

The Anticompetitive Effect of Trade Liberalization

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*The view expressed in this paper are those of the authors and
do not necessarily reflect the view of the National Bank of Belgium*

Motivation

- ▶ Growing concern, among academics and policy-makers, about the U.S. and the EU state of competition (Syverson, 2019)
- ▶ Among the most important recent trends:
 1. Rise in market concentration (Gutiérrez and Philippon, 2017; Covarrubias et al., 2019; Affeltd et al., 2021)
 2. Rise in price over marginal cost or markups (De Loecker and Eeckhout, 2018; De Loecker et al., 2020; Díez et al., 2021)
 3. Lower labor share (Karabarbounis and Neiman, 2014; Reshef and Santoni, 2021)
- ▶ Market power hinders business dynamism and the labor market
- ▶ Research Question : What role for globalization?

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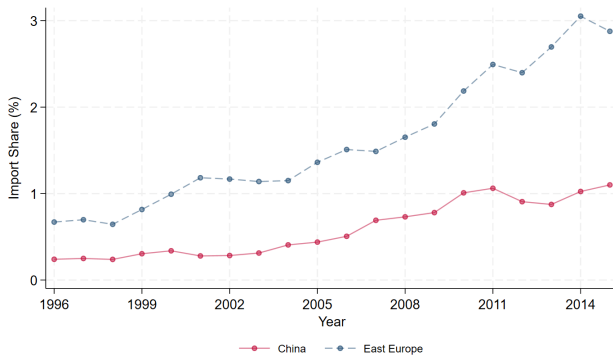
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The East Shock



This Paper

► Setting:

- Belgian manufacturing sector (1996-2015)
- Universe of manufacturing firms with:
 - Balance sheet and custom data
 - Detailed information on imports and exports

► Identification Strategy:

- Exploit Eastern Europe and China trade shocks
- Use instrumental variable approach following [Dauth et al. \(2014\)](#)

► Key Results:

- East European Shock \Rightarrow Markups \nearrow , TFP \nearrow , Concentration \nearrow
- China Shock \Rightarrow Markups \nearrow , TFP \nearrow , Concentration \searrow

Related Literature

► Evolution of Market Power

Gutiérrez and Philippon (2018), Grullon et al. (2019), Syverson (2019), De Loecker et al. (2020), Affeldt et al. (2020), Autor et al. (2020), Diéz et al (2021), De Ridder (2024)

→ focus on Belgium

→ access to **universe** of Belgian manufacturing firms

► Relationship between Trade and Markups

Atkeson and Burstein (2008), Melitz and Ottaviano (2008), Chen et al. (2009), De Loecker and Warzynski (2012), Edmond et al. (2015), De Loecker et al. (2016), Arkolakis et al. (2019), Lashkaripour (2020), Dhyne et al. (2022), Alviarez et al. (2023), Impullitti and Kazmi (2023), Matsuyama and Uschev (2023), Huang et al. (2024)

→ Reduced-form evidence of the **positive effect** of trade on markups *i.e.* anticompetitive effect

► The East Shock

Autor et al. (2013, 2016), Mion and Zhu (2013), Dauth et al. (2014), Acemoglu et al. (2016), Bloom et al. (2016), Caliendo et al. (2019), Feenstra et al. (2019)

→ Import competition effect on output market

Data & Methodology

Data Source

- ▶ VAT declarations and Annual Accounts
 - ▶ balance sheets data collected from the tax authority and the National Bank of Belgium
 - ▶ sales, value added, employment, wages, capital, intermediates, core industry
 - ▶ sample correction
- ▶ Custom data: firm-level import and export at HS 6-digit
- ▶ UN Comtrade: trade data of Belgium and other 8 high-income economies with China
- ▶ Panel of ≈ 22.000 firms in 184 industries for the period 1996-2015

Sample Correction

Industry Category

Summary

Markups Estimation

- ▶ Consider a generic production function for firm i at time t :

$$Q_{it} = F_{it}(L_{it}, K_{it}, M_{it}, \Omega_{it})$$

- ▶ Hp: no adjustment cost for intermediates (Dhyne et al., 2022)
- ▶ Cost minimization with respect to intermediates implies:

$$\underbrace{\mu_{it}}_{\text{markup}} = \underbrace{\theta_{it}^M}_{\text{elasticity of input}} \times \underbrace{(\alpha_{it}^M)^{-1}}_{\text{inverse expenditure share of intermediates on sales}}$$

