

APPENDIX

Sampling Frame Construction and Firm-Level Data

The sampling frame is a complete list of 987 registered (authentic) leather and sport shoe companies in China, compiled by a consulting company. I ranked them according to their size. To obtain generalizable results, I sampled from domestic and foreign brands, and from companies of different scales. The Chinese National Bureau of Statistics has classified company scales into six categories (extra large, first-class large, second-class large, first-class medium, second-class medium, and small) since the first industrial census and I followed their classification. No shoe company falls into the first three categories. The relevant categories for my sample are: I. multinational corporations in China; II. Chinese brand-name companies that are classified as first-class medium scale (Chinese National Bureau of Statistics, 1995); III. Chinese branded companies that are classified as second-class medium scale; and IV. Chinese branded companies that are classified as small scale. I randomly drew 10 companies from each of the four categories with random number generators, and then interviewed and surveyed these randomly selected companies. Under agreement that I would keep their data confidential and provide them with results and further analyses at their request, I received data from 31 of the 40 authentic companies, covering the period 1993-2004. There are no observable differences between the respondents and the non-respondents, based on their size, total employment and age.

Ideally, I wanted to have data for these four variables broken down by each type of shoe a company produces. On average, each company produces over 10 different types of shoes: male winter (with fur or cotton), male summer, male regular (with regular leather, suitable for spring or autumn), female winter (including fur- and cotton-made), female summer, female regular, female knee boots, female mid-leg. Each type is produced at three different quality levels (high, medium and low) according to their material and fabrication techniques used. However, most of the companies do not have such detailed data available (either because of limitations in computer storage or because of difficulties in accessing such old and detailed documents or concerns over confidentiality). In the end, detailed price and cost data were made available to me for three levels of product lines (high, medium, and low).

In addition, I coded and compiled representative shoe characteristics from the annual catalogs that I requested from the companies and stores. These product characteristics are helpful in better controlling for quality and costs. I compiled a dataset of characteristics for each type of shoe in the catalogs, such as materials, comfort, decorative patterns, support and cushioning effects, and ventilation.

Hedonic regressions reveal that these characteristics together account for 90% of the cost variations (Table A.1). The results lend credibility to the company data and to the results.

To check the survey data quality, especially firms' cost estimates from their balance sheets, I conducted a set of hedonic regressions as mentioned in the Data Section. As Table A.1 shows, the set of shoe characteristics gathered from the printed product catalogs explains over 90% of the variation in reported costs and over 80% of the price variation. Production costs are also highly correlated with features that require high material and labor costs, such as using imported crocodile skin and Italian machinery, as one would expect. In addition, a cross-validation of a random sample of these price and cost data based on my calculations from the annual catalogs and companies' responses from their databases were performed to make sure that the cost estimates are in the right ballpark. For instance, knowing that a particular level of shoes is made of top-tier cow leather implies that the material costs would be around 448 Yuan (approximately 56 USD). If the shoe bottom is also made of fine cow leather, then that would cost an additional 17.4 USD.

For the data on counterfeits, I cross-referenced the data from the companies with the available records from the Industrial and Commercial Bureau of China and the AQSIQ.¹² In addition, the AQSIQ kindly shared with me the shoe characteristics from their testing reports for a set of counterfeits, together with their product materials, costs, and prices as recorded in the confiscated financial records. Most counterfeit shoes are made of inferior materials, ranging from second-tier leather to imitative leather to plastic cement. The cost differentials reflect the use of different materials, as evidenced by the statistically significant coefficients associated with imitative-leather and plastic-cement variables. It is stunning to note that many materials are invariant across the sample of counterfeits. For instance, the shoe bottoms are all made of TPU. The counterfeit sport shoes are surfaced with PU and net-like materials, and are equipped with no inner-air cushions or non-standard foam cushions to imitate the look of branded shoes. Interestingly still, the quality level of the branded shoe whose appearance the counterfeit product is mimicking does not correlate with the counterfeit costs but correlates highly with the counterfeit product price. This again indicates that counterfeiters use very similar inputs to produce shoes of all imitative levels, and determine their prices largely based on the brand and appearance that they are imitating.

