

Product relatedness and firm exports in China

Online appendix

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Table S-1: Robustness checks for truncation

Dependent variable	Ln Firm-product level export value in 2006			
	Benchmark (1)	Including zeros in 2000 (2) (3) (4)		
Model:				
Initial Ln Firm-product export in 2000	0.307 ^a (0.009)			
Dummy 0/1 Firm-product export in 2000		0.922 ^a (0.024)		-1.814 ^a (0.079)
Initial Ln (1+ Firm-product export in 2000)			0.114 ^a (0.002)	0.282 ^a (0.008)
Ln Product density	0.903 ^a (0.333)	0.746 ^a (0.112)	0.728 ^a (0.111)	0.716 ^a (0.111)
RCA index	0.001 (0.001)	0.0001 ^a (0.00001)	0.0001 ^a (0.00001)	0.0001 ^a (0.00001)
No of exporters	0.001 ^a (0.0004)	0.003 ^a (0.0001)	0.003 ^a (0.0001)	0.003 ^a (0.0001)
No of countries	0.060 ^a (0.004)	0.125 ^a (0.004)	0.087 ^a (0.003)	0.057 ^a (0.003)
Fixed effects	Firm fixed effects and product (HS6) fixed effects			
Observations	23258	383587	383587	383587
R ²	0.372	0.180	0.182	0.184

Source: Authors' calculations based on Chinese customs and other data described in the text.

Notes: For computational reasons, the regressions are based on a 20% random selection of firms. Heteroskedasticity-robust standard errors are shown in parentheses; ^a, ^b and ^c respectively denote significance at the 1%, 5% and 10% levels; the regressions are corrected for clustering at product-locality level. The values of all explanatory variables refer to those in the first year of our data (2000).

Table S-2: Robustness checks: Results excluding intermediaries

Dependent variable Model:	Ln Firm-product level export value in 2006													
	(1)	(2)		(3)	(4)		(5)		(6)		(7)		(8)	(9)
	All	Total		Foreign	All firms		Domestic		Domestic		Foreign		ODT	PCS
Firm ownership														
Initial Ln Firm-product export	0.382 ^a (0.006)	Domestic 0.318 ^a (0.009)	Foreign 0.405 ^a (0.008)		0.302 ^a (0.009)	0.400 ^a (0.010)	0.249 ^a (0.012)	0.382 ^a (0.019)	0.345 ^a (0.014)					
Initial Ln Firm ODT export														
Initial Ln Firm PCS export														
Ln Product density (city, w/r World)	0.746 ^a (0.228)				1.476 ^a (0.325)	-0.118 (0.385)	1.698 ^a (0.415)	-0.540 (0.590)	1.030 ^c (0.617)					
Ln Product density DOM (city, w/r World)														
Ln Product density FOR (city, w/r World)														
RCA index	0.001 ^a (0.0001)	0.568 ^a (0.183)	-0.003 (0.029)		0.001 (0.001)	0.001 (0.001)	0.001 ^b (0.001)	-0.001 (0.001)	0.001 (0.001)					
No. of exporters	0.002 ^a (0.001)	0.003 ^a (0.001)	0.001 ^a (0.001)		0.003 ^a (0.001)	0.001 ^a (0.001)	0.003 ^a (0.001)	0.003 ^a (0.001)	0.002 ^b (0.001)					
No. of countries	0.066 ^a (0.003)	0.067 ^a (0.003)	0.069 ^a (0.005)		0.082 ^a (0.004)	0.046 ^a (0.003)	0.085 ^a (0.004)	0.034 ^a (0.004)	0.078 ^a (0.007)					
RCA index - Domestic														
RCA index - Foreign														
Fixed effects		Firm fixed effects and product (HS6) fixed effects												
Observations	58454	22891	35563	32626	27513	16454	6466	16172	21047					
R ²	0.374	0.404	0.418	0.358	0.412	0.401	0.565	0.423	0.398					

Source: Authors' calculations based on Chinese customs and other data described in the text.

Notes: Intermediary firms are identified following Ahn et al.'s (2011) based on Chinese characters that have the English-equivalent meaning of "importer", "exporter", and/or "trading" in the firm's name. Heteroskedasticity-robust standard errors are shown in parentheses; ^a, ^b and ^c respectively denote significance at the 1%, 5% and 10% levels; the regressions are corrected for clustering at product-locality level. The values of all explanatory variables refer to those in the first year of our data (2000).

Table S-3: Robustness checks: Alternative measures of Revealed Comparative Advantages

Dependent variable	Ln Firm-product level export value in 2006											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Model:	Bilateral ^j			No deficit ^k			No outlier product ^l			Restricted sample ^m		
Firms	All	Dom	For	All	Dom	For	All	Dom	For	All	Dom	For
Initial Ln export Firm-product	0.32 ^a (0.01)	0.26 ^a (0.01)	0.41 ^a (0.01)	0.32 ^a (0.01)	0.26 ^a (0.01)	0.41 ^a (0.01)	0.32 ^a (0.01)	0.26 ^a (0.01)	0.41 ^a (0.01)	0.32 ^a (0.01)	0.26 ^a (0.01)	0.41 ^a (0.01)
Ln Product density ⁱ	2.66 ^a (0.30)	3.57 ^a (0.34)	0.99 (0.74)	0.90 ^a (0.13)	1.11 ^a (0.15)	-0.01 (0.31)	1.12 ^a (0.15)	1.39 ^a (0.17)	0.10 (0.34)	1.30 ^a (0.18)	1.61 ^a (0.20)	-0.17 (0.40)
No of exporters	0.01 ^a	0.003 ^a	0.001 ^a	0.01 ^a	0.01 ^a	0.01 ^a	0.01 ^a	0.003 ^a	0.001 ^a	0.01 ^a	0.01 ^a	0.0 ^a
No of countries	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a	0.07 ^a
RCA index ^t	0.01 ^a	0.01 ^a	0.01	0.01 ^a	0.01 ^a	0.01	0.01 ^a	0.01 ^a	0.01	0.01 ^a	0.01 ^a	0.01
Fixed effects	Firm fixed effects and product (HS6) fixed effects											
Observations	107663	71642	35468	107663	71642	35468	107663	71642	35468	107663	71642	35468
R ²	0.32	0.32	0.42	0.32	0.32	0.42	0.32	0.32	0.42	0.32	0.32	0.42

Source: Authors' calculations based on Chinese customs and other data described in the text.

Notes: ⁱ RCAs are computed using alternative methods in the various columns. These RCAs are used to compute alternative measures of density referred to respectively as Bilateral, No deficit, No outlier product and Restricted sample.

^j instead of the benchmark RCA method which is calculated by comparing a country's export share with global export shares, the bilateral RCA uses data on relative bilateral exports following Costinot et al. (2012) and looks at whether a country is relatively better than other individual countries at producing a given good rather than other goods.

^k the RCA index is corrected so as to be equal to 1 is (1) as before the ratio of the export share of that product in the country's export basket to the analogous worldwide export share is greater than 1 and (2) the net export of that product for the country is >0.

^l the RCA index is recomputed only relying on countries for which no single product weighs more than 46%, which corresponds to the upper quartile in the distribution of the share that a given product weighs in the country's export basket.

^m the RCA index is computed only relying on the 60 countries for which the share in world exports is higher than the upper quartile value (0.17%) of the distribution of export shares.

Heteroskedasticity-robust standard errors are shown in parentheses; ^a, ^b and ^c respectively denote significance at the 1%, 5% and 10% levels; the regressions are corrected for clustering at product-locality level. The values of all explanatory variables refer to those in the first year of our data (2000).