- ▶ α_{it}^M can be computed from the data, θ_{it}^M needs to be estimated

Identification

Estimates

Aggregate Markup

Density Distribution

Unweighted

Dynamic Decomposition

- Decomposition to unveil the margins of adjustment:
- Let's consider aggregate markups for group G , in industry j at time t :

$$M_{G,jt} = \sum_{i \in G} s_{i,jt} \mu_{i,jt}$$

- The change in aggregate markup can be decomposed in:

$$\Delta M_j = \underbrace{\Delta \bar{M}_{c,j}}_{\text{within}} + \underbrace{\Delta \text{cov}(s_{c,j}, M_{c,j})}_{\text{between}} + \underbrace{s_{e,j2}(M_{e,j2} - M_{c,j2})}_{\text{entry}} + \underbrace{s_{x,j1}(M_{c,j1} - M_{x,j1})}_{\text{exit}}$$

Identification

Exploiting the East Shock

- ▶ Quasi-natural experiment (Dauth et al., 2014) analyzing dual shocks:

1. Major trade policy changes:

- ▶ China: **WTO access** in 2001
- ▶ Eastern Europe: **WTO/EU integration** from 1995

2. Different comparative advantages:

- ▶ China: **labor-intensive** goods
- ▶ Eastern Europe: **intermediate** goods

3. External and unexpected changes:

- ▶ Iron curtain fall in 1989
- ▶ Swift shift in trade patterns

- ▶ Identification separates **supply-side shocks** from domestic changes

Identification Strategy

- ▶ East import exposure in industry j at time t (Dauth et al., 2014):

$$\Delta IS_{jt}^{EAST} = \frac{\Delta M_{jt}^{BE \leftarrow EAST}}{Q_{j,t}^{BE} + M_{j,1988}^{BE}} \quad (1)$$

- ▶ Industry demand shocks raise simultaneously imports and markups
- ▶ Instrument: Import flows of 8 high-income economies:

$$\Delta IS_{jt}^{IV,EAST} = \frac{\Delta M_{jt}^{Other \leftarrow EAST}}{Q_{j,t}^{BE} + M_{j,1988}^{BE}} \quad (2)$$

- ▶ Countries: Australia, Canada, Japan, Norway, New Zealand, Sweden, Singapore, UK
- ▶ Exclusion restriction: orthogonality of cross-country demand shocks

Empirical Specification

► Industry-level specification :

$$\Delta Y_{j,t} = \beta_1 \Delta IS_{jt}^{EAST} + \mathbf{X}'_{j,2000} \gamma + \delta_j + \delta_t + \varepsilon_{j,t}$$

- Y_{jt} : outcome variable in industry j and time t
- IS_{jt}^{EAST} : import competition in industry j and time t
- $\mathbf{X}_{j,2000}$: vector of beginning-of-the-period controls
- δ_j : industry fixed effect
- δ_t : time fixed effect
- St. errors are clustered at 3-digit NACE level
- Regressions are weighted by beginning-of-the-period industry size

Results

The Effects of the East-European Shock on Markups

	$\Delta \text{Markups (2000-2015)}$					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	1.427** (0.621)	6.220*** (1.665)	3.219*** (0.676)	5.796*** (1.354)	6.220*** (2.065)	3.047*** (1.023)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	✓
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.210					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Sales-to-Intermediates Ratio

Reallocation Effect

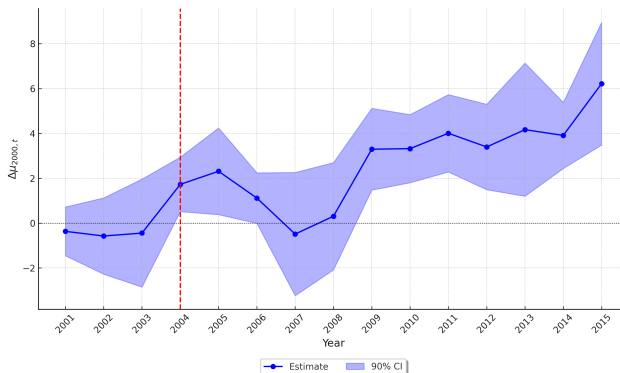
Within Effect

Exit

Entry

The Effects of the East-European Shock on Markups

Dynamics



The Effects of the East-European Shock on TFP

	ΔTFP (2000-2015)					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	0.503** (0.209)	1.893*** (0.632)	1.247*** (0.323)	1.829*** (0.531)	1.893** (0.756)	0.764* (0.415)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.185					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The Effects of the East-European Shock on Concentration