Among the responsive companies, 80% were infringed upon at different levels. These infringed-upon brands range from top-tier household names to low-end producers with small brands. While

¹²It was recently renamed the Administration of Quality Supervision, Inspection and Quarantine. The bureau enlarged its personnel and funding in 1991 in a joint effort with legislation to protect IPR and monitor product quality.

interviewing the companies, I learned that those infringed upon by counterfeits invest in enforcement activities by sending their own employees to monitor counterfeits, lobbying at the government level to outlaw counterfeit localities, and organizing anti-counterfeit conferences. The companies also uniformly tell me that establishing company stores for their brands is a very good strategy to signal their quality and to ward off counterfeits. One company’s manager said during the interview: *“Starting from 1996, our company products have exited the wholesale market and we switched the channel to licensed retailing. We established a well-managed retail distribution system nationwide. This is one of the most effective ways to combat counterfeits, and it almost deterred counterfeiting.”* In order to set up a licensed retail store, a company has to get approval from the Industrial and Commercial Bureau. The application requires legal documents about the brands from the company. The formal approval certificate has to be displayed in each licensed store. Therefore, the counterfeiters are not able to mimic this business strategy. In fact, establishing a fake licensed store will only help the authentic company and the government track down the counterfeits and no counterfeiter has the incentive to do that. I, therefore, obtained data on enforcement expenditures, personnel, and the number of licensed stores to test empirically the effectiveness of these strategies in deterring entry.

Sample Representativeness

I acquired access to the Chinese Industrial Census database for the years 1995, and 1998-2001. The data for 1995 and the dataset for 1998-2001 contain slightly different lists of variables, and do not match up fully. The database contains firm-level sales, profits, the year of establishment, ownership, and other financial information for all the registered companies in China. I compared the common variables in my sample to those in the Industrial Census database. The mean and standard deviations of sales, profits, and most other common variables are very similar across the two data sources (Table A.5). The alignment in sale costs across data sources again confirms the data reliability. However, my sample of small enterprises has a higher mean value for exports, profits, and size (460 employees) as compared to that of the census (230 employees), which is to be expected as branded companies are usually larger. There are a lot of very small companies in the census database that only produce generic shoes without brands. Any draws of such companies were screened out of the final sample for my research question. There is no shortage of small-scale family businesses in the countryside. The census data also provide ample evidence that while no shoe company qualifies as large-scale, there is a long tail of small-scale companies. In the census data across four years, 1998-2001, there are only 23 medium-sized companies (including first-class medium-sized and second-class medium-sized). My

sample covers 22 of the medium-sized companies. My sample additionally includes some smaller-sized branded companies resulting from the random sampling method. Summing up the market share data provided to me, the total market share of the companies in my sample approaches 90%. A large number of the small companies can be considered as competitive fringe firms. Thus, even though my sample size is limited, the sample of companies highly represents the brand-active part of the market, where the main interests of this paper lie.

In addition, for the common variables of the companies that are found in both my sample and the Industrial Census database, such as sales costs, sales, exports, incorporation year (used to calculate company age), I was able to directly see the one-to-one correspondence between the values provided by the sampled companies and the values recorded in the Industrial Census database. This provides evidences that the sampled companies provided me with data out of their financial records, as I requested specifically in my surveys. While I acknowledge potential limitations in the paper, I am confident about the general quality of the data and responses.

The industrial census does not contain price data, so I gathered price data for shoes of the sampled brands from the Ebay China website, with help from researchers at the University of Chicago. The mean price for the high-end shoes in the eBay data is 460 Yuan (57.5 USD), which is very similar to the mean of 491.86 Yuan (61.5 USD) in my dataset. The prices for medium- and low-end shoes exhibit a very dispersed pattern in the Ebay dataset possibly due to the mixing-in of counterfeits. When I drop the extremely low prices (e.g., those under 10 USD), the mean prices for medium- and low-end shoes are also similar to those in my sampled data. When taking the mean price of all the non-high-end shoes from the Ebay data, the result is quite comparable to the mean price of medium-end, low-end, and counterfeit shoes in my dataset. All these corroborations speak to the representativeness and reliability of my sample and data.

Simple OLS, Potential Endogeneity Concerns and Solutions

I carried out a series of OLS regressions to test the correlations between counterfeit entry and the authentic company's sales.

$$\log(sales_{a,j,t}) = \beta_0 + \beta_1 * \text{Entry}_{a,j,t-1} + \beta_2^T * \text{YearDum}_t + \beta_3^T * \text{BrandDum}_a + \beta_3^T * \text{ShoeTypeDum} + \epsilon_{a,t}, \quad (1)$$

where $sales_{a,j,t}$ symbolizes each of the authentic producer a 's sales outcomes for product-line j in year t . $\text{Entry}_{a,j,t-1}$ is a dummy variable that equals 1 whenever there is massive amounts of coun-

terfeits of brand a in the market in year $t - 1$. The set of year dummies and company dummies are controlled for in the regression. I also use the entry dummy lagged by two years as an alternative independent variable to check the robustness of the results.

