null at the 5% level. But the results for the SWF statistics shows that weak identification is linked to the coefficient associated with the LWAGEs' import share, as the corresponding SWF statistic is only significant at 5%. At the same time, the results for the SWF statistic related to China's import share are all significant at 1%; hence the estimated coefficients in t+2 and t+3 are correctly identified.

I now turn to evaluate whether greater competition with China affects the future growth of domestic sales (table 17) and export performance (tables 18 through 22). While the future growth of domestics sales decreases by 1.6 percentage points in t+1 (column [2]), 1.7 percentage points in t+2 (column [6]), and 1.3 percentage points in t+3 (column [10]), a manufacturer's future export growth is not affected by the increase in China's import market. Future export growth performance as measured by total exports (table 18), number of destinations (table 19), product scope (table 20), number of products per destination (table 21), and market penetration (table 22) are not affected by China's increase in import market share. Like the results for productivity growth, the results in t+2 and t+3 seem to be weakly identified as the KP statistic only rejects the null at the 5% level. But the results for the SWF statistics shows that weak identification is linked to the coefficient associated with the LWAGEs' import share, as the corresponding SWF statistic is only significant at 5%. At the same time, the results for the SWF statistic related to China's import share are all significant at 1%; hence the estimated coefficients in t+2 and t+3 are correctly identified.

C. Results by productivity level

In the nonreported results, I extended the analysis by testing whether the increase in the foreign import market share has a differential effect on the performance of Colombian manufacturers by productivity level and size. As in Mion and Zhu (2013), I interacted each import market share with a manufacturer's employment size and productivity level and I proceeded to estimate IV results as originally proposed in equations (3a) and (3b). Unfortunately, none of the results where statistically different from zero.

Finally, in the nonreported results, I estimated the results in tables 3–22 with country/region-sector–specific import market penetration variables. Unfortunately, the estimated coefficients on China's and the LWAGEs' import market penetration in Colombia were not statistically different from zero.

D. Regional sector-specific estimates

As previously explained, data availability on informal employment required me to construct a regional sector-specific database that I used to test whether the increase in foreign market penetration in Colombia has an effect on Colombia's regional labor market as measured by the level of informality, the regional wage, and the active workforce's years in education.

Like Autor, Dorn, and Hanson (2013), I estimated equation (4) using a regional sector-specific database. In table 23, columns (1)–(3), I report the estimates without taking into account the simultaneity bias between the regional labor outcomes—informal employment levels, wage, and years in education—and the degree of import market penetration of China and the ROW. Columns (4)–(6) decrease the simultaneity bias by instrumenting the sector-specific import market penetration with the sector-specific export market share of China and the ROW to other destinations outside Latin America.

The results reveal that the Chinese market penetration does not have an effect on informal employment levels or the active workforce's years in education (columns [4] and [6]). Although only significant at 10%, column (5) suggests that the higher penetration of Chinese products is linked to higher per-weekly wages. This result is consistent with evidence on the future growth of wages reported in table 12, column (6).

The nonreported results extend the current specifications in three ways: first, I tested whether the noneffect on informal employment varies depending on the alternative measure of informal employment; that is, using only health or pension requirements. Second, I tested whether the coefficients in table 23 vary by city subsets; i.e. Bogotá and Medellín as compared to all the other cities. The results for the two alternative measures of informal employment continue to validate the lack of effect of the market penetration of China and the ROW. In addition, the sample breakdown by city type did not reveal any differential effects of the impact of foreign market penetration. In all the specifications, the coefficient linked to foreign market penetration was not statistically different from zero.

6. CONCLUSIONS

For this paper, I constructed two datasets to assess whether the China Shock produced an adjustment of the labor, workforce composition, TFP, domestic sales, and export performance of Colombia's manufacturing sector. Furthermore, I tested, whether China's import market increase has caused a change in the country's regional informal employment levels. I used a two-stage estimation approach to instrument regional import market penetration variables with their corresponding regional export penetration shares in foreign markets outside Latin America. While the initial results suggest that an increase in import market penetration only affects the future growth of productivity and export performance in t, a robustness check shows that the effect of an increase in China's import market share on the growth rates of employment, workforce composition, wages, and productivity one, two, and three years ahead is significant. While China's market penetration decreases the growth rates of employment, productivity, and domestic sales, the share of nonproduction workers increases, while export performance in t+1, t+2, and t+3 is not affected at all. The evidence on informal employment suggests that the higher penetration of foreign products does not seem to affect the country's informal employment levels.

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TABLE 1. SUBSECTOR CLASSIFICATION

Sub-Sector[a]	ISIC Rev 3	Sub-Sector Name
15	15	Manufacture of food products and beverages.
15	16	Manufacture of tobacco products.
17	17	Manufacture of textiles.
18	18	Manufacture of wearing apparel; dressing and dyeing of fur.
19	19	Tanning and dressing of leather; Manufacture of luggage, handbags, saddlery, harness and footwear.
20	20	Manufacture of wood products and cork, except furniture. Articles of straw and plaiting materials.
21	21	Manufacture of paper and paper products.
22	22	Publishing, printing and reproduction of recorded media.
23	23	Manufacture of coke, refined petroleum products and nuclear fuel.
24	24	Manufacture of chemicals and chemical products.
25	25	Manufacture of rubber and plastics products.
26	26	Manufacture of other non-metallic mineral products.
27	27	Manufacture of basic metals.
27	28	Manufacture of fabricated metal products, except machinery and equipment.
29	29	Manufacture of machinery and equipment n.e.c.
30	30	Manufacture of office, accounting and computing machinery.
30	31	Manufacture of electrical machinery and apparatus n.e.c.
30	32	Manufacture of radio, television and communication equipment and apparatus.
33	33	Manufacture of medical, precision and optical instruments, watches and clocks.
34	34	Manufacture of motor vehicles, trailers and semi-trailers.
35	35	Manufacture of other transport equipment.
36	36	Manufacture of furniture; manufacturing n.e.c.
37	37	Recycling

a I reclassified Sub-sector 16 into Sub-sector 15, Sub-sector 28 into Sub-Sector 27 and Sub-sectors 31 and 32 into Sub-sector .

TABLE 2. TOTAL FACTOR PRODUCTIVITY

	Panel A					
Variables	**Food, Beverage and Tobacco**	**Textiles**	**Wearing Apparel**	**Tanning and Dressing Leather**	**Wood Products**	**Paper and Paper Products**
	Sub-Sector 15	Sub-Sector 17	Sub-Sector 18	Sub-Sector 19	Sub-Sector 20	Sub-Sector 21
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Empoyment in t	0.5601	0.6584	0.5801	0.6489	0.5086	0.5924
	(0.019)***	(0.034)***	(0.022)***	(0.029)***	(0.044)***	(0.047)***
Ln Capital in t	0.1339	0.0959	0.0450	0.0957	0.1045	0.2198
	(0.027)***	(0.054)*	(0.029)	(0.042)**	(0.065)	(0.056)***
Ln Intermediate Inputs in t	0.3721	0.3376	0.3231	0.4109	0.4409	0.3712
	(0.014)***	(0.032)***	(0.015)***	(0.030)***	(0.035)***	(0.037)***
Observations	25,044	6,396	14,075	6,298	2,732	3,262

	Panel B					
Variables	**Publishing and Printing**	**Coke and Refined Petroleum**	**Chemicals**	**Ruber and Plastic Products**	**Other Non-Metallic Mineral Products**	**Basic Metals**
	Sub-Sector 22	Sub-Sector 23	Sub-Sector 24	Sub-Sector 25	Sub-Sector 26	Sub-Sector 27
	(7)	(8)	(9)	(10)	(11)	(12)
Ln Empoyment in t	0.5906	0.3576	0.5424	0.6119	0.5967	0.6186
	(0.037)***	(0.094)***	(0.030)***	(0.030)***	(0.038)***	(0.025)***
Ln Capital in t	0.0032	-0.0380	0.1621	0.0902	0.0876	0.1125
	(0.037)	(0.173)	(0.036)***	(0.030)***	(0.032)***	(0.042)***
Ln Intermediate Inputs in t	0.4276	0.4614	0.3997	0.3784	0.3911	0.3138
	(0.030)***	(0.062)***	(0.023)***	(0.022)***	(0.021)***	(0.018)***
Observations	8,421	642	10,621	10,297	6,320	11,469

	Panel C					
Variables	**Machinery and Equipment**	**Office and Accounting**	**Medical Products**	**Motor Vehicles**	**Other Transport Equipment**	**Furniture**
	Sub-Sector 29	Sub-Sector 30	Sub-Sector 33	Sub-Sector 34	Sub-Sector 35	Sub-Sector 36
	(13)	(14)	(15)	(16)	(17)	(18)
Ln Empoyment in t	0.6304	0.4973	0.7950	0.5171	0.6927	0.5582
	(0.031)***	(0.052)***	(0.081)***	(0.065)***	(0.110)***	(0.042)***
Ln Capital in t	0.1178	0.1464	0.2617	0.1423	0.3836	0.1343
	(0.030)***	(0.040)***	(0.090)***	(0.058)**	(0.124)***	(0.026)***
Ln Intermediate Inputs in t	0.3412	0.4501	0.1944	0.3618	0.3573	0.4416
	(0.022)***	(0.039)***	(0.039)***	(0.032)***	(0.058)***	(0.027)***
Observations	7,807	3,387	1,095	3,235	861	9,748

