

Foreign Direct Investment and Intergenerational Occupational Mobility: Evidence from China

Deng Jianpeng, Huang Zibin, Shi Qing, Zhao Xin

College of Business, Shanghai University of Finance and Economics

Jan 5, 2026



上海财经大学

Shanghai University of Finance & Economics

Background

- Attracting FDI is a common growth strategy, but **its impact on social mobility remains a key unanswered question.**
- As part of its WTO accession, China relaxed industry-level FDI regulations in 2002.
- This revised the *Catalogue for the Guidance of Foreign Investment Industries* (vs. 1997 version).
- Following [Lu, Tao, and Zhu \(2017\)](#), we exploit this variation to identify the causal impact of FDI on intergenerational mobility.

Estimating Intergenerational Mobility

- Estimating IGM in developing countries is challenging due to **scarce administrative data** (Mohammed, 2019).
- In contrast, developed nations leverage rich datasets for extensive IGM research (Chetty et al., 2014; Adermon et al., 2021; Nakamura, Sigurdsson, and Steinsson, 2022; Black et al., 2023).
- Fan, Yi, and Zhang (2021) used panel data to analyze income mobility changes in post-reform China.

We focus on Occupation

- Reflect broad socio-economic factors.
- Are generally **more stable** over a life-cycle than income.
- Offer **more reliable** self-reported data.

Determinants of Intergenerational Mobility

Internal Family Influences

- Genetic transmission of traits.
- Family culture and investments in education (Becker and Tomes, 1976, 1986; Jia, Lan, and Miquel, 2021).

External Factors

- Access to education (Blanden, Gregg, and Macmillan, 2007; Güell et al., 2018; Neidhöfer, Serrano, and Gasparini, 2018).
- Migration (Nakamura, Sigurdsson, and Steinsson, 2022; Ward, 2022; Connolly, Corak, and Haeck, 2019).
- Open environments (Fan et al., 2022; Mocetti, Roma, and Rubolino, 2022; Cesar et al., 2023).

Relevant Literature

- Ahsan and Chatterjee (2017): 1991 Indian trade reforms.

Foreign Direct Investment and Inequality

FDI impacts the labor market of host countries in several ways:

- Labor share (Ma and Ruzic, 2020; Leblebicioğlu and Weinberger, 2021).
- Income inequality (Feenstra and Hanson, 1997; Pan-Long, 1995; Johansson and Liu, 2020).
- Gender income gap (Chen et al., 2013).

A comprehensive analysis of inequality:

- Disparities across different groups within the same generation;
- Cross different generations within the same groups.

Main Findings

Methodology:

- **Strategy:** Shift-Share Variable (SSV).
- **Identification:** Exogenous variation from the 2002 FDI regulatory reform.
- **Data:** National Census (2000 & 2005).

Key Findings:

- FDI liberalization **promotes upward intergenerational mobility**.
- **Mechanism:** Increases demand for high-skilled labor, which in turn encourages investment in higher education.

Heterogeneous Effects:

- Positive effects are more significant for: low socioeconomic status; underdeveloped regions.

Data Sources

FDI Policy (The Shift):

- Comparing 1997 and 2002 versions of the *Catalogue* .
- Identifies 4-digit manufacturing industries with relaxed FDI restrictions.

Industry Structure (The Share):

- 1998 ASIF: Calculate pre-period employment shares for each city's 4-digit industries.

Mobility Outcomes:

- National Census (2000, 2005).
- Measure intergenerational occupational mobility.
- Compute occupational education intensity(EI).
- Sample: Children (16-35) co-residing with fathers.

Causal Effect of FDI on IGM

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Identification Challenges:

- **Endogeneity:** FDI inflows are not random. They correlate with unobserved local factors that also drive mobility.
- **Reverse Causality:** Poor local labor markets or low pre-existing mobility might deter FDI.

Methodology:

- We employ a **Shift-Share Variable (SSV)** approach to isolate the causal impact.

Measuring Exposure to FDI Liberalization: SSV

The city-level shock is constructed as (Borusyak, Hull, and Jaravel, 2022):

$$FDI_Shock_{ct} = \sum_j \underbrace{\Delta FDI_{jt}}_{\text{National 'Shift' (Industry Shock)}} \times \underbrace{\frac{E_{cj1998}}{E_{c1998}}}_{\text{Local 'Share' (City Exposure)}} \quad (1)$$

- ΔFDI_{jt} : Driven by **2002 FDI Catalogue** revision.
- $\frac{E_{cj1998}}{E_{c1998}}$: Pre-period (1998) employment structure.