Both the standard and clustered standard error regressions yield these empirical results: counterfeit entry is positively associated with increases in the authentic high-end sales and decreases in low-end sales, all statistically significant at the 5% level.

The advantage of using the Chinese shoe industry primarily comes from a natural experiment, due to an exogenous shift in government enforcement efforts in monitoring footwear trademarks. This brings about identification convenience for the research questions at hand. Suppose entry was exogenous (randomly assigned to companies). Then the question of its effects on an authentic producer's quality and pricing strategies can be simply addressed with OLS regressions of price or quality on the binary indicator variable of entry. This assumption, however, may not hold because entry is more likely to occur if the original producer has a higher price or an easier-to-copy quality. This endogeneity problem will lead to biased estimates in the simple regression suggested above. The identification strategy we adopt comes from enforcement changes in Chinese trademark law in the footwear industry. It is therefore useful to briefly review the history of the legislation and enforcement.

On the legislation side, the Chinese copyright and trademark laws were restored after 1976. China signed the TRIPS agreements and modified the "Details of Trademark Laws Implementations" in 1993. On the enforcement side, in 1985, the Chinese government established the Quality and Technology Supervision Bureau (QTSB), with a branch in each city and joint forces nation-wide, to supervise product qualities and outlaw counterfeit localities. The QTSB has enlarged its personnel and funding since 1991 in joint efforts with legislation to protect IPR and monitor product quality. Due to a series of accidents arising from low quality or counterfeit cottons,¹³ agricultural products, gas tanks, food, drugs, and alcohol, the Chinese government issued amendments in late 1994 (Notification No. 52) and early 1996 (Notification No. 10) to enhance quality supervision and combat counterfeits in seven main sectors prone to hazardous materials: pharmaceuticals, agricultural products (including fertilizers, pesticides, and other materials or instruments), fiber and cotton (paying special attention to those bacteria-infected or bleached counterfeits), food, tobacco, alcohol, and gas. The majority of the QTSB workforce and funding went into these sectors, leaving loopholes for counterfeits to enter the footwear industry. In the early 1990s, approximately 12% of the QTSB's resources were devoted to the footwear sector (5% to leather shoes specifically). This number, however, fell to 2% after 1995 (QTSB yearbooks, Appendix). As seen in the data, authentic companies experienced significant coun-

¹³Some counterfeit cottons carry bacteria and spread infectious diseases.

terfeit entry after this loosening of governmental monitoring and enforcement; most entries occurred in 1996. This exogenous policy shock provides a natural experiment to study the effects of counterfeit entry in the Chinese shoe industry. The branded companies that were infringed upon set up their own “brand-protection” offices to make up for the lack of government monitoring of counterfeits. The company fixed-effects regression of company enforcement investment (logged)¹⁴ on a legislation dummy is positive and significant at the 5% level (coefficient=3.2). However, the authentic companies still had to get the government to outlaw the counterfeit sites once their own enforcement employees discovered them. This is where relationships with the government (the QTSB in particular) come into play.

Before the enforcement change, the QTSB conducted regular inspections in the shoe markets and factories. They confiscated and shut down counterfeit localities right on the spot. The monitoring mechanism was therefore quite uniform across different brands. After the enforcement change, however, companies that had a good relationship with the government received more attention and faster responses when they reported counterfeit cases. All else being equal, this reduced the incentives of counterfeiters to infringe upon these particular brands. This company-level variation is helpful in exploring the variation in the effect of enforcement change on counterfeit entry and sales for different brands and, in turn, the effect on different authentic prices. The challenge is to obtain a proxy for such a relationship. We proxy with the number of days it took each branded company to obtain a mandatory ISO certificate from the QTSB.

Since the late 1980s, all registered companies in China are *required* to meet the standards set by the International Standards Organization (ISO).¹⁵ For the shoe industry, ISO sets standards for the basic equipment a company uses as well as basic environment and labor treatments. The QTSB is in charge of the ISO certification. For some companies, one month was sufficient for obtaining the ISO certificate, but for others, the application date and grant date were over 300 days apart. Among those companies that spent a long time to fulfill the ISO requirements, some were small companies and some were medium or large ones. Interview results and ISO criteria reveal that the standards were rather basic and the differences in application times were largely due to bureaucracy. Chinese consumers hardly notice these ISO certificates, ourselves included. In terms of product quality, the standard for companies to be registered surpasses the basic quality standard specified in the ISO. Therefore, ISO does not signal product quality and is not likely to influence prices in any other way besides through

¹⁴Self-enforcement costs include all costs associated with brand protection activities in each “brand-protection” office. The costs consist of expenses for sending employees to monitor the market, working with the government to track down counterfeit localities, and organizing or engaging in anti-counterfeit conferences, etc. Litigation costs are included but tend to be paid by the losing party (the counterfeiters here) by Chinese law.

