

OFFICE CONTACT INFORMATION

MIT Department of Economics  
77 Massachusetts Avenue, E52-301  
Cambridge, MA 02139

[gpgj@mit.edu](mailto:gpgj@mit.edu)

<http://economics.mit.edu/grad/gpgj>

HOME CONTACT INFORMATION

540 Memorial Drive, apt 804  
Cambridge, MA, 02139  
Mobile: 617-913-6606

MIT PLACEMENT OFFICER

Professor Robert Townsend

[rtownsen@mit.edu](mailto:rtownsen@mit.edu)

617-452-3722

MIT PLACEMENT ADMINISTRATOR

Ms. Julia Martyn-Shah

[jmshah@mit.edu](mailto:jmshah@mit.edu)

617-253-8787

**DOCTORAL STUDIES** Massachusetts Institute of Technology (MIT)  
PhD, Economics, Expected completion June 2020  
DISSERTATION: "Bank Competition and Credit Policy"

## DISSERTATION COMMITTEE AND REFERENCES

Professor Robert Townsend  
MIT Department of Economics  
77 Massachusetts Avenue, E52-538  
Cambridge, MA 02139  
617-452-3722  
[rtownsen@mit.edu](mailto:rtownsen@mit.edu)

Professor Alp Simsek  
MIT Department of Economics  
77 Massachusetts Avenue, E52-552  
Cambridge, MA 02139  
617-452-4836  
[asimsek@mit.edu](mailto:asimsek@mit.edu)

Professor Arnaud Costinot  
MIT Department of Economics  
77 Massachusetts Avenue, E52-534  
Cambridge, MA 02139  
617-253-3399  
[costinot@mit.edu](mailto:costinot@mit.edu)

Damiano Sandri  
IMF Deputy Division Chief, WEO  
700 19th Street NW  
Washington, DC 20431  
202-623-7698  
[dsandri@imf.org](mailto:dsandri@imf.org)

**PRIOR EDUCATION** Pontifical Catholic University of Rio de Janeiro (PUC-Rio) 2014  
MSc in Economics

Insper Institute 2011  
BSc in Economics

**CITIZENSHIP** Brazilian **GENDER:** Male

**LANGUAGES** Portuguese (Native), English (Fluent)

**FIELDS** Primary Field: Macroeconomics  
Secondary Field: Banking

<b>TEACHING EXPERIENCE</b>	14.451 Dynamic Optimization Methods (Graduate, MIT) Teaching Assistant to Alp Simsek, Fall	2016-19
	14.54 International Trade (Undergraduate, MIT) Teaching Assistant to Arnaud Costinot, Fall	2018-19
	14.02 Principles of Macroeconomics (Undergraduate, MIT) Teaching Assistant to James Poterba, Spring	2018
	14.581 International Trade (Graduate, MIT) Teaching Assistant to Arnaud Costinot and David Atkin, Fall	2016
	Organizational Economics (MBA, Insper) Teaching Assistant to João Manoel Pinho de Mello	2014
	Math Camp (Graduate, PUC-Rio) Teaching Assistant to Alex Castro, Summer	2014
	Microeconomics II (Graduate, PUC-Rio) Teaching Assistant to Vinicius Carrasco, Fall	2013
<b>RELEVANT POSITIONS</b>	IMF Fund Internship Program	2018
	Research Assistant to Professor Robert M. Townsend	2015-17
<b>FELLOWSHIPS, HONORS, AND AWARDS</b>	Macro Financial Modelling Dissertation Fellowship, BFI	2018
	Emma Kastle Crob Fellowship, MIT	2015-16
	Graduate Fellowship, Department of Economics, MIT	2014-15
	FAPERJ Fellowship, MSc in Economics, PUC-Rio	2013-14
	CNPq Scholarship, MSc in Economics, PUC-Rio	2012-13
	First place in the National Graduate Admission Exam (ANPEC)	2012
<b>CONFERENCES AND SEMINAR PRESENTATIONS</b>	SAET (2016), IADB Workshop on Cost of Credit (2018), Central Bank of Brazil (2018, 2019)	
<b>RESEARCH PAPERS</b>	<p><b>“Bank Competition, Cost of Credit and Economic Activity: Evidence from Brazil” (Job Market Paper)</b> (joint with Bernardus Van Doornik)</p> <p>We use heterogeneous exposure to large bank mergers to estimate the effect of bank competition on both financial and real variables in local Brazilian markets. Using detailed administrative data on loans and firms, we employ a difference-in-differences empirical strategy to identify the causal effect of bank competition. Following M&amp;A episodes, spreads increase and there is persistently less lending in exposed markets. We also find that bank competition has real effects: a 1% increase in spreads leads to a 0.2% decline in employment. We develop a tractable model of heterogeneous firms and concentration in the banking sector. In our model, the semi-elasticity of credit to lending rates is a sufficient statistic for the effect of concentration on credit and output. We estimate this elasticity and show that the observed effects in the data and predicted by the model are consistent. Among other counterfactuals, we show</p>	