TABLE 3. TOTAL EMPLOYMENT: GROWTH IN T

Dependent Variable: Employment Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.2667	-0.2664	-0.2667	-0.2717	-0.2715	-0.2717
	(0.008)***	(0.009)***	(0.009)***	(0.009)***	(0.010)***	(0.009)***
Ln. Age in t-1	-0.0336	-0.0336	-0.0336	-0.0324	-0.0324	-0.0324
	(0.005)***	(0.005)***	(0.005)***	(0.005)***	(0.005)***	(0.005)***
Ln Tangeable Assets per Empl. in t-1	0.0293	0.0295	0.0293	0.0361	0.0363	0.0362
	(0.002)***	(0.002)***	(0.002)***	(0.002)***	(0.003)***	(0.002)***
Share of Non-Production Workers in t-1	-0.0272	-0.0286	-0.0282	-0.0310	-0.0324	-0.0321
	(0.013)**	(0.013)**	(0.013)**	(0.013)**	(0.013)**	(0.013)**
Ln Value Added Per Worker in t-1	0.0518	0.0514	0.0517			
	(0.004)***	(0.004)***	(0.004)***			
Ln Productivity in t-1				0.0232	0.0223	0.0231
				(0.003)***	(0.003)***	(0.003)***
China's Export Market Share in US Market in t	-0.0806	-0.1676	-0.0865	-0.0746	-0.1647	-0.0797
	(0.036)**	(0.069)**	(0.036)**	(0.039)*	(0.074)**	(0.039)**
China's Industry Import Market Share in t	-0.0558	-0.1459	-0.0893	-0.0559	-0.1471	-0.0918
	(0.094)	(0.131)	(0.109)	(0.099)	(0.135)	(0.115)
LWAGE[a] Industry Import Market Share in t	0.0309	-2.4636	-0.2069	0.0430	-2.5348	-0.1781
	(0.221)	(1.304)*	(0.301)	(0.230)	(1.351)*	(0.321)
Observations	113,813	113,813	113,813	113,813	113,813	113,813
Clustered Firms	14,022	14,022	14,022	14,022	14,022	14,022
Clustered Industries[b]	153	153	153	153	153	153
R-squared	0.287	0.280	0.286	0.280	0.273	0.280
Kleibergen-Paap LM		9.970	7.299		9.960	7.303
Kleibergen-Paap LM pvalue		0.002	0.007		0.002	0.007
F-test First Stage IV 1[c] and IV 2[d]		52.49, 5.24	1179.01,19.80		52.49, 5.24	1178.13, 19.78
Pvalue F-tests IV 1[c] and IV 2[d]		.000, .006	2.783e-93, 2.270e-08		4.66e-18, .006	2.935e-93, 2.318e-08
Sanderson-Windmeijer F-stat (SWF) IV 1[c]		111.616	1767.086		111.894	1766.552
P-Value SWF IV1[c]		6.60E-20	1.36E-85		6.09E-20	1.39E-85
Sanderson-Windmeijer F-stat (SWF) IV 2[d]		10.392	42.170		10.396	42.103
P-Value SWF IV 2[d]		0.001549098	1.12E-09		0.001545591	1.15E-09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 4. SHARE OF NONPRODUCTION WORKERS: GROWTH IN T

Dependent Variable: Share of Non-Production Workers in t	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.0217	-0.0218	-0.0217	-0.0213	-0.0213	-0.0213
	(0.006)***	(0.006)***	(0.006)***	(0.006)***	(0.006)***	(0.006)***
Ln. Age in t-1	0.0061	0.0061	0.0061	0.0060	0.0060	0.0060
	(0.002)***	(0.002)***	(0.002)***	(0.002)***	(0.002)***	(0.002)***
Ln Tangeable Assets per Empl. in t-1	0.0022	0.0022	0.0022	0.0017	0.0017	0.0017
	(0.001)*	(0.001)*	(0.001)*	(0.001)	(0.001)	(0.001)
Ln Value Added Per Worker in t-1	-0.0039	-0.0039	-0.0039			
	(0.001)***	(0.001)***	(0.001)***			
Ln Productivity in t-1				-0.0022	-0.0021	-0.0022
				(0.001)***	(0.001)***	(0.001)***
China's Export Market Share in US Market in t	0.0193	0.0193	0.0202	0.0192	0.0194	0.0199
	(0.015)	(0.017)	(0.015)	(0.015)	(0.017)	(0.015)
China's Industry Import Market Share in t	0.0013	0.0243	0.0023	0.0010	0.0240	0.0023
	(0.021)	(0.031)	(0.023)	(0.021)	(0.031)	(0.023)
LWAGE[a] Industry Import Market Share in t	0.0061	0.0572	0.0291	0.0048	0.0616	0.0253
	(0.054)	(0.216)	(0.079)	(0.055)	(0.218)	(0.081)
Observations	95,242	95,242	95,242	95,242	95,242	95,242
Clustered Firms		12625	12625	12625	12625	12625
Clustered Industries[b]		149	149	149	149	149
R-squared	0.776	0.776	0.776	0.776	0.776	0.776
Kleibergen-Paap LM		8.866	7.013		8.855	7.016
Kleibergen-Paap LM pvalue		0.002	0.008		0.003	0.008
F-test First Stage IV 1[c] and IV 2[d]		45.25 and 6.20	768.89 and 17.45		45.23 and 6.19	767.84 and 17.40
Pvalue F-tests IV 1[c] and IV 2[d]		4.629e-16 and .002	6.549e-79 and 1.574e-07		4.683e-16 and .002	7.180e-79 and 1.623e-07
Sanderson-Windmeijer (SW) IV 1[c]		103.664	927.39		103.788	927.149
P-Value SW IV1[c]		8.77E-19	1.29E-65		8.46E-19	1.31E-65
Sanderson-Windmeijer (SW) IV 2[d]		11.228	33.267		11.23	33.203
P-Value SW IV 2[d]		0.001	4.53E-08		0.001	4.65E-08

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 5. WAGES PER WORKER: GROWTH IN T

Dependent Variable: Wage Rate Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.0241	-0.0241	-0.0241	-0.0246	-0.0246	-0.0246
	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)
Ln. Age in t-1	-0.0639	-0.0639	-0.0639	-0.0640	-0.0640	-0.0640
	(0.013)***	(0.013)***	(0.013)***	(0.013)***	(0.013)***	(0.013)***
Ln Tangeable Assets per Empl. in t-1	0.0018	0.0018	0.0018	0.0013	0.0013	0.0012
	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.008)
Share of Non-Production Workers in t-1	0.1371	0.1379	0.1380	0.1371	0.1378	0.1379
	(0.076)*	(0.075)*	(0.076)*	(0.075)*	(0.075)*	(0.075)*
Ln Value Added Per Worker in t-1	-0.0026	-0.0027	-0.0026			
	(0.007)	(0.007)	(0.007)			
Ln Productivity in t-1				-0.0072	-0.0074	-0.0073
				(0.004)	(0.004)*	(0.004)
China's Export Market Share in US Market in t	-0.0277	-0.0530	-0.0364	-0.0282	-0.0527	-0.0373
	(0.065)	(0.069)	(0.064)	(0.066)	(0.069)	(0.065)
China's Industry Import Market Share in t	-0.0341	-0.0232	-0.0125	-0.0346	-0.0256	-0.0130
	(0.044)	(0.057)	(0.049)	(0.044)	(0.057)	(0.049)
LWAGE[a] Industry Import Market Share in t	-0.0247	-0.6584	-0.1987	-0.0335	-0.6527	-0.2177
	(0.121)	(0.834)	(0.208)	(0.121)	(0.828)	(0.211)
Observations	113,813	113,813	113,813	113,813	113,813	113,813
Clustered Firms	14022	14022	14022	14022	14022	14022
Clustered Industries[b]	153	153	153	153	153	153
R-squared	0.181	0.181	0.181	0.181	0.181	0.181
Kleibergen-Paap LM		9.969	7.299		9.96	7.302
Kleibergen-Paap LM pvalue		0.001	0.006		0.001	0.006
F-test First Stage IV 1[c] and IV 2[d]		52.489 and 5.240	1179.01 and 19.80		52.48 and 5.24	1178.13 and 19.77
Pvalue F-tests IV 1[c] and IV 2[d]		4.654e-18 and .006	2.783e-93 and 2.270e-08		4.66e-18 and .006	2.935e-93 and 2.318e-08
Sanderson-Windmeijer (SW) IV 1[c]		111.615	1767.085		111.893	1766.552
P-Value SW IV1[c]		6.60E-20	1.36E-85		6.09E-20	1.39E-85
Sanderson-Windmeijer (SW) IV 2[d]		10.391	42.169		10.396	42.103
P-Value SW IV 2[d]		0.001	1.12E-09		0.001	1.15E-09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 6. TOTAL FACTOR PRODUCTIVITY: GROWTH IN T