	ΔHHI (2000-2015)					
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIS_{jt}^{EEC}	0.008* (0.004)	0.016* (0.010)	0.020 [†] (0.012)	0.027 (0.020)	0.016 (0.011)	0.038** (0.017)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.423					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

The Effects of the East-European Shock on Labor Share

	<i>Δ Labor Share (2000-2015)</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIS_{jt}^{EEC}	-0.864 [†] (0.680)	-2.647* (1.380)	-3.454*** (0.927)	-3.900** (1.858)	-2.647* (1.442)	-0.096 (1.312)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.293					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

Industry Outcomes: 2000-2007

Industry Outcomes: 2007-2015

The Effects of the China Shock on Industry Outcomes

	Markup	SI	TFP	LP	HHI	LS
ΔIS_{jt}^{CHN}	2.406* (1.296)	2.755* (1.489)	1.075** (0.530)	4.070 [†] (3.245)	-0.020* (0.011)	-1.300 [†] (1.177)
NACE 2 FE	✓	✓	✓	✓	✓	✓
NACE 3 FE	×	×	×	×	×	×
Controls	✓	✓	✓	✓	✓	✓
Weighted	✓	✓	✓	✓	✓	✓
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3
Method	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
KP F-Stat	16.426	16.426	16.426	16.426	16.426	16.426
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

China vs East European Shock

	Markup	SI	TFP	LP	HHI	LS
ΔIS_{jt}^{CHN}	-0.861 (1.430)	-0.977 (1.637)	0.070 (0.537)	0.345 (3.098)	-0.027*** (0.010)	0.099 (1.172)
ΔIS_{jt}^{EEC}	6.166*** (1.600)	7.047*** (1.812)	1.897*** (0.621)	7.032*** (2.553)	0.015† (0.010)	-2.641* (1.360)
NACE 2 FE	✓	✓	✓	✓	✓	✓
NACE 3 FE	×	×	×	×	×	×
Controls	✓	✓	✓	✓	✓	✓
Weighted	✓	✓	✓	✓	✓	✓
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3
Method	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
KP F-Stat	23.530	23.530	23.530	23.530	23.530	23.530
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, † $p < 0.15$.

Results: Discussion

- ▶ Our findings reveal that trade integration can have **anti-competitive effects** by:
 - ▶ Significantly increasing aggregate markups and market concentration
 - ▶ While also positively affecting total factor productivity (TFP)
- ▶ These results are crucially determined by the East-European shock compared to the China shock:
 - ▶ Different patterns of specialization (intermediates vs. final goods)
 - ▶ Different depths of integration (EU/WTO vs. WTO only)
- ▶ The observed anti-competitive effects align with:
 - ▶ Models of **price increasing competition** (Chen and Riordan, 2008; Matsuyama and Ushchev, 2023)
 - ▶ **Sourcing** as a determinant of market power (Blaum et al., 2018)

Conclusions

- ▶ Our results are particularly relevant given the current wave of European integration and suggest balancing trade with competition policy (Caffarra, 2024)
- ▶ **Next Steps:**
 - Add a Conceptual Framework to explain the mechanisms underlying the observed effects
 - Firm-Level Analysis: Shift from aggregate analysis to microeconomic insights using firm-level data
 - Production Network Analysis: Explore production interconnections through B2B data to evaluate the broader impact of trade integration

Thank You

Sample Correction

- ▶ First, we drop observation with mistakes
 - ▶ negative values of reported sales, total assets, and labor
- ▶ Second, we keep firms that in all periods feature:
 - ▶ employment $FTE > 1$
 - ▶ capital stock of at least 100 euro
- ▶ Third, we drop outliers of the following distributions:
 - ▶ $\ln(Y/L), \ln(Y/K), \ln(Y/M)$
 - ▶ outliers are defined as observation outside the range between the median and 3 times the interquartile range

[back](#)

4-digit Industries

Division	Group	Class	
19	19.1		Manufacture of coke and refined petroleum products
			Manufacture of coke oven products
	19.10	Manufacture of coke oven products	
	19.2		Manufacture of refined petroleum products
		19.20	Manufacture of refined petroleum products
	20		Manufacture of chemicals and chemical products
20.1		Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms	
	20.11	Manufacture of industrial gases	
	20.12	Manufacture of dyes and pigments	
	20.13	Manufacture of other inorganic basic chemicals	
	20.14	Manufacture of other organic basic chemicals	
	20.15	Manufacture of fertilisers and nitrogen compounds	
	20.16	Manufacture of plastics in primary forms	
	20.17	Manufacture of synthetic rubber in primary forms	
	20.2		Manufacture of pesticides and other agrochemical products
		20.20	Manufacture of pesticides and other agrochemical products
	20.3		Manufacture of paints, varnishes and similar coatings, printing ink and mastics
		20.30	Manufacture of paints, varnishes and similar coatings, printing ink and mastics

