

Matthew Grant

Home Address:

358 Humphrey St., 3rd Floor
New Haven, CT 06511

Office Address:

Department of Economics
Yale University
New Haven, CT 06520-8268

Telephone: (+1) 240-994-6693

E-mail: matthew.grant@yale.edu

Personal web page: <https://sites.google.com/site/matthewwgrant/>

Citizenship: U.S.

Fields of Concentration:

International Trade
Political Economy

Desired Teaching:

International trade
Trade policy
Microeconomics
Public economics

Comprehensive Examinations Completed:

2013 (Oral): International trade, Public economics
2012 (Written): Microeconomics, Macroeconomics

Dissertation Title: *Essays on the Trade Policy of Special Economic Zones.*

Committee:

Professor Giovanni Maggi (chair)
Professor Penny Goldberg
Professor Peter Schott
Professor Lorenzo Caliendo

Expected Completion Date: May 2017

Degrees:

Ph.D., Economics, Yale University, 2017 (expected)
M.Phil., Economics, Yale University, 2014
M.A., Economics, Yale University, 2013
B.S., Geology & Geophysics, Yale University, 2007

Fellowships, Honors and Awards:

University Dissertation Fellowship, Yale University, 2016
Cowles Foundation Fellowship, 2011-2015
Doctoral Fellowship, Yale University, 2011-2015

Teaching Experience:

Introductory Microeconomics, Fall 2015 (undergraduate, instructor: C. Udry)
International Trade Policy, Fall 2014 (undergraduate, instructor: G. Maggi)
Public Economics, Spring 2014 (undergraduate, instructor: E. Washington)
General Economic Theory: Microeconomics, Fall 2013 (graduate, instructor: T. Bewley)

Research and Work Experience:

Research Assistant to Professor Giovanni Maggi, Yale University, 2015
Research Assistant to Profs. K. Gillingham and W. Nordhaus, Yale University, 2012-2013
Research Assistant to Professor Dean Karlan, Yale University, 2009-2011
Intern, U.S. House of Representatives, Subcommittee on Energy & Mineral Resources, 2009
Staff Hydrogeologist, Water Management Consultants (subsequently Schlumberger Water Services), Denver, CO, 2007-2009

Working Papers:

“Why Special Economic Zones? Using Trade Policy to Discriminate Across Importers”,
(November 2016), *Job Market Paper*

Work In Progress:

“Special Economic Zones in Developing Countries”

“Special Economic Zones and Capital Tax Competition”

“‘Transformative’ Special Economic Zones”

Languages:

English (native), Spanish (intermediate)

References:

Prof. Giovanni Maggi
Yale University
Department of Economics
New Haven, CT 06520
PO Box 208264
Phone: (+1) 203-432-3569
giovanni.maggi@yale.edu

Prof. Penny Goldberg
Yale University
Department of Economics
New Haven, CT 06520
PO Box 208264
Phone: (+1) 203-432-3547
penny.goldberg@yale.edu

Prof. Peter Schott
Yale University
School of Management
New Haven, CT 06520
PO Box 208200
Phone: (+1) 203-436-4260
peter.schott@yale.edu

Prof. Lorenzo Caliendo
Yale University
School of Management
New Haven, CT 06520
PO Box 208200
Phone: (+1) 203-432-4069
lorenzo.caliendo@yale.edu

Dissertation Abstract

My dissertation examines special economic zones (SEZs), a little-studied but common and important aspect of trade policy. SEZs are used by nearly three-quarters of all countries to relax economic regulations for a subset of firms, and house annual gross output over \$7.5 trillion.