Dependent Variable: TFP Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	0.0396	0.0399	0.0398	0.0617	0.0621	0.0619
	(0.015)***	(0.015)***	(0.015)***	(0.020)***	(0.020)***	(0.019)***
Ln. Age in t-1	-0.0407	-0.0406	-0.0407	-0.0549	-0.0546	-0.0548
	(0.020)**	(0.021)*	(0.021)*	(0.024)**	(0.024)**	(0.024)**
Ln Tangeable Assets per Empl. in t-1	0.0954	0.0958	0.0956	0.0008	0.0011	0.0009
	(0.013)***	(0.013)***	(0.013)***	(0.012)	(0.012)	(0.012)
Share of Non-Production Workers in t-1	-0.0419	-0.0544	-0.0460	-0.0082	-0.0246	-0.0111
	(0.037)	(0.038)	(0.037)	(0.029)	(0.031)	(0.029)
Ln Value Added Per Worker in t-1	-0.6300	-0.6300	-0.6301			
	(0.010)***	(0.010)***	(0.010)***			
Ln Productivity in t-1				-0.5867	-0.5862	-0.5872
				(0.023)***	(0.023)***	(0.023)***
China's Export Market Share in US Market in t	0.2228	0.2709	0.2080	0.1394	0.2542	0.0972
	(0.259)	(0.274)	(0.254)	(0.337)	(0.358)	(0.322)
China's Industry Import Market Share in t	-0.2509	-0.6031	-0.3829	-0.2738	-0.7106	-0.3851
	(0.104)**	(0.172)***	(0.127)***	(0.107)**	(0.250)***	(0.140)***
LWAGE[a] Industry Import Market Share in t	-0.7232	-0.3300	-1.4330	-1.2836	0.6418	-2.6612
	(0.403)*	(1.879)	(0.554)**	(0.449)***	(1.829)	(0.893)***
Observations	113,813	113,813	113,813	113,813	113,813	113,813
Clustered Firms	14022	14022	14022	14022	14022	14022
Clustered Industries[b]	153	153	153	153	153	153
R-squared	0.254	0.254	0.254	0.268	0.268	0.268
Kleibergen-Paap LM		9.969	7.299		9.96	7.302
Kleibergen-Paap LM pvalue		0.001	0.006		0.001	0.006
F-test First Stage IV 1[c] and IV 2[d]		52.48 and 5.24	1179.01 and 19.80		52.48 and 5.24	1178.13 and 19.77
Pvalue F-tests IV 1[c] and IV 2[d]		4.654e-18 and .006	2.783e-93 and 2.270e-08		4.662e-18 and .006	2.935e-93 and 2.318e-08
Sanderson-Windmeijer (SW) IV 1[c]		111.615	1767.085		111.893	1766.552
P-Value SW IV1[c]		6.60E-20	1.36E-85		6.09E-20	1.39E-85
Sanderson-Windmeijer (SW) IV 2[d]		10.391	42.169		10.396	42.103
P-Value SW IV 2[d]		0.001	1.12E-09		0.001	1.15E-09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 7. DOMESTIC SALES: GROWTH IN T

Dependent Variable: Domestic Sales Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.1612	-0.1608	-0.1610	-0.1495	-0.1491	-0.1494
	(0.010)***	(0.010)***	(0.010)***	(0.010)***	(0.010)***	(0.010)***
Ln. Age in t-1	-0.0535	-0.0534	-0.0535	-0.0566	-0.0565	-0.0566
	(0.017)***	(0.017)***	(0.017)***	(0.018)***	(0.018)***	(0.018)***
Ln Tangeable Assets per Empl. in t-1	-0.0160	-0.0157	-0.0159	-0.0332	-0.0329	-0.0332
	(0.004)***	(0.004)***	(0.004)***	(0.004)***	(0.004)***	(0.004)***
Share of Non-Production Workers in t-1	-0.0122	-0.0237	-0.0140	-0.0030	-0.0146	-0.0046
	(0.018)	(0.019)	(0.018)	(0.019)	(0.021)	(0.019)
Ln Value Added Per Worker in t-1	-0.1282	-0.1283	-0.1284			
	(0.006)***	(0.006)***	(0.006)***			
Ln Productivity in t-1				-0.0627	-0.0628	-0.0630
				(0.007)***	(0.007)***	(0.007)***
China's Export Market Share in US Market in t	-0.0014	0.0271	-0.0253	-0.0165	0.0203	-0.0428
	(0.208)	(0.215)	(0.207)	(0.208)	(0.216)	(0.207)
China's Industry Import Market Share in t	-0.0511	-0.3842	-0.1193	-0.0513	-0.3842	-0.1137
	(0.074)	(0.200)*	(0.074)	(0.073)	(0.206)*	(0.074)
LWAGE[a] Industry Import Market Share in t	-0.0875	-0.1596	-0.8785	-0.1245	0.0205	-0.9664
	(0.320)	(1.181)	(0.404)**	(0.303)	(1.120)	(0.370)**
Observations	113,813	113,813	113,813	113,813	113,813	113,813
Clustered Firms	14022	14022	14022	14022	14022	14022
Clustered Industries[b]	153	153	153	153	153	153
R-squared	0.166	0.166	0.166	0.161	0.161	0.161
Kleibergen-Paap LM		9.969	7.299		9.96	7.302
Kleibergen-Paap LM pvalue		0.001	0.006		0.001	0.006
F-test First Stage IV 1[c] and IV 2[d]		52.48 and 5.24	1179.01 and 19.80		52.48 and 5.24	1178.13 and 19.77
Pvalue F-tests IV 1[c] and IV 2[d]		4.654e-18 and .006	2.783e-93 and 2.270e-08		4.662e-18 and .006	2.935e-93 and 2.318e-08
Sanderson-Windmeijer (SW) IV 1[c]		111.615	1767.085		111.893	1766.552
P-Value SW IV1[c]		6.60E-20	1.36E-85		6.09E-20	1.39E-85
Sanderson-Windmeijer (SW) IV 2[d]		10.391	42.169		10.396	42.103
P-Value SW IV 2[d]		0.001	1.12E-09		0.001	1.15E-09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 8. TOTAL EXPORTS: GROWTH IN T

Dependent Variable: Exports Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	0.0254	0.0240	0.0266	0.0249	0.0232	0.0263
	(0.102)	(0.100)	(0.103)	(0.101)	(0.098)	(0.102)
Ln. Age in t-1	-2.5941	-2.6000	-2.5900	-2.5936	-2.5996	-2.5895
	(0.218)***	(0.218)***	(0.219)***	(0.218)***	(0.218)***	(0.219)***
Ln Tangeable Assets per Empl. in t-1	-0.1978	-0.1984	-0.1978	-0.1939	-0.1946	-0.1939
	(0.090)**	(0.090)**	(0.090)**	(0.089)**	(0.089)**	(0.089)**
Share of Non-Production Workers in t-1	-0.7060	-0.6853	-0.7136	-0.7088	-0.6881	-0.7164
	(0.362)*	(0.364)*	(0.367)*	(0.361)*	(0.363)*	(0.365)*
Ln Value Added Per Worker in t-1	0.0257	0.0257	0.0263			
	(0.089)	(0.089)	(0.089)			
Ln Productivity in t-1				0.0253	0.0234	0.0272
				(0.075)	(0.075)	(0.075)
China's Export Market Share in US Market in t	-0.1742	-0.4627	0.0038	-0.1473	-0.4408	0.0334
	(3.999)	(4.219)	(3.885)	(4.007)	(4.227)	(3.894)
China's Industry Import Market Share in t	-1.6872	-1.1655	-1.7590	-1.6879	-1.1610	-1.7610
	(0.966)*	(1.412)	(1.426)	(0.968)*	(1.416)	(1.430)
LWAGE[a] Industry Import Market Share in t	5.3974	-2.6226	11.3217	5.4150	-2.6968	11.3650
	(2.786)*	(14.968)	(4.321)***	(2.782)*	(15.014)	(4.318)***
Observations	42,616	42,616	42,616	42,616	42,616	42,616
Clustered Firms	5918	5918	5918	5918	5918	5918
Clustered Industries[b]	149	149	149	149	149	149
R-squared	0.098	0.098	0.098	0.098	0.098	0.098
Kleibergen-Paap LM		6.058	5.669		6.046	5.669
Kleibergen-Paap LM pvalue		0.013	0.0172		0.013	0.017
F-test First Stage IV 1[c] and IV 2[d]		55.88 and 2.82	693.08 and 42.37		55.91 and 2.81	692.19 and 42.32
Pvalue F-tests IV 1[c] and IV 2[d]		8.335e-19 and .062	6.991e-76 and 2.806e-15		8.165e-19 and .063	7.617e-76 and 2.908e-15
Sanderson-Windmeijer (SW) IV 1[c]		87.559	1083.054		88.631	1084.157
P-Value SW IV1[c]		1.23E-16	5.79E-70		8.76E-17	5.41E-70
Sanderson-Windmeijer (SW) IV 2[d]		5.267	84.04		5.26	83.937
P-Value SW IV 2[d]		0.023	3.80E-16		0.023	3.92E-16

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 9. NUMBER OF DESTINATIONS: GROWTH IN T