[back](#)

Summary Statistics

			Percentiles				
	Mean	St. Dev.	p5	p25	p50	p75	p95
Panel A: Full Sample							
Sales	14.26	107.47	0.22	0.55	1.46	4.93	42.93
Capital Stock	2.38	18.70	0.02	0.09	0.30	0.91	6.84
Intermediate Inputs	11.45	93.70	0.11	0.32	0.96	3.57	33.78
Employment in FTE	40.21	194.64	1.10	3.20	8.00	23.60	137.70
Panel B: Only Firms in Trade							
Sales	28.83	155.14	0.54	1.83	4.78	13.97	95.19
Capital Stock	4.69	27.02	0.04	0.23	0.74	2.24	14.74
Intermediate Inputs	23.34	135.40	0.32	1.26	3.46	10.60	77.93
Employment in FTE	76.72	278.49	2.20	8.30	21.00	51.00	280.90
Total Trade	25.70	185.86	0.00	0.23	1.68	8.29	84.43
Export	15.67	113.52	0.00	0.00	0.64	4.76	51.96
Import	10.03	76.18	0.00	0.01	0.70	3.17	31.28

Notes: The full sample contains 215,420 firm-year observation, for 21,619 firms, over the period 1996-2015. Nominal variables are expressed in million of euros and deflated by their respective price deflators.

Production Function Estimation

Consider the log-linearized production function version:

$$q_{it} = f_{it}(l_{it}, k_{it}, m_{it}; \beta) + \omega_{it} + \varepsilon_{it}$$

Assumptions:

- ▶ $f_{it}(\cdot)$ is translog in l_{it} , k_{it} , and m_{it}
 - ▶ translog is a general version of Cobb-Douglas
 - ▶ no explicit assumption about economies of scale
- ▶ Hicks neutral productivity, ω_{it} , following first-order Markov process
- ▶ Firms adopt same technology within broad industry

[back](#)

Production Function Estimation

Identification:

- ▶ 2-step estimation of a dynamic firm optimization model
- ▶ **Step 1:** estimation of predicted output $\hat{\phi}_t$ adding controls \mathbf{z}_{it}

$$\tilde{q}_{it} = \phi_t(l_{it}, k_{it}, m_{it}, \mathbf{z}_{it}) + \varepsilon_{it}$$

- ▶ AR(1) process for productivity: $\omega_{it} = g_t(\omega_{it-1}) + \xi_{it}$
- ▶ **Step 2:** obtain ξ_{it} by estimating non-parametrically the AR(1)

$$\hat{\phi}_t - f_{it} = \hat{\phi}_{t-1} - f_{it-1} + \xi_{it} \quad \Rightarrow \quad \omega_{it}(\beta) = \omega_{it-1}(\beta) + \xi_{it}(\beta)$$

- ▶ Elasticities estimated using moment condition on ξ_{it}

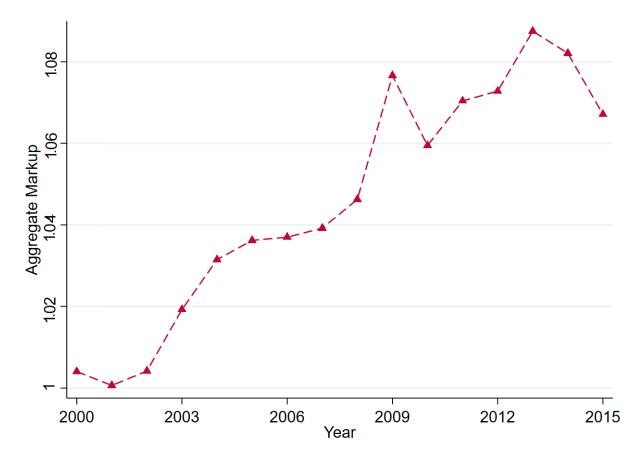
$$\mathbb{E} (\xi_{it}(\beta) (l_{it} k_{it} \mathbf{m}_{it-1})^T) = 0$$

