## SARAH GERTLER

#### **OFFICE CONTACT INFORMATION**

MIT Department of Economics 77 Massachusetts Avenue, E52-301 Cambridge, MA 02139 sgertler@mit.edu https://economics.mit.edu/people/phd-students/ sarah-gertler 617-334-5086

**MIT PLACEMENT OFFICER** 

**MIT PLACEMENT ADMINISTRATOR** Professor David Autor Ms. Shannon May dautor@mit.edu shmay@mit.edu 617-253-4669 617-324-5857

DOCTORAL Massachusetts Institute of Technology (MIT) **STUDIES** PhD, Economics, Expected completion June 2025

DISSERTATION: "Essays in International Macroeconomics"

DISSERTATION COMMITTEE AND REFERENCES

Professor Dave Donaldson MIT Department of Economics 77 Massachusetts Avenue, E52-552 Cambridge, MA 02139

(617)-258-6242 ddonald@mit.edu

Professor Martin Beraja MIT Department of Economics 77 Massachusetts Avenue, E52-552 Cambridge, MA 02139

617-252-1565 maberaja@mit.edu

United States

**CITIZENSHIP** 

**Professor Arnaud Costinot** MIT Department of Economics 77 Massachusetts Avenue, E52-536 Cambridge, MA 02139

617-324-1712 costinot@mit.edu

Professor David Autor MIT Department of Economics 77 Massachusetts Avenue, E52-536 Cambridge, MA 02139

617-258-7698 dautor@mit.edu

**GENDER:** Female

Dartmouth College 2017 PRIOR Economics, Mathematics **EDUCATION** 

**FIELDS** Primary Fields: International, Macroeconomics

Secondary Fields: Econometrics

2019-RELEVANT Research Assistant and Coauthor for Daron Acemoglu and **POSITIONS David Autor** present

SARAH GERTLER OCTOBER 2024-- PAGE 2

**FELLOW-** US Census: solo-authored project approval for multiple papers 2023-2028,

SHIPS, Special Sworn Status.

HONORS, AND National Science Foundation Graduate Fellowship

AWARDS Dartmouth: Phi Beta Kappa, Rufus Choate Scholar, Presidential Scholar

RESEARCH PAPERS Exchange Rate Pass-through and Expenditure-Switching Revisited (under Census Bureau Project #2874) (Job Market Paper)

Conventional wisdom is that low trade price pass-through of exchange rate movements in turn generates small trade fluctuations. If true, exchange rates lose their expenditure-switching power and allocative role. In this paper, I offer evidence to the contrary. Using confidential US micro-data and a macroeconometric technique applied to panel data, I show that although pass-through is substantially lower in US imports than US exports, the resulting trade quantity-exchange rate elasticities do not reflect that difference. The results can be summarized as the low pass-through environment is subject to a higher import demand (quantity-price) elasticity than the high pass-through. To explain this fact, I propose an extension of a standard small open economy New Keynesian model in which exporting and importing agents are both subject to price rigidities. Increasing the exporter's trade price rigidity lowers exchange rate pass-through but causes it to be more persistent. The importer's rigidity causes the importer to respond more to persistent pass-through, leading to a higher import demand elasticity in response to low pass-through. I conclude by exploring the implications of this framework for monetary and exchange rate policy.

SARAH GERTLER OCTOBER 2024-- PAGE 3

#### WORKING PAPERS

## The Structural Drivers of Price and Quantity Adjustment: Insights from Tariff and Exchange Rate Pass-through

Why is there complete long-run pass-through of both tariffs and exchange rates in US exports, despite evidence of flexible markups? To answer this question, I develop a methodology to leverage tariffs and exchange rates to uncover the structural drivers of pass-through, the markup elasticity and the marginal cost scale elasticity. I derive and quantify the scale channel of pass-through, which can be decomposed into a bilateral scale and the novel "shock span" scale effect. The shock span channel arises because different correlation patterns across customers enters prices via the scale channel. Because exchange rates are correlated across trading partners, compared to tariffs they have greater capacity for shock-span effects of scale economies. Quantifying the bilateral and shock span components of the scale channel, the paper demonstrates that scale economies can rationalize the discrepancy between markup flexibility and observed pass-through.

## Temporary Foreign Crisis Transmission to Local Labor via Exports: Evidence from the 1997 Asian Crisis

This paper exploits the temporary US export drop during the 1997 Asian Crisis to demonstrate that short-run foreign crises can have local labor spillovers via the export channel. I embed a Roy model into a specific-factors setting to guide analysis, linking export fluctuations to labor markets. Empirically, traded employment fell associated with the drop in exports to Crisis-4 countries, there was sluggish post-Crisis adjustment, and nontraded employment in lower-education areas also fell. Using the model I estimate that short-run cross-sector distributional heterogeneity is larger than long-run. Computational estimates find the shock lowered 1998 US traded employment by 135,000-150,000 workers.

SARAH GERTLER OCTOBER 2024-- PAGE 4

> RESEARCH IN PROGRESS

Broken Links: The Disruptive Impact of Import Competition on Local Supply Chains and Employment (with Daron Acemoglu, David Autor, David Dorn, and Gordon Hanson) (abstract coming October 18) (under Census Bureau Project #1684)

The International Elasticity Puzzle: Identifying Codetermining Frictions (under Census Bureau Project #2874)

The International Elasticity Puzzle focuses on a discrepancy in the import demand elasticity in international trade versus macroeconomic models, but it relates to both the horizon and the underlying shock (tariff or exchange rate). I present two facts consistent with the puzzle's duality: the elasticity is increasing over time, and is dependent on the underlying shock. I then apply the general framework from Gertler (2024a) to rationalize the puzzle. First, I demonstrate that both within exchange rates and across to tariffs, more persistent shocks generate larger demand effects. Second, I show that import buyer rigidities attenuate the elasticity and cause it to be increasing in shock persistence and over time. Third, I leverage the model structure and the estimates to measure the demand rigidity and the underlying static elasticity: the paper quantitatively explains the puzzle. Finally, I employ the framework and estimates to analyze the rate-of-convergence for exchange rates versus tariffs: in the short-run the persistence effect dominates so that the exchange rate converges to the static elasticity more slowly than the tariff.

# The Macrofinancial Link Between Tariffs, Exchange Rates, and Trade (with Victor Orestes)

We examine how macrofinancial factors, particularly the aggregate interest rate, shape exchange rate and trade responses to tariff shocks. First, we find that US import tariffs substantially influence the exchange rate, and in contrast little effect from tariffs imposed on the US. Second, we find that countries with floating exchange rates and which maintain higher interest rates than the US experience larger depreciations than lower-interest-rate floating countries. Third, we present evidence that high-interest-rate countries' trade are subject to higher demand elasticities, which is driven by supply- or demand-side factors depending on exchange rate regime. Our findings are consistent with a model of centrality in which financial and real factors co-amplify and can offset each other on aggregate but not necessarily in terms of incidence.