Measuring Intergenerational Occupational Mobility

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Intergenerational occupational mobility for individual i is $|transfer_i|$, using 2000 Census Data:

$$|transfer_i| = |EI_i - EI_f| \quad (2)$$

- EI_i : Avg. education years for individual i 's occupation.
- EI_f : Avg. education years for the father's occupation.
- $transfer_i > 0$: Upward mobility
- $transfer_i < 0$: Downward mobility

Baseline Regression

$$\begin{aligned} |transfer_{it}| = & \beta_0 + \beta_1 FDI_Shock_{ct} + \beta_2 X_{it} + \beta_3 City_{ct-1} \\ & + \phi_c + \phi_{pt} + \phi_{bt} + \epsilon_{ict}. \end{aligned} \quad (3)$$

- X_{it} : Demographic and socioeconomic controls.
- $City_{ct-1}$: Lagged city characteristics.
- ϕ_c : City FE.
- ϕ_{pt} : Province-year FE.
- ϕ_{bt} : Cohort-year FE.
- Standard errors clustered at the city level.

Table: Baseline Results

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
FDI_Shock_{ct}	0.331*** (0.127)	0.404*** (0.133)	0.842*** (0.218)	0.768*** (0.230)	-0.133 (0.318)	-0.208 (0.328)
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓		✓
N	143557	143557	37486	37486	19186	19186
adj. R^2	0.110	0.110	0.0265	0.0267	0.158	0.158

Alternate Baseline Specifications

Table: Alternate Baseline Specifications: LPM and Logit

Dependent Variable	$Upward_{it}$		$Downward_{it}$	
	Logit	LPM	Logit	LPM
	(1)	(2)	(3)	(4)
FDI_Shock_{ct}	0.617* (0.355)	0.161*** (0.0572)	-0.168 (0.247)	-0.0122 (0.0232)
City Lagged Controls	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓
City FE	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓
N	143557	143557	143557	143557
adj. R ²		0.129		0.103
pseudo R ²	0.115		0.121	

FDI, Family SES, and Mobility

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: Heterogeneity

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Father's Years of Education						
	$Edu_Year^f \leq 9$	$Edu_Year^f > 9$	$Edu_Year^f \leq 9$	$Edu_Year^f > 9$	$Edu_Year^f \leq 9$	$Edu_Year^f > 9$
FDI_Shock_{ct}	0.397*** (0.140)	0.218 (0.438)	0.631*** (0.232)	1.019 (0.619)	-0.181 (0.404)	-1.123 (0.695)
N	126049	17508	32771	4707	13467	5718
adj R ²	0.114	0.0427	0.0327	0.0499	0.0893	0.217
Panel B: Economic Development Level of Father's Hometown						
	High GDP	Low GDP	High GDP	Low GDP	High GDP	Low GDP
FDI_Shock_{ct}	0.122 (0.190)	0.598*** (0.135)	0.778** (0.303)	1.117*** (0.404)	0.331 (0.373)	-0.470 (0.608)
N	63875	65678	22787	11744	11537	6320
adj R ²	0.0861	0.0875	0.0214	0.0328	0.127	0.190
Panel C: Father's Employment						
	Agri	Non-Agri	Agri	Non-Agri	Agri	Non-Agri
FDI_Shock_{ct}	0.567*** (0.146)	0.0578 (0.257)	0.436* (0.261)	0.366 (0.327)	-0.851 (0.708)	0.0556 (0.381)
N	112600	30957	26754	10732	5545	13634
adj R ²	0.149	0.0662	0.0483	0.0773	0.0791	0.194
City Lagged Controls	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province × Year FE	✓	✓	✓	✓	✓	✓
Cohort × Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_{ct} \times Post02_t$	✓	✓	✓	✓	✓	✓

City-Level FDI Exposure, FDI Flows, and Employment Growth

- Between 2002 and 2005, annual average FDI inflows accounted for around 3.7% of GDP.
- The employment share of foreign firms in manufacturing rose from 18.6% to 28.5%.

Table: City-Level FDI Exposure, FDI Flows, and Employment Growth

Dependent Variable	FDI_Flows_{ct}		$Employment_Growth_{ct}$	
	(1)	(2)	(3)	(4)
FDI_Shock_{ct}	782347.6*** (281002.4)	329919.0** (138472.9)	13103.8*** (2217.0)	11478.0*** (2466.2)
City Lagged Controls	✓	✓	✓	✓
City FE	✓	✓	✓	✓
Year FE	✓		✓	
Province \times Year FE		✓		✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓
N	1540	1492	1540	1492
adj. R ²	0.591	0.499	0.355	0.474

Mechanisms

$$FDI_Shock_{ct}^H = \sum_j High_{j,2000} \times \frac{E_{cj,2000}}{E_{c,2000}} \times \Delta FDI_{jt} \quad (4)$$

$$FDI_Shock_{ct}^L = \sum_j Low_{j,2000} \times \frac{E_{cj,2000}}{E_{c,2000}} \times \Delta FDI_{jt} \quad (5)$$

Increased Demand for High-skill Occupations

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: The Impact of High- and Low-skill FDI on Education Intensity