Production Function Estimation: Summary Statistics

Industry	Output Elasticities of			Markup			Firms
	<i>Capital</i>	<i>Labor</i>	<i>Intermediates</i>	<i>Median</i>	<i>Mean</i>	<i>Sd. Dev.</i>	
Food, Beverages, and Tobacco	0.05	0.25	0.71	1.11	1.12	0.26	5,109
Textile, Wearing Apparels, and Leather Products	0.05	0.23	0.72	1.02	1.11	0.33	2,187
Wood, Paper Products, and Printing	0.05	0.22	0.71	1.07	1.12	0.29	4,134
Chemicals and Pharmaceutical	0.07	0.31	0.75	0.97	1.02	0.28	888
Rubber and Plastic Products	0.04	0.23	0.74	0.95	1.02	0.31	926
Other Non-Metallic Mineral Products	0.05	0.24	0.71	1.05	1.09	0.24	1,477
Basic and Fabricated Metal Products	0.05	0.21	0.71	1.10	1.14	0.30	5,559
Computer, Electronics, and Optical Products	0.06	0.26	0.70	1.01	1.06	0.29	464
Electrical Equipment	0.06	0.26	0.74	1.22	1.28	0.32	576
Machinery and Equipment n.e.c.	0.06	0.25	0.70	1.12	1.17	0.26	1,578
Vehicles and Transport Equipment	0.06	0.25	0.75	1.04	1.10	0.30	457
Furniture, Other Manufacturing, and Repairing	0.04	0.21	0.72	1.16	1.23	0.33	3,262

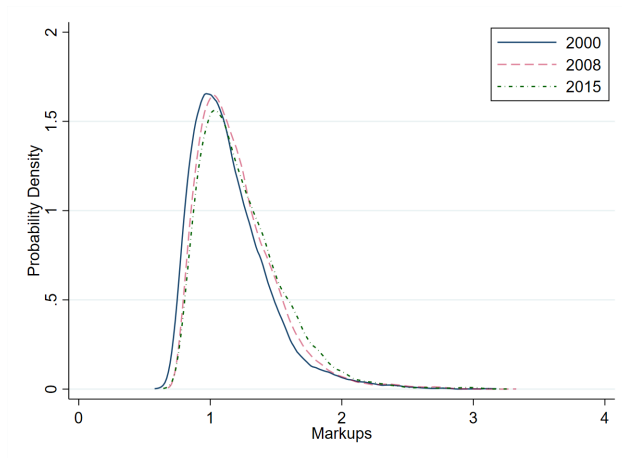
[back](#)

Revenue Weighted Aggregate Markup Evolution



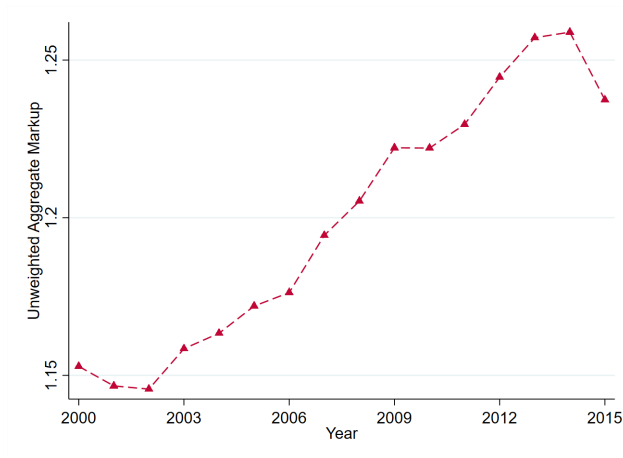
[back](#)

Markup Distribution



[back](#)

Unweighted Aggregate Markup Evolution



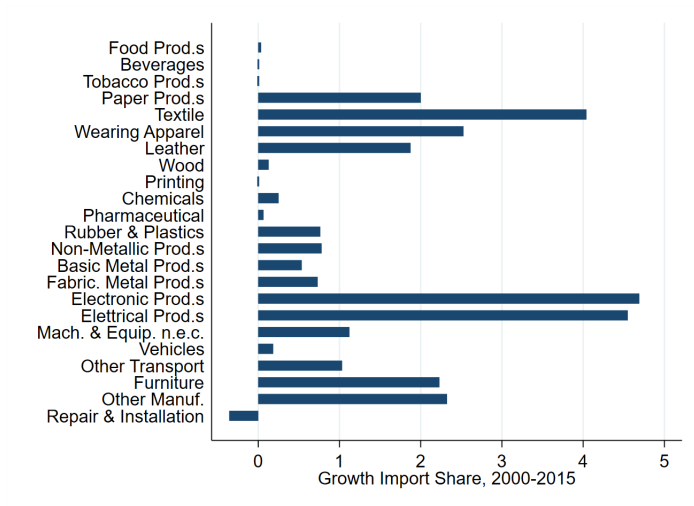
[back](#)

