Discussion of "EXIM's Exit: The Real Effects of Trade Financing by Export Credit Agencies"

By Kabir, Matray, Müller, and Xu

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Adam Smith Workshop April 19, 2024

Industrial policy has become relevant again



Financial Times, 01/30/2023

- Use of industrial policy has increased 46% of all government policies in 2019.
 - Policies that target transformation of economic activity
 - Goals: boost GDP, exports, investment, growth, ...

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- Economists tend to be more skeptical:
 - Better than tariffs.
 - 2. But gains from IP are small.
 - 3. Also, implementation is likely to be problematic.

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- Should we conduct industrial policy?
 - Geopolitics, industrial strategy, political economy, ...

Goal vs. implementation.

Harrison and Rodríguez-Clare (2010)

Bartelme et al. (2021)

Mueller (2023)

Focus on trade financing.

- US: state-backed trade financing represents \$212 billion in 2000–2019.
 - Mostly loans and loan guarantees to importers of US goods.
- Usual criticisms of industrial policy apply!
- One extra criticism most aid is directed at developed countries.
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This paper: Does government trade financing matter?

Shock: EXIM quorum lapse between 2015 and 2019.

- EXIM provides aid to exporters with an annual exposure cap.
- Most aid is in the form of loan guarantees to foreign importers.
- EXIM board must have at least 3 members to approve large transactions.
- Republican opposition led to a lack of quorum.

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Data: US firms.

- Matched Compustat with EXIM transaction data.
- Data on exports.

Identification: compare firms that received aid vs. those that did not.

- Matching + DiD.
- Using only US firms in Compustat.
- Partially controlling for destination-level confounders.
- Use global sales as an outcome variable.

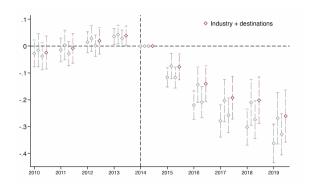
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Key questions:

- 1. Does the removal of EXIM aid have an effect on US firms?
- 2. Which firms are most affected?
- 3. Was EXIM picking the "right" firms?

Result 1 - global sales decrease



- Average effect = 18%.

Result 2 - results driven by financially constrained exporters

Dependent variable	Global sales				
Financing frictions proxy:		Leverage	Dividends	Hoberg and Maskimovic (2015)	
	(1)	(2)	(3)	(4)	
EXIM×Post	-0.18*** (0.037)				
$EXIM{\times}Post{\times}Constrained$	` '	-0.16**	-0.21**	-0.25***	
		(0.077)	(0.087)	(0.081)	
Fixed Effects (not interacted)					
Firm	✓	_	_	_	
Destinations×Year	\checkmark	_	_	_	
Industry×Year	✓	_	_	_	
$Treated \times Year$	_	✓	✓	✓	
Fixed Effects (interacted)					
Firm	_	✓	✓	✓	
Destinations×Year	_	✓	✓	✓	
$Industry \times Year$	_	✓	✓	✓	
Observations	26,732	25,592	25,297	25,438	

Result 3 - EXIM was picking the right firms

Dependent variable	Capital			
Sample	Low	High	All	
	(1)	(2)	(3)	
EXIM×Post	-0.044	-0.25***		
	(0.055)	(0.061)		
$Treated \times Post \times MRPK$			-0.21***	
			(0.087)	
Fixed Effects (interacted)				
Firm	\checkmark	\checkmark	\checkmark	
Industry×Year	\checkmark	✓	\checkmark	
Destinations×Year	\checkmark	\checkmark	\checkmark	
Treated×Year	_	_	\checkmark	
Observations	13,782	13,691	27,473	

- Sales decrease by more for firms with high MRPK.

$$\frac{\Delta \mathsf{Sales}}{\mathsf{Sales}} = \frac{\Delta \mathsf{Sales}_{\mathsf{not} \; \mathsf{exim}}}{\mathsf{Sales}} + \frac{\Delta \mathsf{Sales}_{\mathsf{exim}}}{\mathsf{Sales}}$$

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ATT:
$$(\theta - 1) \times \frac{\mathsf{Sales}_{\mathsf{exim}}}{\mathsf{Sales}}$$

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- Best case scenario: $\theta = 1$ and ATT = 0.