Why Special Economic Zones? Using Trade Policy to Discriminate Across Importers [Job Market Paper]

Thirteen percent of U.S. manufacturing output is produced in special economic zones (SEZs), in which firms receive duty-reduced access to approved intermediate goods. This creates a two-tiered tariff system: firms in SEZs face a lower rate than the prevailing tariff faced by most users of the *same* good. Why should a government implement such a system? Existing models offer no explanation, because they assume that tariffs are uniform across all users. I provide a theoretical framework in which this “cross-importer tariff discrimination” arises as optimal policy for a government motivated by both political and welfare considerations. The theory offers predictions regarding the exact form of the optimal tariff policy, as well as which industries will be granted duty reductions. I show empirically that the implementation of SEZs in the U.S. is consistent with the theory in a novel data set I constructed from public records.

In the model, the government maximizes a political objective function which values welfare and has additional (possibly different) weights on each industry’s profits, and uses tariffs to transfer surplus to preferred industries by raising the prices of domestically produced goods. However, a uniform tariff on an intermediate good incurs more distortion and loss of profits than necessary to make a given transfer of surplus. Lowering the tariff faced by a small enough subset of firms does not change the market-clearing price for domestically produced intermediates, but reduces the resulting losses. Even when the government can charge a different tariff to every user and all industries have different weights in the objective function, the government will optimally adopt a simple two-tiered tariff rule, with some industries assigned to the prevailing tariff and other industries assigned to a lower tier of zero. In practice, final goods industries are assigned to the lower tier by being granted access to particular intermediates in an SEZ.

The quantity of production that can take place under the lower-tier tariff is limited by the endogenously chosen level of transfers. If too much is allowed, the domestic market will clear at a lower price than intended. Consequently, the theory predicts which industries will be prioritized to receive lower-tier tariffs through SEZs: they are politically strong, have highly elastic demand for the intermediate in question, and have less protection (in equilibrium) from the final goods tariff on their own output. When tariffs are held fixed by WTO tariff bindings and imports of a given intermediate rise, the government's constraint is relaxed, and the size of SEZs using this intermediate should increase.

I find support for the model's predictions about the size and industrial composition of SEZs in data I constructed covering the universe of SEZ approvals in the U.S., including all inputs and outputs at the firm level and rich institutional details about lobbying and the approvals process. I find that the final goods industries granted SEZs are politically strong, are protected by lower ad-valorem equivalent final goods tariffs, and use SEZ-approved intermediates more elastically. Growth in US SEZs through time is also consistent with the theory: increases in imports of a given intermediate correspond to subsequent increases in approvals to use that intermediate in SEZs.

Special Economic Zones in Developing Countries

Special economic zones (SEZs) in developing countries are typically structured differently than in rich countries: they usually require firms to move to zones, are export focused, and grant duty-free access to all intermediates, while in rich countries they are generally not place-based, have significant production for the domestic market, and may only provide duty reductions for a subset of input-output pairs. I provide both a theoretical argument and empirical evidence that developing country SEZs are driven by the same cross-importer tariff discrimination as in rich countries, but that cross-country differences in zone design arise from differences in monitoring costs. I extend the theory of the previous paper, requiring the government to monitor to prevent arbitrage between firms facing different tariffs. When the costs of monitoring flows of goods in and out of zones are sufficiently high, governments adopt coarser tariff-discrimination policies. I present two new datasets I collected from public sources: the universe of industries in Bangladeshi SEZs and SEZ design across countries. I show the choice of zone design across countries is explained by monitoring costs, and that the choice of SEZ industries within Bangladesh is consistent with the model in the presence of high monitoring costs.

Special Economic Zones and Capital Tax Competition

In developing countries, a large share of firms in SEZs are foreign-owned. Policymakers claim this is a goal of their SEZ policies, which in addition to lowering tariffs for selected firms, frequently also relax capital controls. In this paper, I find discriminatory intermediate tariffs and relaxed capital controls can be understood as implementing optimal trade policy. I extend the model in the first paper to a setting where (1) capital is mobile across countries but not sectors, (2) movement of capital in a given industry affects wages, profits for all firms in the industry, and tariff revenue, and (3) I permit the government to use discriminatory tariffs and capital controls to maximize its payout.