that if the Brazilian lending spread were to fall to the world level, output would increase by approximately 5%.

### **“Optimal Contracting and Spatial Competition among Financial Service Providers”**

(joint with Robert Townsend and Victor Zhorin)

We present a contract-based model of industrial organization for markets characterized by information and other frictions (Moral Hazard, Adverse Selection, Limited Commitment etc.) and different market structures (Monopoly, Oligopoly, Competition), the latter driven by spatial costs, idiosyncratic preferences, and number of financial service providers. Our methods work in a variety of settings and links to recent literature: changes in the number of bank branches in the US or China, experiments varying intermediation in Kenya, and competition of local relationship banks with less-informed national banks. Model simulations show that interpreting reduced form evidence in a setting with interaction of contracting frictions and market structure can be misleading. Therefore, we derive a likelihood estimator for the structural parameters that determine contracting frictions and market structure and apply this to the Townsend Thai data on entrepreneurs and bank locations. Reducing spatial costs by 50% is equivalent to increasing consumption by 4.85%, which we compare to other policies. We also establish methods that do not need to specify both frictions and market structure depending on the counterfactual of interest and available data.

### **“Lending Rate Caps in Emerging Markets: Good for Growth?”**

(joint with Damiano Sandri)

In many emerging markets, governments try to increase credit access and stimulate economic growth by imposing caps on lending rates. We analyze these policies by extending workhorse models with financial frictions to include a banking sector with market power. Caps are beneficial as they reduce credit costs but are also harmful as they crowd out risky borrowers which can access credit only at high interest rates, and thus have an ambiguous effect in current output and capital accumulation. To prevent crowding out of risky borrowers, in some emerging markets banks are permitted to charge uncapped rates on a share of their loans. This allows banks to service risky borrowers but generates capital misallocation since banks provide capped loans to less productive borrowers, while charging higher rates to more productive ones. In a calibrated version of the model, we show that the optimal policy to maximize steady state welfare involves relatively high caps on a large share of bank loans. The optimal policy decreases output today but increases capital accumulation through a lower cost of credit and thus output in the future. The model also reveals that caps may have a perverse effect of reinforcing market power in the banking sector since they may force less profitable banks to exit the market. Thanks to tractable aggregation properties, the framework can be used to analyze a broad set of alternative credit policies.

**RESEARCH IN  
PROGRESS****“Credit and Economic Activity: The Role of Public Banks”**  
(joint with Felipe Netto)

Despite evidence that lack of competition in the banking sector is detrimental for the economy, there is a limited understanding of the role of the public banks in affecting access to credit and economic activity. In this paper, we use a large-scale change in lending policy from public banks in Brazil to understand their role. Starting in March 2012, the Brazilian government attempted to use state-owned banks to induce competition in the financial sector. Specifically, public banks unexpectedly increased their credit levels by 20% and reduced interest rates by 7 percentage points when compared with private banks. Using detailed administrative data on firms and market level data on lending, we employ a difference-in-differences empirical strategy to identify the causal effect of the changes in lending policy by public banks by comparing banking markets with heterogeneous dependence of public banks. We find a large increase in lending consistent with the objective of the policy, but no effect on employment or wages, which indicates a limited role for public banks in affecting economic activity.