Dependent Variable: Export Destinations Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.0154	-0.0155	-0.0154	-0.0149	-0.0151	-0.0150
	(0.006)**	(0.006)**	(0.006)**	(0.006)**	(0.006)**	(0.006)**
Ln. Age in t-1	-0.0423	-0.0426	-0.0424	-0.0423	-0.0426	-0.0424
	(0.011)***	(0.011)***	(0.011)***	(0.011)***	(0.011)***	(0.011)***
Ln Tangeable Assets per Empl. in t-1	-0.0143	-0.0141	-0.0142	-0.0145	-0.0143	-0.0144
	(0.006)**	(0.006)**	(0.006)**	(0.006)**	(0.006)**	(0.006)**
Share of Non-Production Workers in t-1	-0.0087	-0.0107	-0.0095	-0.0083	-0.0103	-0.0091
	(0.022)	(0.022)	(0.022)	(0.023)	(0.022)	(0.022)
Ln Value Added Per Worker in t-1	-0.0015	-0.0019	-0.0016			
	(0.004)	(0.004)	(0.004)			
Ln Productivity in t-1				0.0012	0.0009	0.0011
				(0.003)	(0.003)	(0.003)
China's Export Market Share in US Market in t	-0.1799	-0.1836	-0.1788	-0.1790	-0.1830	-0.1780
	(0.192)	(0.194)	(0.189)	(0.192)	(0.194)	(0.189)
China's Industry Import Market Share in t	-0.1328	-0.2384	-0.1715	-0.1320	-0.2368	-0.1706
	(0.063)**	(0.065)***	(0.083)**	(0.063)**	(0.065)***	(0.083)**
LWAGE[a] Industry Import Market Share in t	0.1655	-0.3763	0.0502	0.1671	-0.3713	0.0549
	(0.173)	(0.983)	(0.277)	(0.173)	(0.985)	(0.278)
Observations	42,616	42,616	42,616	42,616	42,616	42,616
Clustered Firms	5918	5918	5918	5918	5918	5918
Clustered Industries[b]	149	149	149	149	149	149
R-squared	0.068	0.068	0.068	0.068	0.068	0.068
Kleibergen-Paap LM		6.058	5.669		6.046	5.669
Kleibergen-Paap LM pvalue		0.0138	0.017		0.013	0.017
F-test First Stage IV 1[c] and IV 2[d]		55.88 and 2.82	693.08 and 42.37		55.91 and 2.81	692.19 and 42.32
Pvalue F-tests IV 1[c] and IV 2[d]		8.335e-19 and .062	6.991e-76 and 2.806e-15		8.165e-19 and .063	7.617e-76 and 2.908e-15
Sanderson-Windmeijer (SW) IV 1[c]		87.559	1083.054		88.631	1084.157
P-Value SW IV1[c]		1.23E-16	5.79E-70		8.76E-17	5.41E-70
Sanderson-Windmeijer (SW) IV 2[d]		5.267	84.04		5.26	83.937
P-Value SW IV 2[d]		0.0231	3.80E-16		0.023	3.92E-16

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 10. TOTAL NUMBER OF EXPORTED PRODUCTS: GROWTH IN T

Dependent Variable: # Products Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.0146	-0.0152	-0.0147	-0.0146	-0.0152	-0.0147
	(0.009)	(0.009)*	(0.009)	(0.009)*	(0.009)*	(0.009)*
Ln. Age in t-1	-0.0775	-0.0790	-0.0777	-0.0775	-0.0791	-0.0777
	(0.029)***	(0.029)***	(0.029)***	(0.029)***	(0.029)***	(0.029)***
Ln Tangeable Assets per Empl. in t-1	-0.0171	-0.0167	-0.0169	-0.0170	-0.0168	-0.0169
	(0.007)**	(0.007)**	(0.007)**	(0.007)**	(0.007)**	(0.007)**
Share of Non-Production Workers in t-1	-0.0522	-0.0537	-0.0546	-0.0522	-0.0537	-0.0546
	(0.041)	(0.040)	(0.042)	(0.041)	(0.040)	(0.042)
Ln Value Added Per Worker in t-1	0.0006	-0.0001	0.0003			
	(0.006)	(0.006)	(0.006)			
Ln Productivity in t-1				0.0006	-0.0005	0.0002
				(0.005)	(0.005)	(0.005)
China's Export Market Share in US Market in t	-0.3299	-0.3841	-0.3313	-0.3293	-0.3845	-0.3311
	(0.268)	(0.304)	(0.265)	(0.268)	(0.304)	(0.264)
China's Industry Import Market Share in t	-0.3769	-0.5398	-0.4935	-0.3769	-0.5401	-0.4936
	(0.141)***	(0.184)***	(0.204)**	(0.142)***	(0.185)***	(0.205)**
LWAGE[a] Industry Import Market Share in t	0.3581	-2.1643	-0.1459	0.3585	-2.1638	-0.1456
	(0.229)	(2.508)	(0.343)	(0.229)	(2.509)	(0.342)
Observations	42,616	42,616	42,616	42,616	42,616	42,616
Clustered Firms	5918	5918	5918	5918	5918	5918
Clustered Industries[b]	149	149	149	149	149	149
R-squared	0.070	0.068	0.069	0.070	0.068	0.069
Kleibergen-Paap LM	5.67	6.058	5.669	5.67	6.046	5.669
Kleibergen-Paap LM pvalue	0.017	0.013	0.017	0.017	0.013	0.017
F-test First Stage IV 1[c] and IV 2[d]		55.88 and 2.82	693.08 and 42.37		55.916 and 2.816	692.19 and 42.32
Pvalue F-tests IV 1[c] and IV 2[d]		8.335e-19 and .062	5.991e-76 and 2.806e-15		8.165e-19 and .063	7.617e-76 and 2.908e-15
Sanderson-Windmeijer (SW) IV 1[c]		87.559	1083.054		88.6311371	1084.157
P-Value SW IV1[c]		1.23E-16	5.79E-70		8.76E-17	5.41E-70
Sanderson-Windmeijer (SW) IV 2[d]		5.267	84.04		5.26	83.937
P-Value SW IV 2[d]		0.023	3.80E-16		0.023	3.92E-16

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 11. NUMBER OF PRODUCTS PER DESTINATION: GROWTH IN T

Dependent Variable: Products per Destination Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	-0.0076	-0.0082	-0.0078	-0.0074	-0.0080	-0.0075
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Ln. Age in t-1	-0.0603	-0.0619	-0.0605	-0.0603	-0.0619	-0.0605
	(0.025)**	(0.025)**	(0.025)**	(0.025)**	(0.025)**	(0.025)**
Ln Tangeable Assets per Empl. in t-1	-0.0082	-0.0079	-0.0080	-0.0084	-0.0082	-0.0083
	(0.005)*	(0.005)*	(0.005)*	(0.005)*	(0.005)*	(0.005)*
Share of Non-Production Workers in t-1	-0.0650	-0.0651	-0.0666	-0.0647	-0.0649	-0.0664
	(0.031)**	(0.031)**	(0.032)**	(0.031)**	(0.031)**	(0.032)**
Ln Value Added Per Worker in t-1	-0.0016	-0.0021	-0.0018			
	(0.005)	(0.005)	(0.005)			
Ln Productivity in t-1				-0.0004	-0.0013	-0.0006
				(0.004)	(0.004)	(0.004)
China's Export Market Share in US Market in t	-0.1536	-0.2131	-0.1558	-0.1542	-0.2144	-0.1566
	(0.175)	(0.266)	(0.184)	(0.175)	(0.266)	(0.184)
China's Industry Import Market Share in t	-0.2984	-0.4026	-0.3816	-0.2980	-0.4025	-0.3811
	(0.116)**	(0.166)**	(0.172)**	(0.116)**	(0.167)**	(0.172)**
LWAGE[a] Industry Import Market Share in t	0.2396	-2.2385	-0.1599	0.2396	-2.2325	-0.1596
	(0.176)	(2.234)	(0.240)	(0.176)	(2.232)	(0.240)
Observations	42,616	42,616	42,616	42,616	42,616	42,616
Clustered Firms	5918	5918	5918	5918	5918	5918
Clustered Industries[b]	149	149	149	149	149	149
R-squared	0.066	0.063	0.066	0.066	0.063	0.066
Kleibergen-Paap LM		6.058	5.669		6.046	5.669
Kleibergen-Paap LM pvalue		0.013	0.017		0.013	0.017
F-test First Stage IV 1[c] and IV 2[d]		55.88 and 2.82	693.08 and 42.37		55.91 and 2.81	692.19 and 42.32
Pvalue F-tests IV 1[c] and IV 2[d]		8.335e-19 and .062	6.991e-76 and 2.806e-15		8.165e-19 and .063	7.617e-76 and 2.908e-15
Sanderson-Windmeijer (SW) IV 1[c]		87.559	1083.054		88.631	1084.157
P-Value SW IV1[c]		1.23E-16	5.79E-70		8.76E-17	5.41E-70
Sanderson-Windmeijer (SW) IV 2[d]		5.267	84.04		5.26	83.937
P-Value SW IV 2[d]		0.023	3.80E-16		0.023	3.92E-16

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 12. EXPORT PENETRATION: GROWTH IN T