Dependent Variable	EI_{it}		$ transfer_{it} $	$Upward_{it}$	$Downward_{it}$
	(1)	(2)	(3)	(4)	(5)
FDI_Shock_{ct}	0.497** (0.236)				
$FDI_Shock_{ct}^H$		1.016*** (0.387)	1.016*** (0.241)	0.328*** (0.106)	0.0481 (0.0426)
$FDI_Shock_{ct}^L$		0.972 (0.726)	0.812** (0.374)	0.486*** (0.150)	0.123 (0.0822)
City Lagged Controls	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓
N	143557	143557	143557	143557	143557
adj. R ²	0.388	0.388	0.110	0.129	0.103

Enhanced Educational Investment

FDI Increases Returns to Education

- FDI raises demand for skilled labor, increasing returns to education.
- Families respond by investing more in their children's human capital.
- Effect is especially relevant for younger cohorts making educational decisions.

Table: The Impact of High- and Low-skill FDI on College Attainment

Dependent Variable	<i>College_Dummy_{it}</i>							
	Age:16-35				Age:16-25			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>FDI_Shock_{ct}</i>	0.0523*** (0.0140)		0.0185 (0.0136)		0.0723*** (0.0183)		0.0250 (0.0161)	
<i>FDI_Shock_{ct}^H</i>		0.0625*** (0.0193)		0.0340* (0.0174)		0.0851*** (0.0220)		0.0265 (0.0192)
<i>FDI_Shock_{ct}^L</i>		0.0393** (0.0173)		-0.00295 (0.0201)		0.0554* (0.0302)		0.0230 (0.0268)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓	✓
Province × Year FE	✓	✓	✓	✓	✓	✓	✓	✓
Cohort × Year FE	✓	✓	✓	✓	✓	✓	✓	✓
<i>Dist_Port_c</i> × <i>Post02_t</i>	✓	✓	✓	✓	✓	✓	✓	✓
N	783601	783601	143557	143557	338746	338746	99439	99439
adj. R ²	0.235	0.235	0.285	0.285	0.230	0.230	0.272	0.272

More on Education Choices

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: Educational Choices at the Individual Level

Dependent Variable	<i>Dropout_Dummy_{it}</i>		<i>HighSchool_Dummy_{it}</i>		<i>College_Dummy_{it}</i>		<i>University_Dummy_{it}</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>FDI_Shock_{ct}</i>	-0.00229 (0.00564)		0.0302* (0.0178)		0.0485*** (0.0134)		0.0287*** (0.00750)	
<i>FDI_Shock_{ct}^H</i>		0.00271 (0.0109)		-0.0179 (0.0319)		0.0524** (0.0258)		0.0325** (0.0135)
<i>FDI_Shock_{ct}^L</i>		-0.0325 (0.0303)		0.0295 (0.0709)		-0.0804* (0.0452)		-0.0343 (0.0250)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓	✓
Province × Year FE	✓	✓	✓	✓	✓	✓	✓	✓
<i>Dist_Port_c × Post02_t</i>	✓	✓	✓	✓	✓	✓	✓	✓
N	799223	799223	799223	799223	799223	799223	799223	799223
adj. R ²	0.0258	0.0258	0.361	0.361	0.233	0.233	0.105	0.105

Structural Transformation

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

- $Trans_Dummy_{it}$: equal to one if individual i 's father worked in agriculture and individual i works in a non-agricultural sector.

$$Trans_Dummy_{it} = \beta_0 + \beta_1 FDI_Shock_{ct} + \beta_2 X_{it} + \beta_3 City_{ct-1} + \phi_c + \phi_{pt} + \phi_{bt} + \epsilon_{ict} \quad (6)$$

$$Trans_Int_{ct} = \beta_0 + \beta_1 FDI_Shock_{ct} + \beta_2 City_{ct-1} + \phi_c + \phi_{pt} + \phi_{bt} + \epsilon_{ct} \quad (7)$$

Table: The Impacts of FDI on Structural Transformation

Dependent Variable	<i>Trans_Dummy_{it}</i>		<i>Trans_Int_{ct}</i>	
	Industry	Occupation	Industry	Occupation
	(1)	(2)	(3)	(4)
<i>FDI_Shock_{ct}</i>	1.153*** (0.372)	1.041*** (0.387)	0.0930*** (0.0343)	0.114*** (0.0422)
City Lagged Controls	✓	✓	✓	✓
Individual Controls	✓	✓		
City FE			✓	✓
Province × Year FE	✓	✓	✓	✓
Cohort × Year FE	✓	✓		
<i>Dist_Port_c</i> × <i>Post02_t</i>	✓	✓	✓	✓
N	143557	143548	392	392
Pseudo R ²	0.0735	0.0807		
adj. R ²			0.641	0.749

