

# Global Banks in a Trade Shock: From Local Decline to Foreign Boom

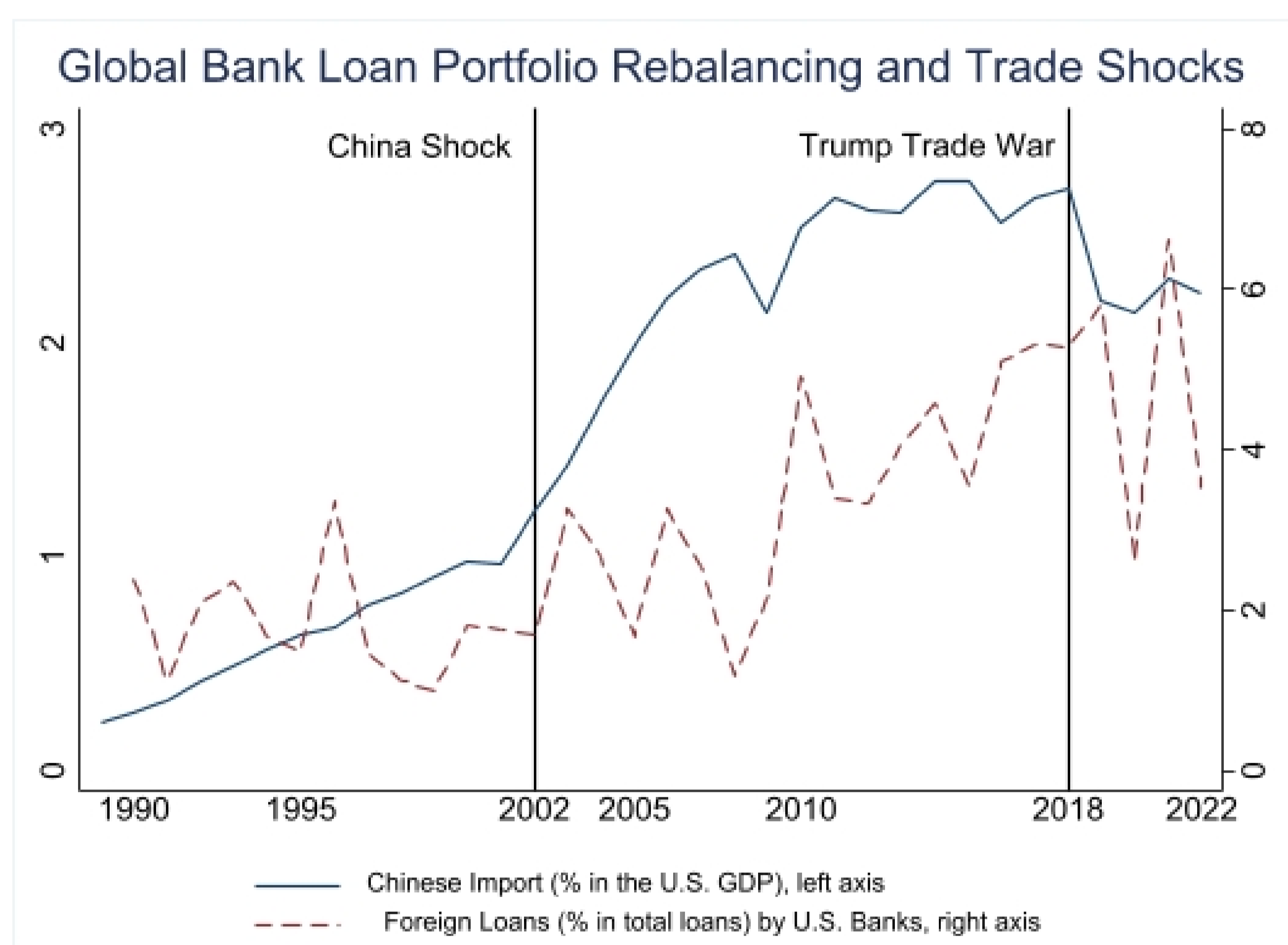
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## Abstract

We examine how global banks respond to trade shocks and their consequences. When rising imports decrease local demand for import-competing manufacturers, global banks shift their loan portfolios from the domestic to the global market. This behavior amplifies the negative effects of trade shocks on the local economy while stimulating growth in foreign markets. We test hypothesis using global syndicated loan data, focusing on China's accession to the WTO and recent episodes of the Trump trade wars.

## Motivation

- Deglobalization in trade is underway after a long period of globalization.
- Global banks are crucial to the global economy.