Dependent Variable: Export Penetration Growth t to t-1	No IV	IV		No IV	IV	
		Import Share	Exch. Rate t-1		Import Share	Exch. Rate t-1
	(1)	(2)	(3)	(4)	(5)	(6)
Ln Employment in t-1	0.0408	0.0396	0.0421	0.0398	0.0383	0.0412
	(0.101)	(0.099)	(0.102)	(0.100)	(0.098)	(0.101)
Ln. Age in t-1	-2.5518	-2.5574	-2.5477	-2.5513	-2.5570	-2.5472
	(0.214)***	(0.214)***	(0.216)***	(0.214)***	(0.214)***	(0.216)***
Ln Tangeable Assets per Empl. in t-1	-0.1835	-0.1843	-0.1836	-0.1794	-0.1803	-0.1795
	(0.088)**	(0.088)**	(0.088)**	(0.087)**	(0.087)**	(0.087)**
Share of Non-Production Workers in t-1	-0.6974	-0.6746	-0.7041	-0.7005	-0.6777	-0.7073
	(0.357)*	(0.359)*	(0.361)*	(0.356)*	(0.358)*	(0.360)*
Ln Value Added Per Worker in t-1	0.0272	0.0276	0.0279			
	(0.087)	(0.087)	(0.087)			
Ln Productivity in t-1				0.0241	0.0225	0.0260
				(0.074)	(0.074)	(0.074)
China's Export Market Share in US Market in t	0.0057	-0.2792	0.1827	0.0317	-0.2578	0.2114
	(4.046)	(4.238)	(3.931)	(4.054)	(4.247)	(3.941)
China's Industry Import Market Share in t	-1.5544	-0.9271	-1.5875	-1.5559	-0.9241	-1.5904
	(0.926)*	(1.373)	(1.374)	(0.928)*	(1.377)	(1.377)
LWAGE[a] Industry Import Market Share in t	5.2319	-2.2463	11.2715	5.2478	-2.3255	11.3101
	(2.711)*	(14.368)	(4.280)***	(2.707)*	(14.410)	(4.277)***
Observations	42,616	42,616	42,616	42,616	42,616	42,616
Clustered Firms	5918	5918	5918	5918	5918	5918
Clustered Industries[b]	149	149	149	149	149	149
R-squared	0.097	0.097	0.097	0.097	0.097	0.097
Kleibergen-Paap LM		6.058	5.669		6.046	5.669
Kleibergen-Paap LM pvalue		0.013	0.017		0.013	0.017
F-test First Stage IV 1[c] and IV 2[d]		55.88 and 2.82	693.08 and 42.37		55.916 and 2.816	692.199 and 42.323
Pvalue F-tests IV 1[c] and IV 2[d]		8.335e-19 and .062	6.991e-76 and 2.806e-15		8.165e-19 and .063	7.617e-76 and 2.908e-15
Sanderson-Windmeijer (SW) IV 1[c]		87.559	1083.054		88.631	1084.157
P-Value SW IV1[c]		1.23E-16	5.79E-70		8.76E-17	5.41E-70
Sanderson-Windmeijer (SW) IV 2[d]		5.267	84.04		5.26	83.937
P-Value SW IV 2[d]		0.023	3.80E-16		0.023	3.92E-16

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Industry Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Industry Import Market Share in t. All estimates include year fixed effects and firm fixed effects. Columns (2) and (5) instrument China's and LWAGE Sectoral Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America. Columns (3) and (6) instrument China's and LWAGE Import penetration in Colombia with the weighted Real Exchange Rate proposed in equation (4b).

TABLE 13. EMPLOYMENT: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: Employment Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.1655	-0.4085	-0.1652	-0.4080	-0.0945	-0.4008	-0.0942	-0.4016	-0.1870	-0.3377	-0.1865	-0.3381
	(0.183)	(0.189)**	(0.188)	(0.195)**	(0.160)	(0.147)***	(0.161)	(0.149)***	(0.151)	(0.134)**	(0.152)	(0.135)**
LWAGE[a] Industry Import Market Share in t	-0.3416	-2.5049	-0.3191	-2.6012	-0.8427	-3.8493	-0.8373	-3.9000	-0.6383	-3.6498	-0.6370	-3.6682
	(0.475)	(1.985)	(0.477)	(2.038)	(0.483)*	(1.879)**	(0.482)*	(1.902)**	(0.627)	(2.191)*	(0.626)	(2.202)*
China's Export Market Share in US Market in t	0.0996	0.0396	0.1076	0.0430	0.1087	0.0193	0.1099	0.0186	-0.0937	-0.2091	-0.0938	-0.2096
	(0.236)	(0.262)	(0.241)	(0.268)	(0.139)	(0.130)	(0.140)	(0.131)	(0.115)	(0.171)	(0.114)	(0.171)
Observations	113,796	113,796	113,796	113,796	99,902	99,902	99,902	99,902	87,469	87,469	87,469	87,469
Clustered Firms	14,021	14,021	14,021	14,021	12,943	12,943	12,943	12,943	11,959	11,959	11,959	11,959
Clustered Industries[b]	153	153	153	153	151	151	151	151	151	151	151	151
R-squared	0.656	0.656	0.655	0.655	0.654	0.653	0.654	0.653	0.671	0.670	0.671	0.670
Kleibergen-Paap LM		9.968		9.958		7.7812		7.784		6.374		6.379
Kleibergen-Paap LM pvalue		0.001		0.001		0.005		0.005		0.012		0.011
F-test First Stage IV 1[c] and IV 2[d]		52.49 and 5.24		52.49 and 5.23		77.85 and 3.16		77.660 and 3.165		59.24 and 2.58		59.045 and 2.581
Pvalue F-tests IV 1[c] and IV 2[d]		4.638e-18 and .006		4.646e-18 and .006		6.462e-24 and .045		7.078e-24 and .045		1.090e-19 and .079		1.218e-19 and .078
Sanderson-Windmeijer (SW) IV 1[c]		111.649		111.929		115.794		116.452		116.494		116.708
P-Value SW IV1[c]		6.53E-20		6.02E-20		2.27E-20		1.88E-20		1.86E-20		1.75E-20
Sanderson-Windmeijer (SW) IV 2[d]		10.386		10.391		6.797		6.802		5.28		5.287
P-Value SW IV 2[d]		0.001		0.001		0.01		0.01		0.022		0.022

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 14. NONPRODUCTION WORKERS: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: Share of Non-Production Workers	t+1				t+2				t+3			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.0188	0.0108	-0.0188	0.0108	0.0836	0.1291	0.0836	0.1289	0.1681	0.2291	0.1681	0.2286
	(0.020)	(0.020)	(0.020)	(0.020)	(0.029)***	(0.031)***	(0.029)***	(0.032)***	(0.044)***	(0.055)***	(0.044)***	(0.056)***
LWAGE[a] Industry Import Market Share in t	0.1548	-0.0055	0.1558	-0.0106	0.1944	-0.7621	0.1955	-0.7716	0.1711	-1.0102	0.1713	-1.0200
	(0.098)	(0.310)	(0.097)	(0.309)	(0.084)**	(0.377)**	(0.083)**	(0.379)**	(0.079)**	(0.524)*	(0.078)**	(0.527)*
China's Export Market Share in US Market in t	0.0176	0.0087	0.0180	0.0089	0.0318	-0.0090	0.0326	-0.0087	-0.0215	-0.0723	-0.0207	-0.0719
	(0.024)	(0.027)	(0.024)	(0.027)	(0.041)	(0.043)	(0.041)	(0.043)	(0.029)	(0.039)*	(0.029)	(0.039)*
Observations	113,813	113,813	113,813	113,813	113,813	113,813	113,813	113,813	113,813	113,813	113,813	113,813
Clustered Firms	14022	14022	14022	14022	14022	14022	14022	14022	14022	14022	14022	14022
Clustered Industries[b]	149	153	153	153	153	153	153	153	153	153	153	153
R-squared	0.682	0.682	0.682	0.682	0.657	0.655	0.656	0.654	0.664	0.661	0.664	0.661
Kleibergen-Paap LM		9.977		9.967		9.977		9.967		9.977		9.967
Kleibergen-Paap LM pvalue		0.001		0.001		0.001		0.001		0.001		0.001
F-test First Stage IV 1[c] and IV 2[d]		51.77 and 5.24		51.76 and 5.25		51.76 and 5.24		51.76 and 5.25		51.766 and 5.244		51.75 and 5.24
Pvalue F-tests IV 1[c] and IV 2[d]		7.146e-18 and .006		7.179e-18 and .006		7.146e-18 and .006		7.179e-18 and .006		7.146e-18 and .006		7.179e-18 and .006
Sanderson-Windmeijer (SW) IV 1[c]		110.392		110.637		110.392		110.637		110.392		110.637
P-Value SW IV1[c]		9.42E-20		8.77E-20		9.42E-20		8.77E-20		9.42E-20		8.77E-20
Sanderson-Windmeijer (SW) IV 2[d]		10.41		10.414		10.41		10.414		10.41		10.414
P-Value SW IV 2[d]		0.001		0.001		0.001		0.001		0.001		0.001