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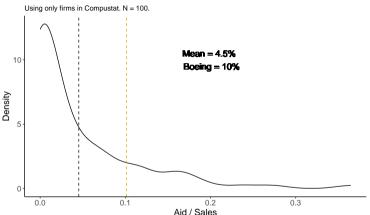
Counterfactual:
$$\frac{\Delta Sales_{not\ exim}}{Sales} = \underbrace{g^{counterfactual}}_{control\ group} + \theta \frac{Sales_{exim}}{Sales}, \theta \in [0, 1]$$

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- Worst case scenario: $\theta = 0$ and all sales backed by EXIM disappear.
- Best case scenario: $\theta = 1$ and ATT = 0.
- Let's compute $\frac{Sales_{exim}}{Sales}$.

Average share of EXIM in total aid is around 5%





- Match around 60% of total aid before shock.
- Aid covers 85% of exports \implies share = 4.5/0.85 = 5.3%.

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Using structure, results predict that complementarities account for at least 2/3 of result.

- Maximum drop in sales generated by EXIM under separability is 5%.

Control group

If we narrow in on largest recipient of aid (Boeing):

Benmelech and Monteiro (2023)

- Use Airbus as control group.
- Sales decrease by 4% relative to 10% share $\implies \theta = 0.6$.
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What can be driving this?

- Potential selection bias: who wants EXIM aid?
- Matching on foreign firms rather than US firms.

Result: financially constrained exporters more affected by shock.

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- 86% of aid are loan guarantees to **importers**.
- From perspective of importer, this is a negative demand shock.
- Assumption of regression is that shock is identical to all treated firms.
- Model in paper is about EXIM lowering cost of capital.

$$\mathsf{MRPK} = \underbrace{\omega}_{\mathsf{wedge} \geq 1} \times (1 + r)$$

- Simple model with a collateral constraint.
- Can be generalizable.
- Wedge is larger for financially constrained firms.
- Introduces permanent differences in MRPK.

How do demand shocks interact with financial frictions?

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Constrained firm: $\omega > 1$.

- End of EXIM is negative demand shock \implies cash on hand $\downarrow \implies \omega \uparrow$.
- End of EXIM aid \Longrightarrow MRPK \downarrow , $\omega \uparrow \Longrightarrow K \downarrow \downarrow \Longrightarrow$ Sales $\downarrow \downarrow$.
- Financially constrained firms should experience sharper drop in sales.

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- Financially constrained firms should experience sharper drop in sales.
- In line with empirical results!

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- Result 3 = Result 2.

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- Result 3 = Result 2.
- Two-way split MPRK and financial frictions.
- Maybe use TFP?

Other sources of misallocation

Misallocation across importers: within firm.

- Most of EXIM aid is directed at developed countries.
- Elasticity of demand wrt EXIM aid is likely to be low.
- For Boeing, we find Elasticity \approx 0.
- Efficiency gains if we move aid away from developed countries.

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Misallocation across sectors

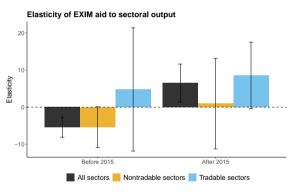
- Maybe within sector EXIM gets it right.
- What about aid across sectors?

Aid across sectors

$$\log ext{Aid amount}_{ ext{\it sdt}} = \lambda_{ ext{\it dt}} + lpha_{ ext{\it s}} + \gamma imes \log ext{Output}_{ ext{\it st}} + arepsilon_{ ext{\it sdt}}$$

Aid across sectors

$$\log \text{Aid amount}_{sdt} = \lambda_{dt} + \alpha_s + \gamma \times \log \text{Output}_{st} + \varepsilon_{sdt}$$



- EXIM was supporting underperforming sectors.
- Shifts after 2015 shock.

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- Topic is hot in policy circles. Time for economists to weigh in!
- Discussion of effectiveness and importance of industrial policy is very important.
- I find the misallocation avenue very promising.
 - This is what policymakers need!
 - However, not enough to compare firms within sectors.