Overview of Robustness Checks

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

① Alternative Measures & Specifications

- Standardized EI
- Alternative Occupational Measures (ISEI)
- Min-Max Normalization
- EI at the City-2 Digit-Industry Level
- City-level Mobility Ratio
- Using FDI Shocks Across All Industries

② Addressing Endogeneity & Selection

- Validity of the Shift-Share IV
- Addressing Co-residence Selection
- Varying the Age Cutoff
- Propensity Score Weighting (PSW)
- Excluding Migrants
- Event Study (Adding 1990 Data)
- Adding 2010 Census Data

③ Controlling for Confounding Factors

- Import Trade Liberalization
- Trade Policy Uncertainty (TPU)
- Hukou Reform
- Number of Colleges
- Placebo Test

Conclusion

- FDI liberalization (2000-2005) **significantly increased** intergenerational occupational mobility.
- FDI → ↑ Demand for **High-Skilled Labor** → ↑ Youth Investment in **Education**.
- This effect is **stronger** for individuals from **low-SES backgrounds** and **underdeveloped regions**.
- FDI can serve as a tool to **reduce** intergenerational inequality.

Additional Heterogeneity

Table: Additional Heterogeneity

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Ethnic Minority Presence in Father's Hometown						
	Minor=1	Minor=0	Minor=1	Minor=0	Minor=1	Minor=0
FDI_Shock_{ct}	0.478* (0.262)	0.394** (0.172)	1.128** (0.458)	0.724*** (0.268)	0.363 (0.527)	-0.262 (0.419)
N	48818	94739	11295	26191	6430	12756
adj R ²	0.127	0.0999	0.0207	0.0301	0.169	0.157
Panel B: Presence of 156 Project SOEs						
	SOE=1	SOE=0	SOE=1	SOE=0	SOE=1	SOE=0
FDI_Shock_{ct}	-0.216 (0.389)	0.467*** (0.132)	0.426 (0.366)	0.947*** (0.263)	0.130 (0.624)	-0.329 (0.412)
N	30749	112808	6973	30513	4274	14912
adj R ²	0.101	0.113	0.0172	0.0301	0.150	0.160
Panel C: Gendered Effects						
	Male	Female	Male	Female	Male	Female
FDI_Shock_{ct}	0.336** (0.146)	0.551*** (0.176)	0.700** (0.286)	0.955*** (0.353)	-0.651 (0.410)	0.378 (0.474)
N	94250	49307	23519	13967	11709	7475
adj R ²	0.107	0.115	0.0206	0.0461	0.160	0.149
City Lagged Controls	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province × Year FE	✓	✓	✓	✓	✓	✓
Cohort × Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓	✓

Introduction

Background

Literature

Review

Data and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Distribution of Industries with Increased FDI Liberalization

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

二分位行业代码	二分位行业名称	受到鼓励的四分位行业数量	受到鼓励的四分位行业的占比
33	有色金属冶炼及压延加工业	13	87
35	通用设备制造业	12	39
36	专用设备制造业	12	29
26	化学原料及化学制品制造业	10	33
37	交通运输设备制造业	9	39
13	农副食品加工业	7	47
40	通信设备、计算机及其他电子设备制造业	7	44
39	电气机械及器材制造业	7	29
34	金属制品业	5	28
14	食品制造业	4	21
42	工艺品及其他制造业	3	23
41	仪器仪表及文化、办公用机械制造业	3	12
28	化学纤维制造业	2	29
15	饮料制造业	2	17
31	非金属矿物制品业	2	7
43	废弃资源和废旧材料回收加工业	1	100
16	烟草制品业	1	33
25	石油加工、炼焦及核燃料加工业	1	25
32	黑色金属冶炼及压延加工业	1	25
22	造纸及纸制品业	1	20
29	橡胶制品业	1	11
19	皮革、毛皮、羽毛(绒)及其制品业	1	10

Distribution of Industries with Increased FDI Liberalization

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

30	塑料制品业	0	0
17	纺织业	0	0
20	木材加工及木、竹、藤、棕、草制品业	0	0
27	医药制造业	0	0
23	印刷业和记录媒介的复制	0	0
21	家具制造业	0	0
18	纺织服装、鞋、帽制造业	0	0
24	文教体育用品制造业	0	0

Table: EI Standardization by Generation

Dependent Variable	$ transfer_{it}^z $			$Upward_{it}^z$		$Downward_{it}^z$	
	All	Upward	Downward	Logit	LPM	Logit	LPM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FDI_Shock_{ct}	0.156*** (0.0593)	0.418*** (0.134)	-0.194 (0.196)	0.667* (0.357)	0.162*** (0.0550)	-0.667* (0.357)	-0.162*** (0.0550)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓	✓	✓
N	143557	37486	19186	143557	143557	143557	143557
adj. R ²	0.111	0.0323	0.156		0.113		0.113
pseudo R ²				0.104		0.104	