¹⁵This differs from the U.S. practice where companies adopt ISO voluntarily.

affecting counterfeit entry and quantity.¹⁶

I therefore use the number of work days it took each company to pass the ISO requirements as a proxy for its relationship with the government. Each registered branch of a branded company needed to apply for an ISO certificate at the QTSB office. For instance, the brand Senda originated in Yancheng city and applied for an ISO certificate there; its subsidiaries in Shanghai, Jianhu, Beijing, Jilin, etc., applied for and obtained ISO certificates from the corresponding QTSB branches. I used the number of work days it took each branded company to obtain ISO certificates, averaged across all the relevant cities where that company had production or management branches, as a proxy for the company's relationship with the government in the national market. Further, there were more variations in the ISO indicator across brands or firms within the same local area than across regions. When I regressed the ISO values on the series of dummies indicating the city of application, none of the cities carried statistically significant coefficients. The p-values of these coefficients ranged from 0.23 to 0.64. I also regressed the number of days for passing each of the two sets of ISO standards, respectively, on the application city's per-capita income, growth rate, CPI, and income inequality measure for the relevant years and found no significant coefficients. Because neither the counterfeiting treatment variable nor the policy shift experiment (supplemented with brand-level variation in relationships to government) exhibits regional variations, regional factors are not likely to cause bias in estimates even if omitted. Furthermore, I collected regional-level income per capita, growth, prices, and inequality data, and found that results were unchanged with such regional controls. This paper therefore reports the national-level analyses.

I further gathered data on whether the sampled companies and their regional subsidiaries were awarded import licenses to serve as an alternative measure for relationship, or political connectedness of these brands. This was a difficult process again and I was only able to obtain the data for one year (I chose the first ISO year as my priority year in data requests). I identified which of the sampled companies were approved with import licenses as of 1995, as those are likely to be the companies with a better relationship with the government [Mobarak and Purbasari, 2006]. The ISO data correlates with this alternative connectedness measure (correlation coefficient = -0.64). I still used the ISO measure to interact with policy changes as the main instrument because ISO measures the relationship with the QTSB, which is the government agency that directly deals with counterfeits. The Foreign Trade and Economic Cooperation Bureau (which used to be called the Foreign Trade and Economics Delegation Committee) is in charge of awarding the import licenses. Companies that are not granted import and

¹⁶Many sectors are privatized in China, the footwear industry included. None of the companies in the sample is state-owned. Shoe prices are also freely set by demand and supply in the market.

export rights have to go through intermediate agents such as the Import and Export Companies to carry out import and export. These intermediate agents are professional service companies analogous to law or accounting firms.

In addition, I constructed alternative relationship proxy using the political connectedness of each company's CEO with the government officials, based on each CEO's education and experiences. I coded CEO biography for each company in the sample based on a systematic codebook (Qian and Shih, 2010). The final composite score is based on 10 subcategories: 1. Whether the managers overlapped with the AQSIQ officials in the pre-college education; 2. Whether the managers overlapped with the AQSIQ officials in the college education; 3. Whether the managers overlapped with the AQSIQ officials in the post-college education; 4. Whether the managers are princelings; 5. Whether the managers overlapped with the AQSIQ officials in their party membership; 6. Whether the managers overlapped with the AQSIQ officials in their government sector work experience; 7. Whether the managers overlapped with the AQSIQ officials in their public sector work experience; 8. Whether the managers overlapped with the AQSIQ officials in any military services; 9. Whether the managers overlapped with the AQSIQ officials in any private sector work experience; 10. Whether the managers overlapped with the AQSIQ officials overlapped in any other notable experiences. This proxy also correlates with the ISO measure (correlation coefficient = -0.68), as they are both driven by political connectedness. I collected data on the fraction of resources the QTSB allocates to the shoe industry annually from the QTSB Yearbooks. The Yearbooks do not have the actual expenditures listed for most years; however, they do provide estimates for the relative resource allocations across sectors for most years. I, therefore, use the percentage of government resources for shoes as an alternative to the dummy indicating the sudden loosening of enforcement for shoe trademarks, and repeat all the analyses as robustness checks. Tables A.4 and A.5 tabulate the two stages of the I.V. estimations, respectively. Similar to those in Table 2 in the main text, the results displayed in Table A.4 illustrate the high relevance of the IV using either the government resource proxy alone or using the interaction between government resources and the ISO relationship proxy, controlling for the year and company effects.

