The Unintended Consequences of Financial Sanctions

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discussion by

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[†]The views expressed here are those of the authors and do not necessarily reflect those of the Board of Governors or the Federal Reserve System.

Motivation

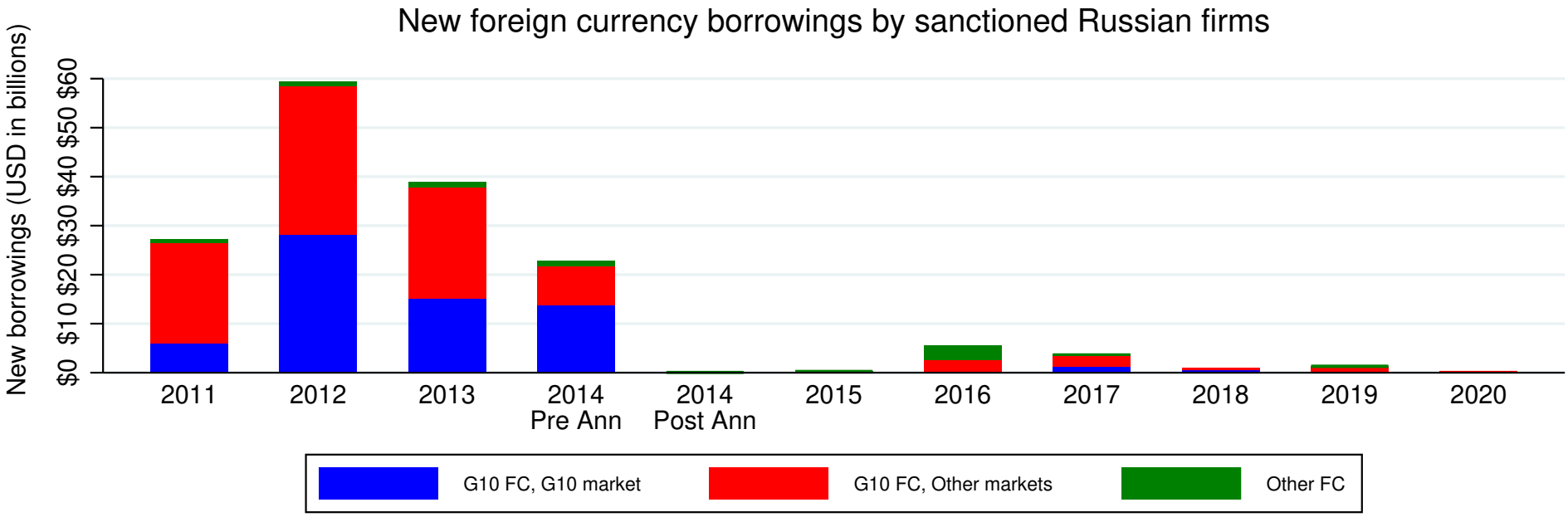
- Meticulous and in-depth analysis of financial sanctions and firm performance
- Enlightening read with a lot to praise!
- Ultimate question:

  Do targeted financial sanctions live up to their premise—hurt targets with minimal collateral damage?

- Main takeaways:
  - Targeted firms outperform unsanctioned peers.
  - Mechanism: Targets, denied external funding, compensate it with domestic resources, crowding out funds for the rest.
  - Size-dependent borrowing constraints are key for economic theory.

The Impact of Sanctions

- A sudden stop of external borrowing



Heterogeneous Impact

- Differences-in-differences analysis of borrowing and asset size

$$Y_{it} = \alpha_i + \eta_t + \gamma \cdot Sanctioned_{it} + \epsilon_{it}$$

	New Foreign Borrowings	Assets	Domestic Borrowings
Sanctioned	-2.472***	0.287***	0.706***
	(0.377)	(0.044)	(0.249)
Observations	7,280	72,293	72,456
Adjusted R^2	0.319	0.653	0.658

- Size of sanctioned firms increased relatively (cf. Ahn and Ludema, 2020).
- A wide range of robustness exercises with further insights

The Model and Quantitative Results

Model:

- A model of heterogeneous firms (productivity) and credit allocation
  - Firm productivity $\Rightarrow$ firm size
- Firms borrow to finance working capital...
  - Endogenous selection into domestic or foreign markets
  - Fixed cost κ of foreign borrowing $\Rightarrow$ sorting: large firms borrow externally
- ... but subject to *size-dependent* borrowing constraints
  - More binding for small/less productive firms
  - More binding for less productive when interest rate on debt $\Uparrow \left(\frac{\partial \Gamma}{\partial r^b \partial z} > 0 \right)$.

Findings:

- Quantitatively, it can account for the empirical magnitude of heterogeneous impact of sanctions on asset size
- A 1% drop in Y and 0.8% drop in TFP with 1% loss in ceq welfare

Comments on Empirical Analysis

1. Additional descriptive statistics
   - Foreign borrowing by sanctioned firms over total domestic borrowing
   - Actual patterns around sanctions (firms' assets, etc.)
2. Emphasize insights from robustness specifications
   - Adding size and industry controls (B1)
   - Role of access to international markets (B4)

	Assets
Sanctioned	0.291***
	(0.045)
Sanctioned × External-debt-to-assets$_{-1}$	-0.558
	(1.167)
Never-sanctioned × Post-2014 × External-debt-to-assets$_{-1}$	0.524***
	(0.184)
Observations	72,293
Adjusted R^2	0.653

3. Differences between banks and non-banks
4. Crowding-out vs. tighter credit conditions

Comments on Model and Quantitative Analysis

1. Borrowing constraints and dynamic losses
   - Gopinath et al. (2017): size-dependent constraints with forward-looking firm investment, misallocation of credit
   - Akcigit and Kerr (2018): smaller firms are more innovative
   - Schmitz (2021): amplification of crises through firm heterogeneity in innovativeness

2. Quantitative implications and exercises
   - Most emphasis on welfare
   - Alternative sanction policies
   - Russian' governments response

3. The main statistic as untargeted moment

Conclusion

- Key finding: Targets' capacity impaired less, the brunt born by smaller untargeted firms
- Best alternative seems to be sanctions on critical supplies
  - Real effect on productive capacity
  - Can the model help evaluate these considerations?
- *Enjoy reading the paper!*