

**John Morrow**  
Dept. of Ag and Applied Economics  
University of Wisconsin-Madison  
morrow1@wisc.edu

427 Lorch St.  
Madison, WI 53706  
Tel: 319 400 3160  
www.johnmorrow.info

## Implications of Structural Change for Trade, Inequality and Politics

Dissertation Abstract for John Morrow  
PhD Candidate, UW-Madison

My dissertation is composed of three chapters. The first models the role of skill heterogeneity in production and how general equilibrium conditions influence the division of surplus within worker teams. I estimate productivity differences of worker teams, finding support for the model and indicating new relationships between inequality and structural change. The second chapter considers the political consequences of income dynamics, in particular those set in motion by structural reforms in early 1990's Latin America. The third chapter is a theoretical contribution analyzing the foundations of firm selection models in trade to assess when the creative destruction of firms leads to efficiency gains.

### **"Is Skill Dispersion a Source of Productivity and Exports in Developing Countries?"**

*Abstract.* Recent literature claims that skill mix within firms, in contrast to average human capital, influences the entire economy. This paper provides theoretical and empirical evidence of the linkage from skill mix to output, inequality, productivity and exports. I develop a multisector model of firms who employ teams of workers in production. In this setting I derive two main results. First, I consider what impact changes in the skill distribution from migration, education or outsourcing have on output. I find an increase in industry specific workers boosts output, but in contrast to classical models, worker spillovers to other industries may attenuate output. Second, I consider the impact of price changes caused by tariff reductions or subsidies. I show a rise in output prices raises the total wages of a worker team but changes relative wages within teams. The new relative wages depend on the supply of team members to the industry. Inequality will increase if the supply of high skilled workers is tight. This possibility of a sector boom coincident with higher inequality provides a new explanation of inequality trends beyond skill biased technical change. Empirically, my model motivates a novel specification that characterizes industries as

“intensive in skill diversity” or “intensive in skill similarity.” Productivity differences explained by skill mix intensity are comparable to the magnitude of training and imported inputs combined. I also find skill mix differences explain intrasector exports better than physical or human capital.

**“Left, Right, Left: Income Dynamics, Learning and the Evolution of Political Preferences by Bayesian Voters”<sup>1</sup>**

*Abstract.* The political left turn, which lagged Latin America’s transition to liberalized market economies by a decade, challenges conventional economic explanations of voting behavior. This paper provides a theoretical framework to help understand these complex political-economic dynamics. To do this, we first build on forward-looking voter models and analyze political preferences under general families of income transition functions. We show that non-concave functions, which offer no prospect of upward mobility for segments of the population, may result in stronger support for redistributive policies than might otherwise be anticipated. Interestingly, numerical analysis of the model based on estimated transition functions, suggests much stronger support for redistribution than actually materialized over the first decade of economic liberalization. We thus eschew the assumption that voters had full information on their new economic reality, and model voters as Bayesians learners. We show that starting from a prior that was consistent with the so-called Washington Consensus vision of liberalization, voters would be expected to exhibit the sort of political dynamics observed in most of Latin America over the last two decades.

**“Is Selection on Firm Productivity a Third Gain from Trade?”<sup>2</sup>**

*Abstract.* This paper addresses two questions: Do Selection Effects yield new Gains from Trade, distinct from Comparative Advantage and Scale Effects? If so, what is special about international trade in generating new welfare gains through Selection? Examining heterogeneous firm models, we find the answer to each question depends on the demand structure. For example, CES demand ensures selection is an optimal response to trade frictions, but is unique in this regard. The results highlight the role of demand in determining when Selection Effects are distinct, optimal and "anti-variety."

---

<sup>1</sup>Coauthored with Michael Carter, Thesis adviser, UW-Madison.

<sup>2</sup>Coauthored with Swati Dhingra, PhD candidate, UW-Madison.