Additional Data Diagnostics to Preclude Confounding Explanations

I additionally gathered economic data at the regional level on income per capita, growth, prices, and inequality. The data exhibit a drastic widening of inequality in the late 1980s and early 1990s, instead of the late 90s when the authentic quality upgrades and price hikes are most pronounced. In addition, the shoe industry size has been stabilized since the late 1980s, and the national statistics show that the number of employees in the footwear and garment industry has been around 1,750,000 throughout

the 1990s (Tables 12-2 and 13-2 in each Yearbook, Chinese National Bureau of Statistics). According to the Basic Unit Census of China [The National Bureau of Statistics, 1996], the massive entry of legal shoe companies took place in the late 1980s. The number of companies increased from 348 in 1984 to 1,058 in 1985, with some further increases in the following years. The 1990s witnessed some declines in the number of shoe companies, but the industry size stabilized at around 1,000 registered firms. Therefore, this study examines a period where the registered companies coexisted relatively peacefully among themselves, and the effects of counterfeit entry can be teased out relatively easily.

To take into account potential ramifications arising from industry differentials in price levels, I also gathered data on CPI specifically for the shoe and garment sector from the Yearbooks, and found this price index to follow the overall CPI quite closely (correlation coefficient =0.89). All these supplemental data diagnostics and research into the macro or regional market conditions in the sampled years yield additional support for the findings and conclusions in this study.

To address the potential concern that the legislation-change dummy might be confounded with other macro changes not picked up by the year effects, I conducted robustness checks using the fraction of the resources the QTSB devoted to the shoe industry as an alternative instrument to the legislation dummy. The results are similar to those presented here (Table A.4).

Table A.1. Checking Sample Representativeness

	Medium sized Companies		Small sized companies	
Variables	My sample (1993-2004)	Census (1998-2001)	Sample (1993-2004)	Census (1998-2001)
Sales (Yuan)	165932.3 (120645)	158935.1 (199806.7)	49634.3 (49069.64)	42772.34 (157319)
Sale costs (Yuan)	94731.26 (88601.51)	95173.22 (249619.4)	38865.35 (37995.72)	36572.63 (141030.1)
#employees (headcount)	1345.04 (340.61)	1472.558 (2204.885)	460.30 (191.81)	230.38 (485.44)
Incorporation Year	1987 (5)	1987 (9)	1988 (3)	1989 (4)
Profits (10,000 Yuan)	9577.12 (8964.71)	9445.821 (14314.34)	1969.54 (3041.73)	1479.57 (11983.2)
Exports (1000 Yuan)	166.06 (134.55)	156.33 (207.46)	77.13 (129.05)	46.87 (136.36)
# obs.	192	95	96	1739

This table compares the summary statistics of the common variables in my sample and those in the Industrial Census conducted by the Chinese Bureau of Statistics for the years 1998-2001.

Table A.2. IV Regression of Sales Quantity and Values By Stratified Samples of Three Quality Tiers

Notes: Each column reports one regression specification that is executed in the sample of quality tier as specified in the column header. Point estimates are reported in the first row aligning with the corresponding independent variable. Standard Errors are clustered at the product-line level, and are reported in the second row for each corresponding independent variable.