Other Measures of Occupational Status

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: Using ISEI to Measure Occupational Status

Dependent Variable	$ transfer_{it}^{ISEI} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
FDI_Shock_{ct}	1.083 (0.665)	1.321* (0.681)	5.530*** (1.851)	5.278*** (1.903)	-2.622 (2.799)	-3.039 (3.021)
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓		✓
N	143557	143557	35995	35995	20613	20613
adj. R ²	0.165	0.165	0.109	0.109	0.105	0.105

Min-Max Normalization

$$EI_Normal_{it} = \frac{EI_{it} - \min(EI_t)}{\max(EI_t) - \min(EI_t)} \times 100 \quad (8)$$

$$|transfer_Normal_{it}| = EI_Normal_{it} - EI_Normal_{it}^f \quad (9)$$

Table: Min-Max Normalization

Dependent Variable	$ transfer_{it}^{pj} $		$Upward_{it}^{pj}$		$Downward_{it}^{pj}$		
	All	Upward	Downward	Logit	LPM	Logit	LPM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FDI_Shock_{ct}	0.431*** (0.143)	0.424** (0.200)	0.506 (0.379)	0.658* (0.342)	0.156*** (0.0542)	-0.0434 (0.275)	-0.00138 (0.0248)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓	✓
Province × Year FE	✓	✓	✓	✓	✓	✓	✓
Cohort × Year FE	✓	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓	✓	✓
N	135297	34595	16248	135297	135297	135297	135297
adj. R ²	0.149	0.0749	0.152		0.146		0.0987
pseudo R ²				0.130		0.123	

EI at the City-2 Digit-Industry Level

Table: EI at the City-2 Digit-Industry Level

Dependent Variable	$ transfer_{it} $			$Upward_{it}$		$Downward_{it}$	
	All	Upward	Downward	Logit	LPM	Logit	LPM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FDI_Shock_{ct}	5.458*** (1.566)	10.11*** (2.929)	-2.128 (4.116)	0.595* (0.0556)	0.159*** (0.0556)	-0.119 (0.235)	-0.0101 (0.0220)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓	✓	✓
N	143557	37821	18852	143557	143557	143557	143557
adj. R ²	0.108	0.0311	0.162		0.131		0.101
pseudo R ²				0.116		0.120	

FDI Shock and City-level Mobility

Table: FDI Shock and City-level Mobility

Dependent Variable	Up_Ratio_{ct}	$Down_Ratio_{ct}$
	(1)	(2)
FDI_Shock_{ct}	0.149*** (0.0535)	-0.0383 (0.0348)
City Lagged Controls	✓	✓
City FE	✓	✓
Province \times Year FE	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓
N	392	392
$adj.R^2$	0.840	0.780

Using FDI Shocks Across All Industries

Table: Intergenerational Occupational Mobility and FDI Shocks Across All Industries

Dependent Variable	$ transfer_{it} $			$Upward_{it}$		$Downward_{it}$	
	All	Upward	Downward	Logit	LPM	Logit	LPM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FDI_Shock_{ct}	2.350*** (0.795)	3.742*** (1.404)	-3.848 (2.445)	3.168 (2.157)	0.978*** (0.353)	0.204 (1.604)	0.0511 (0.132)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓	✓	✓
N	143662	37502	19192	143662	143662	143662	143662
adj. R ²	0.110	0.0265	0.158		0.129		0.103
pseudo R ²				0.115		0.121	

Validating the Shift-Share IV

- The assumption for the Shift-Share IV is that the shocks are assigned as good as random.
- The shocks of the industries cannot be correlated with other local shocks in the primary markets of these industries ([Borusyak, Hull, and Jaravel, 2022](#)).
- City-Level Balance Test: Converted city-level lagged variables to the industry level.

$$\bar{X}_{jt} = \frac{\sum_c \frac{E_{cj1998}}{E_{c1998}} \times X_{ct}}{\sum_c \frac{E_{cj1998}}{E_{c1998}}} \quad (10)$$

Addressing Co-residence Selection

$$\begin{aligned} \text{Coreside}_{ict} = & \beta_0 + \beta_1 \text{FDI_Shock}_{ct} + \beta_2 X_{it} + \beta_3 \text{City}_{ct-1} \\ & + \phi_c + \phi_{pt} + \phi_{bt} + \epsilon_{ict} \end{aligned} \quad (11)$$

Table: Robustness

Panel A: Sample Selection Bias					
Dependent Variable	$Coreside_{it}$		$ transfer_{it} $		
	Probit	Logit	All	Upward	Downward
	(1)	(2)	(3)	(4)	(5)
FDI_Shock_{ct}	0.0211 (0.100)	0.0314 (0.173)	0.485** (0.220)	1.254*** (0.469)	0.208 (0.472)
City Lagged Controls	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓
$Dist_Port_{ct} \times Post02_t$	✓	✓	✓	✓	✓
N	493498	493498	143557	37486	19186
adj. R ²			0.120	0.0490	0.126
pseudo R ²	0.176	0.177			