## Research Questions

- How do global banks respond to trade shocks?
- Implications for domestic and foreign markets.

## Approaches

- Combine *Dealscan* loan-level data and *Worldscope* listed firm-level data.
- Difference-in-differences estimation around the China shock in 2002.
- Results are consistent using the recent Trump trade war shock.

## Key Findings

### 1 China import shock lowers credit demand for U.S. firms.

$$Y_{it} = \beta * \text{Post}_{2002} * IP_r * IP_s + \text{Controls}_{it} + \varepsilon_{it} \quad (1)$$

- $Y_{it}$ : loan characteristics issued to U.S. firms
- $IP_r$ : regional-level exposure to China's import penetration (*Autor, Dorn and Hanson 2013 AER*)
- $IP_s$ : sectoral-level exposure to China's import penetration (*Hombert and Matray 2018 JF*)
- Data: loans issued by all global banks to the U.S. firms (1990–2007)

	(1)	(2)	(3)
	Spread	Amount	Maturity
$\text{Post}_{2002} * IP_r * IP_s$	-0.008** (0.003)	-0.027*** (0.005)	0.008*** (0.002)
$IP_r * IP_s$	-0.007*** (0.002)	0.001 (0.004)	-0.008*** (0.001)
$\text{Post}_{2002} * IP_r$	0.016*** (0.002)	0.009*** (0.003)	-0.004*** (0.001)
$\text{Post}_{2002} * IP_s$	-0.021 (0.015)	-0.000 (0.030)	-0.012 (0.009)
$IP_r * IP_s$	-0.004** (0.001)	-0.002 (0.003)	0.003*** (0.001)
Constant	5.053*** (0.003)	5.925*** (0.005)	1.500*** (0.002)
Bank $\times$ Industry	Y	Y	Y
Bank $\times$ Year	Y	Y	Y
Observations	2369245	2541475	2443985
Adjusted $R^2$	0.494	0.509	0.323

### 2 U.S. banks increase lending to non-US firms.

$$Y_{it} = \beta * \text{Post}_{2002} * IP_s * 1_{\text{Non-U.S.}} + \text{Controls}_{it} + \varepsilon_{it} \quad (2)$$

- $Y_{it}$ : loan characteristics issued to all firms by U.S. banks
- $IP_s$ : sectoral-level exposure to China's import penetration (*Hombert and Matray 2018 JF*)
- $1_{\text{Non-U.S.}}$ : dummy for loans issued to non-U.S. firms
- Data: loans issued by U.S. banks to all firms (1990–2007)

	(1)	(2)	(3)
	Spread	Amount	Maturity
$\text{Post}_{2002} * IP_s * 1_{\text{Non-U.S.}}$	-0.084*** (0.018)	0.226*** (0.030)	0.064*** (0.011)
$IP_s * 1_{\text{Non-U.S.}}$	0.090*** (0.016)	-0.243*** (0.028)	-0.057*** (0.011)
$IP_s$	0.040*** (0.002)	-0.011*** (0.003)	0.044*** (0.001)
$1_{\text{Non-U.S.}}$	-0.121*** (0.007)	0.155*** (0.011)	-0.007* (0.004)
Constant	5.236*** (0.001)	6.000*** (0.002)	1.518*** (0.001)
Borrower Country $\times$ Year	Y	Y	Y
Borrower Country $\times$ Bank	Y	Y	Y
Observations	907182	1039928	1008642
Adjusted $R^2$	0.336	0.270	0.152

### 3 More U.S. loans increase foreign firm's real activity.

$$y_{ft} = \beta_0 + \beta_1 \text{Post}_{2002} * \text{US Loans}_{ft} + \text{Control}_{ft} + \varepsilon_{ft} \quad (3)$$

- $y_{ft}$ : firm-level outcomes
- $\text{US Loans}_{ft}$ : the number of US loans received by the non-US firms
- Data: Non-US listed firms balance sheet info (1990–2007)

	(1)	(2)	(3)	(4)
	TFP	ROA	Investment	EBIT/Sale
$\text{Post}_{2002} * \text{US Loans}$	0.346*** (0.131)	0.064** (0.030)	0.024 (0.025)	0.313 (0.272)
US Loans	-0.350*** (0.120)	-0.035 (0.028)	-0.011 (0.023)	-0.102 (0.252)
Constant	-4.415*** (0.260)	-0.304*** (0.058)	-0.201*** (0.048)	-2.043*** (0.524)
Firm FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	19197	21718	21398	21006
Adjusted $R^2$	0.429	0.089	0.030	0.124