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 15. WAGES PER WORKER: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: Wage Rate Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.7492	-1.6027	-0.7489	-1.6047	-0.7796	-1.5596	-0.7783	-1.5672	-1.0616	-1.6018	-1.0560	-1.6050
	(0.534)	(0.582)***	(0.552)	(0.607)***	(0.525)	(0.497)***	(0.534)	(0.507)***	(0.580)*	(0.508)***	(0.589)*	(0.515)***
LWAGE[a] Industry Import Market Share in t	1.2728	-2.4878	1.3566	-2.9239	-0.5769	-12.4233	-0.5582	-12.7068	1.6747	-13.9956	1.6895	-14.2312
	(1.540)	(6.697)	(1.532)	(6.891)	(1.316)	(7.134)*	(1.301)	(7.271)*	(1.878)	(9.133)	(1.873)	(9.268)
China's Export Market Share in US Market in t	-0.4180	-0.4818	-0.3816	-0.4651	0.5824	0.1882	0.5913	0.1867	-1.9619	-2.5910	-1.9627	-2.6004
	(0.858)	(0.893)	(0.885)	(0.923)	(0.860)	(0.793)	(0.864)	(0.796)	(0.937)**	(0.982)***	(0.936)**	(0.984)***
Observations	113,692	113,692	113,692	113,692	99,755	99,755	99,755	99,755	87,305	87,305	87,305	87,305
Clustered Firms	14006	14006	14006	14006	12926	12926	12926	12926	11941	11941	11941	11941
Clustered Industries[b]	153	153	153	153	151	151	151	151	151	151	151	151
R-squared	0.695	0.695	0.694	0.694	0.675	0.675	0.675	0.675	0.688	0.687	0.687	0.687
Kleibergen-Paap LM		9.966		9.956		7.772		7.774		6.371		6.375
Kleibergen-Paap LM pvalue		0.001		0.001		0.005		0.005		0.011		0.011
F-test First Stage IV 1[c] and IV 2[d]		52.42 and 5.23		52.42 and 5.23		77.52 and 3.15		77.33 and 3.16		59.14 and 2.57		58.949 and 2.581
Pvalue F-tests IV 1[c] and IV 2[d]		4.830e-18 and .006		4.84e-18 and .006		7.579e-24 and .045		8.330e-24 and .045		1.15e-19 and .079		1.285e-19 and .079
Sanderson-Windmeijer (SW) IV 1[c]		111.513		111.792		115.417		116.073		115.943		116.161
P-Value SW IV1[c]		6.80E-20		6.27E-20		2.53E-20		2.10E-20		2.18E-20		2.04E-20
Sanderson-Windmeijer (SW) IV 2[d]		10.38		10.384		6.791		6.796		5.282		5.286
P-Value SW IV 2[d]		0.001		0.001		0.01		0.01		0.022		0.022

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 16. PRODUCTIVITY: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: TFP Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.8332	-2.0433	-0.8448	-2.1003	-1.3954	-1.9099	-1.4057	-1.9638	-2.0157	-2.8190	-2.0209	-2.8569
	(0.519)	(0.746)***	(0.508)*	(0.728)***	(0.813)*	(0.711)***	(0.801)*	(0.693)***	(1.085)*	(1.290)**	(1.075)*	(1.272)**
LWAGE[a] Industry Import Market Share in t	-1.7478	-19.1524	-1.9540	-19.0847	-1.9999	-28.8295	-2.1930	-28.6928	2.1406	-23.8680	2.0062	-23.7008
	(1.879)	(16.232)	(1.886)	(16.011)	(1.476)	(20.062)	(1.452)	(19.742)	(2.190)	(15.290)	(2.176)	(15.047)
China's Export Market Share in US Market in t	0.1817	-0.3632	0.1795	-0.3506	-0.8983	-1.9332	-0.8757	-1.8911	0.3275	-0.7520	0.3609	-0.6985
	(0.801)	(1.242)	(0.797)	(1.232)	(0.733)	(1.265)	(0.727)	(1.246)	(1.957)	(1.720)	(1.940)	(1.696)
Observations	113,452	113,452	113,452	113,452	99,428	99,428	99,428	99,428	86,963	86,963	86,963	86,963
Clustered Firms	13988	13988	13988	13988	12886	12886	12886	12886	11888	11888	11888	11888
Clustered Industries[b]	153	153	153	153	151	151	151	151	151	151	151	151
R-squared	0.635	0.633	0.636	0.634	0.621	0.617	0.621	0.618	0.631	0.628	0.632	0.629
Kleibergen-Paap LM		9.954		9.944		7.762		7.764		6.338		6.342
Kleibergen-Paap LM pvalue		0.001		0.001		0.005		0.005		0.011		0.011
F-test First Stage IV 1[c] and IV 2[d]		52.517 and 5.214		52.516 and 5.218		77.70 and 3.15		77.517 and 3.156		59.01 and 2.56		58.81 and 2.56
Pvalue F-tests IV 1[c] and IV 2[d]		4.57e-18 and .006		4.582e-18 and .006		6.923e-24 and .045		7.59e-24 and .04		1.243e-19 and .080		1.386e-19 and .080
Sanderson-Windmeijer (SW) IV 1[c]		111.514		111.801		114.62		115.294		115.169		115.42
P-Value SW IV1[c]		6.80E-20		6.25E-20		3.17E-20		2.62E-20		2.71E-20		2.52E-20
Sanderson-Windmeijer (SW) IV 2[d]		10.339		10.344		6.773		6.778		5.245		5.249
P-Value SW IV 2[d]		0.001		0.001		0.01		0.01		0.0233		0.023

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 17. DOMESTIC SALES: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: Domestic Sales Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.7873	-1.6803	-0.7864	-1.6787	-0.6950	-1.7152	-0.6943	-1.7219	-1.0652	-1.3474	-1.0630	-1.3539
	(0.721)	(0.820)**	(0.735)	(0.844)**	(0.642)	(0.607)***	(0.648)	(0.613)***	(0.707)	(0.651)**	(0.710)	(0.652)**
LWAGE[a] Industry Import Market Share in t	1.1096	-1.9225	1.2044	-2.3457	-1.5357	-13.2100	-1.5254	-13.4124	1.2256	-16.8580	1.2185	-16.9595
	(2.412)	(8.711)	(2.404)	(8.874)	(1.896)	(7.279)*	(1.884)	(7.365)*	(2.647)	(11.298)	(2.645)	(11.357)
China's Export Market Share in US Market in t	-0.6674	-0.6995	-0.6319	-0.6840	0.8118	0.4481	0.8181	0.4475	-2.2312	-2.9978	-2.2282	-2.9964
	(1.199)	(1.227)	(1.225)	(1.256)	(1.056)	(0.987)	(1.059)	(0.988)	(1.240)*	(1.300)**	(1.239)*	(1.300)**
Observations	113,813	113,813	113,813	113,813	99,838	99,838	99,838	99,838	87,378	87,378	87,378	87,378
Clustered Firms	14022	14022	14022	14022	12930	12930	12930	12930	11940	11940	11940	11940
Clustered Industries[b]		153	153	153	151	151	151	151	151	151	151	151
R-squared	0.694	0.693	0.693	0.693	0.677	0.677	0.677	0.677	0.689	0.688	0.689	0.688
Kleibergen-Paap LM		9.969		9.96		7.779		7.781		6.37		6.374
Kleibergen-Paap LM pvalue		0.001		0.001		0.005		0.005		0.0116		0.0115
F-test First Stage IV 1[c] and IV 2[d]		52.48 and 5.24		52.486 and 5.244		77.592 and 3.161		77.411 and 3.16		58.898 and 2.576		58.706 and 2.579
Pvalue F-tests IV 1[c] and IV 2[d]		4.654e-18 and .006		4.662e-18 and .006		7.320e-24 and .045		8.004e-24 and .045		1.322e-19 and .079		1.472e-19 and .079
Sanderson-Windmeijer (SW) IV 1[c]		111.615		111.893		115.683		116.344		116.086		116.296
P-Value SW IV1[c]		6.60E-20		6.09E-20		2.34E-20		1.94E-20		2.09E-20		1.97E-20
Sanderson-Windmeijer (SW) IV 2[d]		10.391		10.396		6.793		6.798		5.276		5.281
P-Value SW IV 2[d]		0.001		0.001		0.01		0.01		0.022		0.022