Panel B: Validity of the Reduced-Form Estimation					
Dependent Variable	ΔFDI_{it}				
	GDP per capita	Ratio of 2nd-industry	Distance to port	Number of university	Teacher-student ratio
	(1)	(2)	(3)	(4)	(5)
Independent Variable	-0.0079 (0.0153)	0.0035 (0.0086)	0.0196* (0.0114)	0.0018 (0.0106)	0.0218 (0.0141)
Year FE	✓	✓	✓	✓	✓
N	820	820	820	820	820
adj. R ²	0.144	0.143	0.147	0.143	0.147

Varying the Age Cutoff

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

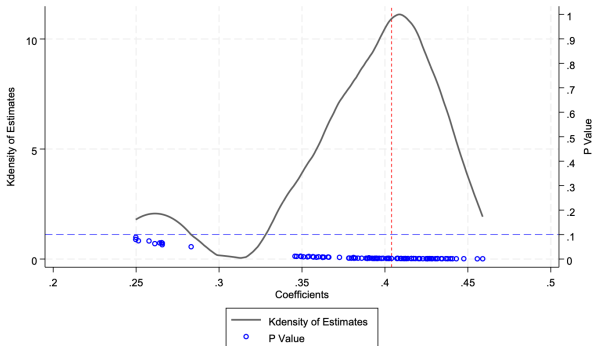
Robustness

Conclusion

Appendix

References

Figure: Lower bound (16-25) & upper bound (35-44)



Propensity Score Weighting(PSW)

① Probit Regression

$$Coreside_{ict} = \theta Z_{ict} + v_{ict} \quad (12)$$

- $Coreside_{ict}$: Indicates co-residence of father and individual.
 - Z_{ict} : Individual-level predictors.
 - Predicted values yield propensity scores.
- ## ② Weighted Least Squares
- Uses inverse propensity scores as weights.
 - Lower scores indicate lower co-residence probability.
 - Higher weights adjust results for non-co-residing families.

Table: Robustness

Panel A: Sample Selection Bias					
Dependent Variable	$Coreside_{it}$		$ transfer_{it} $		
	Probit	Logit	All	Upward	Downward
	(1)	(2)	(3)	(4)	(5)
FDI_Shock_{ct}	0.0211 (0.100)	0.0314 (0.173)	0.485** (0.220)	1.254*** (0.469)	0.208 (0.472)
City Lagged Controls	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓
$Dist_Port_{ct} \times Post02_t$	✓	✓	✓	✓	✓
N	493498	493498	143557	37486	19186
adj. R ²			0.120	0.0490	0.126
pseudo R ²	0.176	0.177			

Panel B: Validity of the Reduced-Form Estimation					
Dependent Variable	ΔFDI_{it}				
	GDP per capita	Ratio of 2nd-industry	Distance to port	Number of university	Teacher-student ratio
	(1)	(2)	(3)	(4)	(5)
Independent Variable	-0.0079 (0.0153)	0.0035 (0.0086)	0.0196* (0.0114)	0.0018 (0.0106)	0.0218 (0.0141)
Year FE	✓	✓	✓	✓	✓
N	820	820	820	820	820
adj. R ²	0.144	0.143	0.147	0.143	0.147

Exclusion of Migrants

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: Exclusion of Migrant Samples

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
FDI_Shock_{ct}	0.299** (0.126)	0.322** (0.130)	0.915*** (0.227)	0.852*** (0.240)	-0.0868 (0.321)	-0.143 (0.337)
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓		✓
N	138658	138658	34516	34516	18502	18502
adj. R ²	0.118	0.118	0.0260	0.0262	0.158	0.159

Event Study and Adding 1990 Census Data

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: Event Study and Extended Baseline Regression with 1990 Data

Dependent Variable	$ transfer_{it} $			
	(1)	(2)	(3)	(4)
$FDI_Shock_{c2005} \times \mathbf{1}\{t = 1990\}$	0.0244 (0.104)	-0.0830 (0.103)		
$FDI_Shock_{c2005} \times \mathbf{1}\{t = 2005\}$	0.304** (0.140)	0.342** (0.136)		
FDI_Shock_{ct}			0.285** (0.139)	0.403*** (0.127)
City Lagged Controls		✓		✓
Individual Controls	✓	✓	✓	✓
City FE	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓
N	806426	806426	806426	806426
adj. R ²	0.112	0.112	0.112	0.112

Adding 2010 Census Data

Introduction

Background

Literature
ReviewData and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Table: Regression Results with 2010 Census Data