Aggregate Entry and Exit



[back](#)

Cross-Industry China Shock Variation



The Effects of the East-European Shock on Sales-to-Intermediate Ratios

	ΔSI Ratio (2000-2015)					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	1.601** (0.702)	7.107*** (1.884)	3.632*** (0.758)	6.643*** (1.544)	7.107*** (2.345)	3.488*** (1.154)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.248					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, † $p < 0.15$.

The Effects of the East-European Shock on Reallocation

	Δ Reallocation (2000-2015)					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	0.018 [†]	0.092***	0.046***	0.084***	0.092***	0.003
	(0.009)	(0.033)	(0.013)	(0.029)	(0.035)	(0.019)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.567					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

The Effects of the East-European Shock on Unweighted Markup

	Δ Unweighted Markup (2000-2015)					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	0.002 (0.004)	0.022* (0.011)	-0.005 (0.009)	0.017 [†] (0.010)	0.022 (0.018)	0.024** (0.011)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.346					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

The Effects of the East-European Shock on Exit

	$\Delta \text{Exit (2000-2015)}$					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	0.002 (0.003)	-0.016 [†] (0.011)	0.007 (0.008)	-0.012 (0.011)	-0.016 (0.014)	-0.005 (0.008)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.346					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

The Effects of the East-European Shock on Entry

	$\Delta \text{Entry (2000-2015)}$					
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIS_{jt}^{EEC}	0.002 (0.003)	-0.016 [†] (0.011)	0.007 (0.008)	-0.012 (0.011)	-0.016 (0.014)	-0.005 (0.008)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.303					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

The Effects of the East-European Shock on Labor Productivity

	<i>Δ Labor Productivity (2000-2015)</i>					
ΔIS_{jt}^{EEC}	(1)	(2)	(3)	(4)	(5)	(6)
	2.282*	7.011***	3.392 [†]	6.388**	7.011***	2.897*
	(1.164)	(2.586)	(3.763)	(2.837)	(2.353)	(1.698)
NACE 2 FE	✓	✓	×	✓	✓	✓
NACE 3 FE	×	×	✓	×	×	×
Controls	✓	✓	✓	×	✓	✓
Weighted	✓	✓	✓	✓	✓	×
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 2	Nace 3
Span	2000-15	2000-15	2000-15	2000-15	2000-15	2000-15
Method	OLS	2SLS	2SLS	2SLS	2SLS	2SLS
AR2	0.508					
KP F-Stat		48.642	9.552	30.388	33.309	9.680
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

Industry Outcomes - First Period (2000-2007)

	Markup	SI	TFP	LP	HHI	LS
ΔIS_{jt}^{EEC}	-0.491 (1.671)	-0.351 (1.813)	-0.314 (0.637)	1.750 [†] (2.622)	0.035 ^{**} (0.014)	-0.788 (1.560)
NACE 2 FE	✓	✓	✓	✓	✓	✓
NACE 3 FE	×	×	×	×	×	×
Controls	✓	✓	✓	✓	✓	✓
Weighted	✓	✓	✓	✓	✓	✓
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3
Method	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
KP F-Stat	48.642	48.642	48.642	48.642	48.642	48.642
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

back

Industry Outcomes - Second Period (2007-2015)

	Markup	SI	TFP	LP	HHI	LS
ΔIS_{jt}^{EEC}	1.557** (0.780)	7.458** (3.345)	2.207* (1.172)	9.108*** (3.016)	-0.018 [†] (0.014)	-1.633 [†] (1.515)
NACE 2 FE	✓	✓	✓	✓	✓	✓
NACE 3 FE	×	×	×	×	×	×
Controls	✓	✓	✓	✓	✓	✓
Weighted	✓	✓	✓	✓	✓	✓
Cluster	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3	Nace 3
Method	2SLS	2SLS	2SLS	2SLS	2SLS	2SLS
KP F-Stat	48.642	48.642	48.642	48.642	48.642	48.642
Obs	171	171	171	171	171	171

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$, [†] $p < 0.15$.

back