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 18. EXPORTS: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: Export Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-1.3815	-2.4197	-1.4152	-2.4603	-1.8072	-2.3064	-1.8111	-2.3181	-0.6419	-1.0140	-0.6539	-1.0405
	(1.589)	(1.784)	(1.598)	(1.811)	(1.698)	(2.182)	(1.703)	(2.192)	(1.677)	(2.253)	(1.679)	(2.265)
LWAGE[a] Industry Import Market Share in t	6.9800	-6.7230	6.9793	-7.1790	8.5616	-21.4850	8.5540	-21.4855	5.0090	-25.9247	4.9960	-26.1085
	(3.669)*	(18.380)	(3.693)*	(18.545)	(4.828)*	(24.667)	(4.826)*	(24.627)	(4.932)	(29.502)	(4.921)	(29.444)
China's Export Market Share in US Market in t	3.9567	3.5514	4.0307	3.6023	-0.2923	-1.4734	-0.2946	-1.4807	0.2041	-1.1566	0.2296	-1.1416
	(5.215)	(5.072)	(5.202)	(5.055)	(7.332)	(7.850)	(7.329)	(7.847)	(4.131)	(2.971)	(4.134)	(2.979)
Observations	42,305	42,305	42,305	42,305	38,345	38,345	38,345	38,345	34,587	34,587	34,587	34,587
Clustered Firms	5720	5720	5720	5720	5322	5322	5322	5322	4915	4915	4915	4915
Clustered Industries[b]	149	149	149	149	149	149	149	149	149	149	149	149
R-squared	0.320	0.320	0.320	0.320	0.342	0.341	0.342	0.341	0.363	0.362	0.363	0.362
Kleibergen-Paap LM		5.952		5.939		4.173		4.167		3.409		3.406
Kleibergen-Paap LM pvalue		0.014		0.014		0.041065378		0.0412		0.064		0.064
F-test First Stage IV 1[c] and IV 2[d]		58.144 and 2.743		58.17 and 2.73		100.31 and 1.82		100.18 and 1.81		97.90 and 1.47		97.45 and 1.47
Pvalue F-tests IV 1[c] and IV 2[d]		2.320e-19 and .067		2.281e-19 and .068		2.910e-28 and .165		3.082e-28 and .166		8.150e-28 and .231		9.907e-28 and .232
Sanderson-Windmeijer (SW) IV 1[c]		90.847		91.989		90.137		91.303		119.36		120.779
P-Value SW IV1[c]		4.36E-17		3.05E-17		5.45E-17		3.78E-17		9.59E-21		6.46E-21
Sanderson-Windmeijer (SW) IV 2[d]		5.21		5.201		3.611		3.608		2.904		2.901
P-Value SW IV 2[d]		0.023		0.023		0.059		0.059		0.09		0.09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 19. NUMBER OF EXPORT DESTINATIONS: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: # Export Destinations Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.0629	-0.0710	-0.0627	-0.0708	-0.0171	-0.0586	-0.0151	-0.0568	0.0503	0.0514	0.0500	0.0495
	(0.105)	(0.134)	(0.105)	(0.135)	(0.113)	(0.178)	(0.113)	(0.176)	(0.118)	(0.181)	(0.118)	(0.179)
LWAGE[a] Industry Import Market Share in t	0.2117	-2.4634	0.2130	-2.4637	0.7406	-3.0150	0.7410	-2.9812	-0.3799	-4.1669	-0.3824	-4.1463
	(0.271)	(1.416)*	(0.270)	(1.419)*	(0.433)*	(2.149)	(0.429)*	(2.133)	(0.374)	(2.839)	(0.374)	(2.822)
China's Export Market Share in US Market in t	0.4657	0.3590	0.4669	0.3593	0.2977	0.1472	0.2940	0.1442	0.1445	-0.0301	0.1407	-0.0332
	(0.240)*	(0.238)	(0.239)*	(0.238)	(0.402)	(0.527)	(0.401)	(0.524)	(0.301)	(0.221)	(0.301)	(0.222)
Observations	42,305	42,305	42,305	42,305	38,345	38,345	38,345	38,345	34,587	34,587	34,587	34,587
NClusters 1	5720	5720	5720	5720	5322	5322	5322	5322	4915	4915	4915	4915
NClusters 2	149	149	149	149	149	149	149	149	149	149	149	149
R-squared	0.249	0.247	0.249	0.247	0.264	0.260	0.264	0.260	0.281	0.277	0.281	0.277
Kleibergen-Paap LM		5.952		5.939		4.173		4.167		3.409		3.406
Kleibergen-Paap LM pvalue		0.014		0.014		0.041		0.041		0.064		0.064
F-test		58.14 and 2.74		58.17 and 2.73		100.31 and 1.82		100.18 and 1.81		97.90 and 1.47		97.45 and 1.47
Pvalue F-tests		2.320e-19 and .067		2.281e-19 and .068		2.910e-28 and .165		3.082e-28 and .166		8.150e-28 and .231		9.907e-28 and .232
Sanderson-Windmeijer (SW) IV 1[c]		90.847		91.989		90.137		91.303		119.36		120.779
P-Value SW IV1[c]		4.36E-17		3.05E-17		5.45E-17		3.78E-17		9.59E-21		6.46E-21
Sanderson-Windmeijer (SW) IV 2[d]		5.21		5.201		3.611		3.608		2.904		2.901
P-Value SW IV 2		0.023		0.023		0.059		0.059		0.09		0.09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 20. PRODUCT SCOPE: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: # Products Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.4254	-0.6085	-0.4254	-0.6080	-0.5696	-0.8253	-0.5679	-0.8248	-0.5179	-0.9401	-0.5187	-0.9446
	(0.270)	(0.442)	(0.271)	(0.445)	(0.417)	(0.591)	(0.417)	(0.590)	(0.450)	(0.728)	(0.449)	(0.725)
LWAGE[a] Industry Import Market Share in t	-1.0730	-11.1383	-1.0670	-11.1513	0.1840	-12.2567	0.1847	-12.2233	-1.2958	-10.5051	-1.3018	-10.4496
	(0.534)**	(7.472)	(0.535)**	(7.490)	(0.430)	(9.171)	(0.427)	(9.142)	(0.293)***	(7.344)	(0.293)***	(7.280)
China's Export Market Share in US Market in t	0.0305	-0.3494	0.0376	-0.3463	0.5520	0.0697	0.5494	0.0659	-0.8276	-1.1789	-0.8373	-1.1871
	(0.179)	(0.530)	(0.176)	(0.531)	(0.470)	(0.981)	(0.469)	(0.980)	(0.422)*	(0.436)***	(0.418)**	(0.431)***
Observations	42,305	42,305	42,305	42,305	38,345	38,345	38,345	38,345	34,587	34,587	34,587	34,587
Clustered Firms	5720	5720	5720	5720	5322	5322	5322	5322	4915	4915	4915	4915
Clustered Industries[b]	149	149	149	149	149	149	149	149	149	149	149	149
R-squared	0.218	0.199	0.218	0.199	0.234	0.207	0.234	0.207	0.247	0.234	0.247	0.235
Kleibergen-Paap LM		5.952		5.939		4.173		4.167		3.409		3.406
Kleibergen-Paap LM pvalue		0.014		0.014		0.041		0.041		0.064		0.064
F-test First Stage IV 1[c] and IV 2[d]		58.14 and 2.74		58.17 and 2.73		100.31 and 1.82		100.182 and 1.817		97.90 and 1.47		97.45 and 1.47
Pvalue F-tests IV 1[c] and IV 2[d]		2.320e-19 and .067		2.281e-19 and .068		2.910e-28 and .165		3.08e-28 and .166		8.150e-28 and .231		9.907e-28 and .232
Sanderson-Windmeijer (SW) IV 1[c]		90.847		91.989		90.137		91.303		119.36		120.779
P-Value SW IV1[c]		4.36E-17		3.05E-17		5.45E-17		3.78E-17		9.59E-21		6.46E-21
Sanderson-Windmeijer (SW) IV 2[d]		5.21		5.201		3.611		3.608152784		2.904		2.901
P-Value SW IV 2[d]		0.023		0.023		0.059		0.059		0.09		0.09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 21. NUMBER OF PRODUCTS PER DESTINATION: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: # Products per Destination Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-0.3775	-0.5952	-0.3780	-0.5957	-0.5625	-0.8140	-0.5620	-0.8148	-0.5871	-1.0272	-0.5875	-1.0301
	(0.230)	(0.396)	(0.231)	(0.398)	(0.388)	(0.525)	(0.388)	(0.525)	(0.434)	(0.700)	(0.433)	(0.699)
LWAGE[a] Industry Import Market Share in t	-1.0192	-9.2982	-1.0150	-9.3136	0.0147	-10.6438	0.0147	-10.6276	-0.6334	-7.9124	-0.6371	-7.8739
	(0.578)*	(7.020)	(0.579)*	(7.033)	(0.313)	(8.335)	(0.313)	(8.314)	(0.210)***	(5.892)	(0.210)***	(5.842)
China's Export Market Share in US Market in t	-0.1670	-0.4699	-0.1609	-0.4674	0.5722	0.1635	0.5712	0.1610	-0.8624	-1.1217	-0.8688	-1.1273
	(0.174)	(0.465)	(0.176)	(0.466)	(0.196)***	(0.677)	(0.195)***	(0.678)	(0.297)***	(0.494)**	(0.292)***	(0.490)**
Observations	42,305	42,305	42,305	42,305	38,345	38,345	38,345	38,345	34,587	34,587	34,587	34,587
Clustered Firms	5720	5720	5720	5720	5322	5322	5322	5322	4915	4915	4915	4915
Clustered Industries[b]	149	149	149	149	149	149	149	149	149	149	149	149
R-squared	0.155	0.132	0.155	0.132	0.170	0.134	0.170	0.134	0.179	0.164	0.179	0.164
Kleibergen-Paap LM		5.952		5.939		4.173		4.167		3.409		3.406
Kleibergen-Paap LM pvalue		0.014		0.014		0.041		0.041		0.064		0.064
F-test First Stage IV 1[c] and IV 2[d]		58.14 and 2.74		58.17 and 2.73		100.31 and 1.82		100.18 and 1.81		97.90 and 1.47		97.45 and 1.47
Pvalue F-tests IV 1[c] and IV 2[d]		2.320e-19 and .067		2.281e-19 and .068		2.910e-28 and .165		3.082e-28 and .166		8.150e-28 and .231		9.907e-28 and .232
Sanderson-Windmeijer (SW) IV 1[c]		90.847		91.989		90.137		91.303		119.36		120.779
P-Value SW IV1[c]		4.36E-17		3.05E-17		5.45E-17		3.78E-17		9.59E-21		6.46E-21
Sanderson-Windmeijer (SW) IV 2[d]		5.21		5.201		3.611		3.608		2.904		2.901
P-Value SW IV 2[d]		0.023		0.023		0.059		0.059		0.09		0.09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 22. EXPORT PENETRATION: GROWTH IN T+1, T+2, AND T+3