Dependent Variable	$ transfer_{it} $			$Upward_{it}$		$Downward_{it}$	
	All	Upward	Downward	Logit	LPM	Logit	LPM
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
FDI_Shock_{ct}	0.184* (0.104)	0.692*** (0.202)	-0.0478 (0.264)	0.127 (0.282)	0.0772* (0.0433)	-0.459** (0.219)	-0.0354* (0.0204)
City Lagged Controls	✓	✓	✓	✓	✓	✓	✓
Individual Controls	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$	✓	✓	✓	✓	✓	✓	✓
N	394725	157715	52581	394725	394725	394725	394725
$adj.R^2$	0.0823	0.0243	0.123		0.115		0.0797
$pseudoR^2$				0.0930		0.0936	

Controlling For Import Trade Liberalization

$$Tariff_Input_c = \sum_j \frac{E_{cj1998}}{E_c1998} \times Input_{j,2001}$$

$$Tariff_Output_c = \sum_j \frac{E_{cj1998}}{E_c1998} \times Output_{j,2001}$$

Table: Controlling For Import Trade Liberalization

Dependent Variable	transfer _{it}					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>FDI_Shock_{ct}</i>	0.359** (0.145)	0.443*** (0.148)	0.731*** (0.227)	0.730*** (0.244)	-0.302 (0.318)	-0.312 (0.329)
<i>Tariff_Input_c × Post02_t</i>	✓	✓	✓	✓	✓	✓
<i>Tariff_Output_c × Post02_t</i>	✓	✓	✓	✓	✓	✓
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province × Year FE	✓	✓	✓	✓	✓	✓
Cohort × Year FE	✓	✓	✓	✓	✓	✓
<i>Dist_Port_c × Post02_t</i>		✓		✓		✓
N	143557	143557	37486	37486	19186	19186
adj. R ²	0.109	0.110	0.0265	0.0266	0.158	0.158

Controlling For Trade Policy Uncertainty

Table: Controlling For Trade Policy Uncertainty

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
FDI_Shock_{ct}	0.306** (0.132)	0.379*** (0.137)	0.803*** (0.218)	0.728*** (0.237)	-0.185 (0.325)	-0.253 (0.338)
$TPU_c \times Post02_t$	✓	✓	✓	✓	✓	✓
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓		✓
N	143557	143557	37486	37486	19186	19186
adj. R ²	0.110	0.110	0.0265	0.0267	0.158	0.158

Exclusion of Hukou Reform

Table: Controlling For Hukou Reform

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
FDI_Shock_{ct}	0.318** (0.122)	0.392*** (0.129)	0.837*** (0.217)	0.767*** (0.230)	-0.157 (0.320)	-0.213 (0.329)
Hukou Reform	✓	✓	✓	✓	✓	✓
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓		✓
N	143557	143557	37486	37486	19186	19186
adj. R ²	0.110	0.110	0.0264	0.0267	0.158	0.158

Controlling for the Number of Colleges

Table: Controlling for the Number of Colleges

Dependent Variable	$ transfer_{it} $					
	All		Upward		Downward	
	(1)	(2)	(3)	(4)	(5)	(6)
FDI_Shock_{ct}	0.351*** (0.128)	0.413*** (0.133)	0.837*** (0.226)	0.763*** (0.233)	-0.0986 (0.327)	-0.175 (0.334)
Number of Colleges	✓	✓	✓	✓	✓	✓
City Lagged Controls		✓		✓		✓
Individual Controls	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓
Province \times Year FE	✓	✓	✓	✓	✓	✓
Cohort \times Year FE	✓	✓	✓	✓	✓	✓
$Dist_Port_c \times Post02_t$		✓		✓		✓
N	143557	143557	37486	37486	19186	19186
adj. R ²	0.110	0.110	0.0264	0.0267	0.158	0.158

Placebo Test

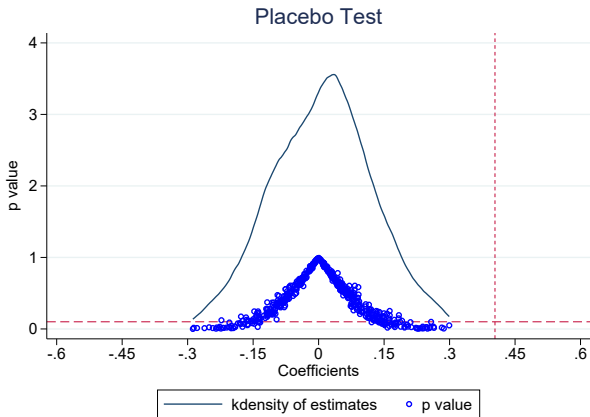


Figure: Placebo Test

Introduction

Background

Literature
Review

Data and
Empirical
Strategy

Data

Main Results

Mechanisms

Robustness

Conclusion

Appendix

References

Thanks!