Variable	log sale quantity			log sales		
	High-end	Medium- end	Low-end	High-end	Medium- end	Low-end
	(1)	(2)	(3)	(4)	(5)	(6)
Log deflated price	-0.21 (0.29)	-0.34 (0.37)	-0.36 (0.29)	-0.18 (0.39)	-0.18 (0.43)	-0.84 (0.37)
Fake entry	0.51 (0.21)	-0.28 (0.17)	-0.58 (0.24)	0.41 (0.20)	-0.08 (0.24)	-0.75 (0.38)
Age	0.00 (0.01)	0.00 (0.01)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)
Employment	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Log GDP per capita	0.61 (2.23)	-6.93 (2.59)	-17.18 (2.64)	1.87 (3.05)	-4.90 (3.36)	-18.49 (3.30)
Log consumption (deflated)	-0.69 (0.87)	2.54 (1.00)	6.09 (0.98)	-1.22 (1.15)	1.58 (1.26)	6.88 (1.22)
Economic growth	0.07 (0.04)	-0.03 (0.04)	-0.17 (0.04)	0.07 (0.04)	0.00 (0.05)	-0.23 (0.05)
Consumption/GDP	0.00 (0.03)	-0.09 (0.03)	-0.20 (0.03)	0.02 (0.04)	-0.06 (0.04)	-0.22 (0.04)
Gini Coefficient	0.07 (0.08)	0.29 (0.09)	0.57 (0.11)	0.04 (0.11)	0.24 (0.12)	0.61 (0.12)
Male Shoes	0.08 (0.06)	0.54 (0.06)	0.41 (0.06)	0.15 (0.08)	0.63 (0.06)	0.51 (0.05)
Tall-leg boots	-1.56 (0.10)	-1.58 (0.12)	-1.59 (0.12)	-1.59 (0.14)	-1.52 (0.14)	-1.76 (0.16)
Medium-leg boots	-1.01 (0.03)	-1.06 (0.05)	-1.10 (0.07)	-1.06 (0.04)	-1.10 (0.06)	-1.31 (0.08)
Slippery	-1.52 (0.08)	-1.49 (0.07)	-1.58 (0.07)	-1.54 (0.11)	-1.54 (0.09)	-1.57 (0.07)
Sport Shoes	0.90 (0.23)	1.47 (0.21)	1.52 (0.22)	1.32 (0.28)	1.89 (0.25)	1.92 (0.24)
Constant	14.35 (7.38)	-6.47 (7.46)	-14.71 (6.91)	21.66 (7.97)	5.38 (7.91)	-19.43 (8.44)
Year FE	Y	Y	Y	Y	Y	Y
Firm and Product- line FE	Y	Y	Y	Y	Y	Y
N	1944	1945	1944	1859	1861	1860

Table A.3. IV Regression Results for Log Sale Quantity and Values of Three Fixed Quality Tiers for the Women Fashion Boots

Notes: Each column reports one regression specification that is executed in the sample of quality tier as specified in the column header. Point estimates are reported in the first row aligning with the corresponding independent variable. Standard Errors are clustered at the product-line level, and are reported in the second row for each corresponding independent variable.

Variable	log sale quantity			log sales		
	High- end	Medium-end	Low- end	High- end	Medium- end	Low- end
	(1)	(2)	(3)	(4)	(5)	(6)
Log deflated price	-0.29 (0.45)	-0.20 (0.54)	-0.35 (0.39)	-0.02 (0.59)	-0.39 (0.59)	-0.90 (0.33)
Fake entry	0.65 (0.19)	0.10 (0.28)	-0.28 (0.33)	0.66 (0.18)	0.19 (0.34)	-0.32 (0.47)
Age	0.01 (0.01)	0.00 (0.01)	0.00 (0.00)	0.01 (0.01)	0.00 (0.01)	0.00 (0.00)
Employment	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Log GDP per capita	-0.01 (2.86)	-12.52 (2.61)	-21.72 (3.41)	1.13 (3.31)	-10.91 (2.66)	-21.69 (3.94)
Log consumption (deflated)	-0.64 (1.37)	5.52 (1.17)	8.52 (1.06)	-1.65 (1.78)	4.18 (1.21)	8.10 (1.27)
Economic growth	0.06 (0.07)	-0.19 (0.06)	-0.30 (0.03)	0.14 (0.10)	-0.10 (0.07)	-0.26 (0.03)
Consumption/GDP	-0.01 (0.04)	-0.18 (0.04)	-0.27 (0.03)	0.03 (0.05)	-0.13 (0.04)	-0.25 (0.04)
Gini Coefficient	0.10 (0.11)	0.42 (0.10)	0.66 (0.16)	0.07 (0.12)	0.38 (0.11)	0.65 (0.18)
Constant	15.26 (15.46)	-33.56 (12.80)	-36.50 (6.42)	28.44 (20.78)	-16.61 (14.57)	-28.22 (6.94)
Year FE	Y	Y	Y	Y	Y	Y
Firm and ShoeType FE	Y	Y	Y	Y	Y	Y
N	209	209	209	209	209	209

Table A.4. IV Regression Results for Three Fixed Quality Tiers for the Less-Fashion Shoes

Notes: Each column reports one regression specification that is executed in the sample of quality tier as specified in the column header. Point estimates are reported in the first row aligning with the corresponding independent variable. Standard Errors are clustered at the product-line level, and are reported in the second row for each corresponding independent variable.