Dependent Variable: # Export Penetration Growth	Growth t+1 to t				Growth t+2 to t+1				Growth t+3 to t+2			
	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share	No IV[e]	IV[e] Import Share	No IV[f]	IV[f] Import Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
China's Industry Import Market Share in t	-1.3186	-2.3487	-1.3525	-2.3895	-1.7901	-2.2478	-1.7960	-2.2613	-0.6922	-1.0655	-0.7039	-1.0900
	(1.510)	(1.704)	(1.517)	(1.729)	(1.619)	(2.042)	(1.624)	(2.053)	(1.607)	(2.141)	(1.608)	(2.155)
LWAGE[a] Industry Import Market Share in t	6.7683	-4.2596	6.7662	-4.7153	7.8211	-18.4700	7.8130	-18.5043	5.3890	-21.7579	5.3784	-21.9623
	(3.578)*	(17.795)	(3.600)*	(17.946)	(4.511)*	(23.087)	(4.513)*	(23.060)	(4.716)	(27.554)	(4.705)	(27.507)
China's Export Market Share in US Market in t	3.4909	3.1923	3.5638	3.2430	-0.5900	-1.6205	-0.5887	-1.6249	0.0595	-1.1265	0.0890	-1.1084
	(5.020)	(4.903)	(5.007)	(4.885)	(7.029)	(7.450)	(7.029)	(7.449)	(3.931)	(2.946)	(3.933)	(2.952)
Observations	42,305	42,305	42,305	42,305	38,345	38,345	38,345	38,345	34,587	34,587	34,587	34,587
Clustered Firms	5720	5720	5720	5720	5322	5322	5322	5322	4915	4915	4915	4915
Clustered Industries[b]	149	149	149	149	149	149	149	149	149	149	149	149
R-squared	0.306	0.306	0.306	0.305	0.327	0.326	0.327	0.326	0.347	0.347	0.347	0.347
Kleibergen-Paap LM		5.952		5.939		4.173		4.167		3.409		3.406
Kleibergen-Paap LM pvalue		0.014		0.014		0.041		0.041		0.064		0.064
F-test First Stage IV 1[c] and IV 2[d]		58.14 and 2.74		58.17 and 2.73		100.31 and 1.82		100.182 and 1.817		97.908 and 1.475		97.45 and 1.47
Pvalue F-tests IV 1[c] and IV 2[d]		2.320e-19 and .067		2.281e-19 and .068		2.910e-28 and .165		3.082e-28 and .166		8.150e-28 and .2319		9.907e-28 and .232
Sanderson-Windmeijer (SW) IV 1[c]		90.847		91.989		90.137		91.303		119.36		120.779
P-Value SW IV1[c]		4.36E-17		3.05E-17		5.45E-17		3.78E-17		9.59E-21		6.46E-21
Sanderson-Windmeijer (SW) IV 2[d]		5.21		5.201		3.611		3.608		2.904		2.901
P-Value SW IV 2[d]		0.023		0.023		0.059		0.059		0.09		0.09

Twoway clustered standard errors by firm and Industry in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Sample period t: 1996-2013. [a] As in Mion and Zhu(2013) Least Wage Countries (LWAGE) are countries for which their per capita GDP in 1996 falls below 5% of U.S.'s per capita GDP. [b] Industry is defined by at the 4 digit level of ISIC rev 3 classification. [c] IV 1 refers to first stage estimates of China's Import Market Share in t. [d] IV 2 refers to first stage estimates of LWAGES's Import Market Share in t. All estimates include year and firm fixed effects. [e] Results in columns (1), (2), (5), (6), (9) and (10) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Value Added per worker. [f] Columns (3), (4), (7), (8), (11) and (12) control for lagged Employment, Age, Tangeable Assets per Employee, Share of Non-Production Workers and Firm Productivity. All estimates include year fixed effects and firm fixed effects. Columns (2) and (4) instrument China's and LWAGE Industry Import penetration in Colombia with their corresponding Industry Import Market Share at other export destinations outside Latin America.

TABLE 23. EFFECT OF CHINA IMPORT MARKET PENETRATION ON INFORMAL EMPLOYMENT, WEEKLY WAGE AND YEARS IN EDUCATION.

Dependent variable in t	OLS			IV		
	Informality	Weekly Wage[a]	Years Education[a]	Informality	Weekly Wage[a]	Years Education[a]
	(1)	(2)	(3)	(4)	(5)	(6)
China Import Market Share in t	0.0338	0.2092	-0.0476	0.0157	1.1161	0.0688
	(0.044)	(0.093)**	(0.052)	(0.328)	(0.601)*	(0.329)
Rest of World Import Market Share in t	0.0200	0.0807	-0.0295	0.8979	1.3520	0.8746
	(0.035)	(0.070)	(0.041)	(0.718)	(1.707)	(0.713)
Observations	5,755	5,755	5,755	5,755	5,755	5,755
R-squared	0.492	0.387	0.303	0.426	0.357	0.222

Standard errors in parentheses are clustered by city and sector . *** $p<0.01$, ** $p<0.05$, * $p<0.10$. [a] In natural logarithm.

APPENDIX A. FIRM PRODUCTIVITY

As in Levinsohn and Petrin (2003), a manufacturer's productivity level is given by:

$$\hat{\tilde{\xi}}_{i,s,t} = \exp(\tilde{w}_{i,s,t} - \hat{\kappa}_0 - \hat{\kappa}_l \tilde{l}_{i,s,t} - \hat{\kappa}_I \tilde{I}_{i,s,t} - \hat{\kappa}_k \tilde{k}_{i,s,t}). \qquad (1)$$

where subindex i identifies manufacturers, subindex s identifies each of the 18 sectors reported in table 1, with the caveat that in the estimates reported in table 2, the manufacturers that were originally classified within the tobacco products sector (16) are all included within the sample used to estimate the results for the food and beverage sector (15). Manufacturers originally classified within the fabricated metal products sector (28) are all included within the estimates reported for the metal products sector (27), and the manufacturers classified within the electrical machinery (31) and radio and television equipment (32) sectors were all reclassified within the office and computing machinery sector (30). Subindex t identifies time and the symbol $\sim$ identifies that the corresponding variable is expressed in natural logarithm. Variables $\tilde{w}_{i,s,t}, \tilde{l}_{i,s,t}, \tilde{I}_{i,s,t}$ and $\tilde{k}_{i,s,t}$ correspond to the real value-added, units of labor,[21] quantity of intermediate input, and quantity of capital of manufacturer i in year t. Although the AMS contains a manufacturer's labor size, the underlying production function implied by equation (1) would require the use of quantity units for intermediate inputs and capital rather than using their corresponding total value. To circumvent this problem, I proxied each quantity series with its real value. In the case of intermediate inputs, I deflated the total value of intermediate inputs[22] with a sector-specific price index produced by Colombia's Administrative Department of National Statistics (DANE). Similarly, I proxied a manufacturer's use of units of capital with the real book value of fixed assets. The nominal book value of fixed assets is obtained by adding the value of buildings and structures, machinery and equipment, transport equipment, and office and retail space.[23] This aggregate was deflated using DANE's sector-specific price index. Although I'm aware that for a different sample period Eslava, Haltiwanger, Kugler, and Kugler (2004) were able to deflate the nominal value of intermediate inputs and capital with manufacturer-factor–specific price indexes, the files that DANE made available for this project did not contain the quantity data that one would need to derive manufacturer-specific product price indexes to deflate intermediate inputs and capital. Therefore, I was unable to replicate Eslava, Haltiwanger, Kugler, and Kugler's (2004) procedure and I was only able to deflate these two series using DANE's sector-specific price index. Finally, it is important to remember that Levinsohn and Petrin's (2003) procedure requires the use of quantity of consumed electricity as an instrument for capital. As with the series of intermediate inputs and capital, AMS reports a manufacturer's value of consumed electricity[24] and it also provides manufacturer-specific information on energy prices per kilowatt consumed.[25] Therefore, I obtained the quantity of energy a manufacturer consumed by dividing the value of the energy consumed by the price of electricity. Last, parameters $\hat{\kappa}_0, \hat{\kappa}_l, \hat{\kappa}_I$ and $\hat{\kappa}_k$ in equation (1) correspond to the factor elasticities estimated by regressing

$$\tilde{w}_{i,s,t} = \kappa_0 + \kappa_l \tilde{l}_{i,s,t} + \kappa_k \tilde{k}_{i,s,t} + \kappa_I \tilde{I}_{i,s,t} + \zeta_{i,s,t} \qquad (2),$$

where $\zeta_{i,s,t}$ is the error term.

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[21] In the AMS, this information corresponds to the data obtained in questions c4r4c1t, c4r4c2t, c4r4c3t, c4r4c4t, c4r4c5t, c4r4c6t, c4r4c7t, and c4r4c8t.

[22] In the AMS, the total value of intermediate inputs is given by variable consin2.

[23] In the AMS, this information corresponds to the data obtained in questions c7r5c6, c7r6c6, c7r7c6 and c7r8c6. Though in years 2004–2014, the prior information obtained in c7r8c6, is now reported in questions c7c4r14 and c7c5r14.

[24] In AMS, the value of consumed electricity is given in question c5r1c4.

[25] In AMS, a manufacturer's specific energy price is obtained using questions c5r1c1 and c3r19c3.