- Adermon, Adrian, Mikael Lindahl, Marten Palme, Of Economics Department, För Nationalekonomi Med Statistik Institutionen, Handelshögskolan, and Universitet Göteborgs. 2021. "Dynastic Human Capital, Inequality, and Intergenerational Mobility." The American Economic Review 111 (5):1523–1548.
- Ahsan, Reshad N. and Arpita Chatterjee. 2017. "Trade Liberalization and Intergenerational Occupational Mobility in Urban India." Journal of International Economics 109:138–152.
- Becker, G. S. and N. Tomes. 1976. "Child Endowment and the Quality and Quantity of Children." Journal of Political Economy 84:S143–S162.
- Becker, Gary S. and Nigel Tomes. 1986. "Human Capital and the Rise and Fall of Families." Journal of Labor Economics 4 (3, Part 2):S1–S39.
- Black, Sandra E., Neil Duzett, Adriana Lleras-Muney, Nolan G. Pope, and Joseph Price. 2023. "Intergenerational Correlations in Longevity." National Bureau of Economic Research Working Paper Series No. 31034.
- Blanden, Jo, Paul Gregg, and Lindsey Macmillan. 2007. "Accounting for Intergenerational Income Persistence: Noncognitive Skills, Ability and Education." The Economic Journal 117 (519):C43–C60.
- Borusyak, K., P. Hull, and X. Jaravel. 2022. "Quasi-Experimental Shift-Share Research Designs." Review of Economic Studies 89 (1):181–213.
- Cesar, Andres, Matias Ciaschi, Guillermo Falcone, and Guido Neidhöfer. 2023. "Trade Shocks and Social Mobility: The Intergenerational Effect of Import Competition in Brazil." ZEW - Centre for European Economic Research Discussion Paper No.42.
- Chen, Zhihong, Ying Ge, Huiwen Lai, and Chi Wan. 2013. "Globalization and Gender Wage Inequality in China." World Development 44:256–266.
- Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. 2014. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States *." The Quarterly Journal of Economics 129 (4):1553–1623.
- Connolly, Marie, Miles Corak, and Catherine Haeck. 2019. "Intergenerational Mobility Between and Within Canada and the United States." Journal of Labor Economics 37:S595–S641.
- Fan, Haichao, Zheng Fang, Bihong Huang, and Mohan Zhou. 2022. "Prevalence of SOEs and Intergenerational Income Persistence: Evidence from China." World Economy 45 (1):276–291.
- Fan, Yi, Junjian Yi, and Junsen Zhang. 2021. "Rising Intergenerational Income Persistence in China." American Economic Journal: Economic Policy 13 (1):202–230.
- Feenstra, Robert C. and Gordon H. Hanson. 1997. "Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras." Journal of International Economics 42 (3):371–393.

- Güell, Maia, Michele Pellizzari, Giovanni Pica, and José V. Rodríguez Mora. 2018. "Correlating Social Mobility and Economic Outcomes." The Economic Journal 128 (612):F353–F403.
- Jia, Ruixue, Xiaohuan Lan, and Gerard Padró I. Miquel. 2021. "Doing Business in China: Parental Background and Government Intervention Determine Who Owns Business." Journal of Development Economics 151:102670.
- Johansson, Anders C. and Dan Liu. 2020. "Foreign Direct Investment and Inequality: Evidence from China's Policy Change." The World Economy 43 (6):1647–1664.
- Leblebicioğlu, Asli and Ariel Weinberger. 2021. "Openness and Factor Shares: Is Globalization Always Bad for Labor?" Journal of International Economics 128.
- Lu, Y., Z. G. Tao, and L. M. Zhu. 2017. "Identifying FDI Spillovers." Journal of International Economics 107:75–90.
- Ma, Lin and Dimitrije Ruzic. 2020. "Globalization and Top Income Shares." Journal of International Economics 125.
- Mocetti, S., G. Roma, and E. Rubolino. 2022. "Knocking on Parents' Doors Regulation and Intergenerational Mobility." Journal of Human Resources 57 (2):525–554.
- Mohammed, A. R. Shariq. 2019. "Does a Good Father Now Have to Be Rich? Intergenerational Income Mobility in Rural India." Labour Economics 60:99–114.
- Nakamura, Emi, József Sigurdsson, and Jón Steinsson. 2022. "The Gift of Moving: Intergenerational Consequences of a Mobility Shock." The Review of Economic Studies 89 (3):1557–1592.
- Neidhöfer, Guido, Joaquín Serrano, and Leonardo Gasparini. 2018. "Educational Inequality and Intergenerational Mobility in Latin America: A New Database." Journal of Development Economics 134:329–349.
- Pan-Long, Tsai. 1995. "Foreign Direct Investment and Income Inequality: Further Evidence." World Development 23 (3):469–483.
- Ward, Zachary. 2022. "Internal Migration, Education, and Intergenerational Mobility: Evidence from American History." The Journal of Human Resources 57 (6):1981–2011.