Variable	log sale quantity			log sales		
	High-end	Medium-end	Low-end	High-end	Medium-end	Low-end
	(1)	(2)	(3)	(4)	(5)	(6)
Log deflated price	-0.47	-0.77	-0.70	-0.53	-0.77	-0.70
	(0.40)	(0.66)	(0.48)	(0.40)	(0.66)	(0.48)
Fake entry	0.46	-0.36	-0.54	0.36	-0.24	-0.75
	(0.24)	(0.20)	(0.23)	(0.14)	(0.32)	(0.33)
Age	0.01	0.00	0.00	0.01	0.00	0.00
	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.02)
Employment	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Log GDP per capita	0.88	-8.85	-18.10	-3.93	-5.87	-6.58
	(2.52)	(3.35)	(3.24)	(3.07)	(3.06)	(3.03)
Log consumption (deflated)	-0.81	3.63	6.57	2.74	2.67	1.14
	(0.99)	(1.44)	(1.28)	(2.02)	(1.86)	(1.00)
Economic growth	0.07	-0.12	-0.22	0.00	0.07	0.11
	(0.04)	(0.06)	(0.05)	(0.12)	(0.11)	(0.08)
Consumption/GDP	0.01	-0.12	-0.21	-0.09	-0.10	-0.06
	(0.03)	(0.05)	(0.04)	(0.07)	(0.06)	(0.03)
Gini Coefficient	0.06	0.33	0.59	-0.02	0.06	0.16
	(0.10)	(0.12)	(0.13)	(0.18)	(0.19)	(0.17)
Male Shoes	0.05	0.63	0.57	-0.20	0.43	0.49
	(0.13)	(0.07)	(0.11)	(0.18)	(0.12)	(0.13)
Tall-leg boots	-1.80	-1.45	-1.48	-2.10	-1.69	-1.77
	(0.18)	(0.09)	(0.13)	(0.25)	(0.14)	(0.18)
Medium-leg boots	-1.23	-1.18	-1.19	-1.15	-1.20	-1.29
	(0.04)	(0.04)	(0.08)	(0.06)	(0.06)	(0.11)
Slippery	-1.58	-1.49	-1.60	-1.27	-1.28	-1.54
	(0.19)	(0.16)	(0.20)	(0.23)	(0.20)	(0.21)
Sport Shoes	0.12	0.80	0.55	0.59	1.18	0.87
	(0.39)	(0.40)	(0.41)	(0.40)	(0.42)	(0.39)
Constant	-19.52	-9.61	21.72	-22.89	-8.14	26.10
	(24.96)	(23.08)	(18.09)	(30.17)	(27.15)	(16.43)
Year FE	Y	Y	Y	Y	Y	Y
Firm and ShoeType FE	Y	Y	Y	Y	Y	Y
N	1735	1736	1735	1650	1652	1651

Table A.5. IV Regression Results for Three Fixed Quality Tiers of the Non-Renowned Brands

Notes: Each column reports one regression specification that is executed in the sample of quality tier as specified in the column header. Point estimates are reported in the first row aligning with the corresponding independent variable. Standard Errors are clustered at the product-line level, and are reported in the second row for each corresponding independent variable.

Variable	log sale quantity			log sales		
	High- end	Medium-end	Low- end	High- end	Medium- end	Low- end
	(1)	(2)	(3)	(4)	(5)	(6)
Log deflated price	-0.33	-0.95	-0.66	-0.58	-0.73	-0.59
	(0.33)	(0.41)	(0.28)	(0.46)	(0.52)	(0.34)
Fake entry	0.56	0.34	-0.37	0.65	0.52	-0.52
	(0.27)	(0.21)	(0.20)	(0.35)	(0.26)	(0.21)
Age	0.01	0.00	0.00	0.01	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Employment	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Log GDP per capita	-4.11	-11.36	-20.63	-2.69	-9.84	-19.54
	(2.52)	(2.88)	(3.50)	(3.12)	(3.61)	(4.16)
Log consumption (deflated)	1.59	4.91	8.02	0.44	3.75	7.23
	(1.05)	(1.14)	(1.23)	(1.48)	(1.56)	(1.57)
Economic growth	-0.03	-0.14	-0.27	0.08	-0.03	-0.20
	(0.05)	(0.05)	(0.04)	(0.08)	(0.07)	(0.05)
Consumption/GDP	-0.07	-0.17	-0.26	-0.03	-0.12	-0.23
	(0.03)	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)
Gini Coefficient	0.20	0.39	0.63	0.18	0.36	0.60
	(0.10)	(0.11)	(0.15)	(0.12)	(0.14)	(0.18)
Male Shoes	0.01	0.50	0.37	-0.03	0.47	0.35
	(0.06)	(0.06)	(0.06)	(0.08)	(0.07)	(0.07)
Tall-leg boots	-1.71	-1.74	-1.85	-1.77	-1.83	-2.06
	(0.11)	(0.14)	(0.13)	(0.14)	(0.18)	(0.15)
Medium-leg boots	-1.01	-1.13	-1.22	-1.01	-1.16	-1.31
	(0.03)	(0.07)	(0.08)	(0.04)	(0.09)	(0.09)
Slippery	-1.37	-1.38	-1.50	-1.31	-1.34	-1.45
	(0.10)	(0.08)	(0.08)	(0.13)	(0.10)	(0.09)
Sport Shoes	1.34	1.89	2.05	1.64	2.18	2.37
	(0.31)	(0.27)	(0.21)	(0.41)	(0.34)	(0.27)
Constant	-4.02	-26.31	-30.81	9.29	-13.11	-21.61
	(10.58)	(9.51)	(8.58)	(15.67)	(13.62)	(10.82)
Year FE	Y	Y	Y	Y	Y	Y
Firm and ShoeType FE	Y	Y	Y	Y	Y	Y
N	1353	1353	1353	1353	1353	1353

Table A.6. IV Regression Results for Three Fixed Quality Tiers for the Renowned Brands

Notes: Each column reports one regression specification that is executed in the sample of quality tier as specified in the column header. Point estimates are reported in the first row aligning with the corresponding independent variable. Standard Errors are clustered at the product-line level, and are reported in the second row for each corresponding independent variable.

Variable	log sale quantity			log sales		
	High- end	Medium-end	Low- end	High- end	Medium- end	Low- end
	(1)	(2)	(3)	(4)	(5)	(6)
Log deflated price	-0.43 (0.61)	-0.19 (0.68)	-0.25 (0.49)	-0.44 (0.81)	-0.33 (0.81)	-0.78 (0.42)
Fake entry	0.18 (0.09)	-0.15 (0.37)	-0.68 (0.22)	0.19 (0.07)	-0.21 (0.43)	-0.83 (0.33)
Age	0.02 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.03 (0.01)	0.02 (0.01)	-0.01 (0.01)
Employment	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Log GDP per capita	-1.16 (2.67)	-7.05 (2.63)	-12.49 (4.49)	1.43 (3.40)	-5.03 (2.66)	-11.58 (4.74)
Log consumption (deflated)	0.69 (1.41)	3.65 (1.23)	4.94 (1.55)	-0.91 (1.97)	2.40 (1.40)	4.41 (1.71)
Economic growth	-0.03 (0.07)	-0.17 (0.07)	-0.24 (0.07)	0.06 (0.09)	-0.10 (0.08)	-0.22 (0.07)
Consumption/GDP	-0.04 (0.04)	-0.12 (0.04)	-0.17 (0.05)	0.02 (0.06)	-0.08 (0.05)	-0.15 (0.05)
Gini Coefficient	0.04 (0.08)	0.17 (0.09)	0.29 (0.21)	-0.05 (0.10)	0.09 (0.10)	0.23 (0.22)
Male Shoes	0.12 (0.06)	0.49 (0.09)	0.29 (0.09)	0.11 (0.07)	0.48 (0.11)	0.28 (0.09)
Tall-leg boots	-1.50 (0.14)	-1.90 (0.28)	-2.00 (0.24)	-1.50 (0.20)	-1.95 (0.34)	-2.23 (0.22)
Medium-leg boots	-1.01 (0.06)	-1.17 (0.16)	-1.25 (0.15)	-1.01 (0.07)	-1.19 (0.19)	-1.36 (0.16)
Slippery	-1.47 (0.12)	-1.46 (0.08)	-1.43 (0.11)	-1.47 (0.15)	-1.44 (0.09)	-1.37 (0.11)
Sport Shoes	1.34 (0.39)	1.96 (0.26)	2.10 (0.18)	1.96 (0.60)	2.60 (0.39)	2.77 (0.22)
Constant	-1.88 (16.22)	-23.87 (13.34)	-12.92 (12.11)	15.00 (22.65)	-10.51 (16.91)	-6.94 (13.90)
Year FE	Y	Y	Y	Y	Y	Y
Firm and ShoeType FE	Y	Y	Y	Y	Y	Y
N	591	592	591	506	508	507