



Sinergia Workshop 2018 - Inequality and Globalization

Abstracts for Paper Presentations

Margins of Labor Market Adjustment to Trade

Rafael Dix-Carneiro (with Brian K. Kovak)

We use both longitudinal administrative data and cross-sectional household survey data to study the margins of labor market adjustment following Brazil's early 1990s trade liberalization. We document how workers and regional labor markets adjust to trade-induced changes in local labor demand, examining various adjustment margins, including earnings and wage changes; interregional migration; shifts between tradable and nontradable employment; and shifts between formal employment, informal employment, and non-employment. Our results provide insight into the regional labor market effects of trade, and have important implications for policies that address informal employment and that assist trade-displaced workers.

The Margins of Trade

Ana Cecilia Fieler (with Jonathan Eaton)

We introduce quality differentiation into a standard quantitative, general equilibrium model of international trade. The framework allows bilateral trade to vary both at the margin of quantity and of unit value. We estimate the parameters of the model using bilateral data on trade flows and on unit values in trade. The model captures a number of regularities in the data.

The Distributional Effects of Trade: Theory and Evidence from the United States

Xavier Jaravel (with Kirill Borusyak)

Are the gains from trade unequally distributed in society? This paper presents new evidence on the distributional effects of trade across education groups in the U.S. through both consumer prices (expenditure channel) and wages (earnings channel). Our analysis, guided by a simple quantitative trade model, leverages linked datasets that cover the entire U.S. economy and include detailed spending data on consumer packaged goods and automobiles. First, we show that the expenditure channel is distributionally neutral due to offsetting forces. College graduates spend more on services, which are largely non-traded; however, their spending on goods is skewed towards industries, firms, and brands with higher import content. Second, on the earnings side, we find that college graduates work in industries that (1) are less exposed to import competition, (2) export more, (3) are more income-elastic, and (4) use fewer imported inputs. The first three forces cause trade liberalizations to favor college graduates; the fourth has the opposite effect. Finally, we combine and quantify the expenditure and earnings channels using the model. A 10% reduction of all import and export barriers generates a modest increase in inequality between education groups, primarily due to the earnings channel. Welfare gains are 16% higher for college graduates, whose real income increases by 2.02% compared to 1.74% for individuals without a college degree. Reductions of import barriers with China have qualitatively similar implications.



Forensics, Elasticities and Benford's Law: Detecting Tax Fraud in International Trade

Beata Javorcik (with Banu Demir)

By its very nature, tax evasion is difficult to detect as the parties involved have incentive to conceal their activities. This paper offers a setting where tax evasion can be detected because of an exogenous shock to the tax rate. It contributes to the literature by proposing two new methods of detecting tax evasion. The first method is based Benford's law, while the second relies on comparing price and trade cost elasticity of import demand. Both methods produce evidence consistent with an increase in tax evasion after the shock. The paper further shows that evasion induces a bias in the estimation of trade cost elasticity of import demand, leading to miscalculation of gains from trade based on standard welfare formulations. Finally, welfare predictions are derived from a simple Armington trade model which accounts for tax evasion.

Trade and Inequality: Evidence from Worker-Level Adjustment in France

Marti Mestieri (with Sergi Basco, Maxime Liegey and Gabriel Smagghue)

We use nationally-representative matched employer-employee panel data to investigate the effect of Chinese import competition on French workers between 2001 and 2006. We document a negative impact of Chinese import competition on earnings for workers in the bottom third of the earnings distribution. The effect of Chinese competition is negligible on workers with higher earnings. In addition, we exploit the richness of the dataset to document novel margins of adjustment. First, we show that the decline in earnings in the bottom third is accounted by a reduction in hours worked, while wages per hour are not significantly affected by Chinese competition. Workers in the bottom third experience reductions in the number of hours per working contract and more churning across employers. We also document that workers with temporary contracts and in more regulated industries experience a higher decline in earnings. Second, we show that low-earners are relatively more likely to change occupations in response to a trade shock and to switch to relatively lower-paying occupations. Low-earners are also relatively more likely to stay in the same industry. Finally, we also document that Chinese competition increases the probability of changing the place of residence, which mostly occurs for workers who also change the industry they work in.

Better, Faster, Stronger: Global Innovation and Trade Liberalization

Andreas Moxnes (with Federica Coelli and Karen Helene Ulltveit-Moe)

This paper investigates the effect of improved market access on worldwide innovation. Using exogenous changes in tariffs in firms' export markets during the 1990s, we find a large effect of tariff cuts on innovation as measured by patent data. These effects are not driven by the deterioration of innovation quality, and the results are robust to controlling for changes in the patent system and to industry-wide trends in innovation.

Of Mice and Merchants: Trade and Growth in the Iron Age

Ferdinand Rauch (with Stephan Maurer and Jörn-Stephen Pischke)

We study the causal connection between trade and development using one of the earliest massive trade expansions in prehistory: the first systematic crossing of open seas in the Mediterranean during the time of the Phoenicians. For each point on the coast, we construct the ease with which other points can be reached by crossing open water. This connectivity differs depending on the shape of the coast, the location of islands, and the distance to the opposing shore. We find an association between better connected locations and archaeological sites during the Iron Age, at a time when sailors began to cross open water very routinely and on a big scale. We corroborate these findings at the level of the world.



Abstracts for Poster Presentations

Youth Drain, Entrepreneurship and Innovation

Gaetano Basso (with Massimo Anelli, Giuseppe Ippedico and Giovanni Peri)

Young workers provide entrepreneurial and innovation skills and spur economic growth. What are the costs of draining a large share of young people from a local labor market? In this paper we exploit administrative data on the emigration flows of Italian citizens to construct a measure of youth entrepreneurial and managerial capital lost in Italy between 2005 and 2015 by age, education level and country of destination. As the emigration decision is endogenous to local economic conditions, we construct an instrumental variable which exploits the local network of emigrants from Italian local labor markets to different countries as of 2000 interacted with destination countries economic performance relative to the Italian one during the Great Recession. We combine this information with detailed firm-level data on the universe of Italian firms for which we observe the age of owners and shareholders, revenues, employment and productivity, and on the presence of innovative startups at the local level. Preliminary results indicate that youth emigration predicts a lower growth of young-entrepreneurs firms, and fewer innovative startups.

Immigration and the Displacement of Incumbent Households

Kristian Blickle (with Zeno Adams)

We make use of the universe of immigrants who arrived in Switzerland between 1992 and 2013, granular community level house price and wage data as well as detailed information on the Swiss population to study the effects of immigration on the location choice of incumbent households. Immigration influences a household's location choice through three distinct channels: house price changes, labor market competition, and households' sentiment regarding immigration. We find evidence of all three channels. However, we show that the channel to which a household responds most strongly depends on the type of immigration and the characteristics of the household. Our research provides valuable insights into some of the effects of large scale immigration

Rage against the Machines: Labor-Saving Technology and Unrest in England, 1830-32

Bruno Caprettini (with Hans-Joachim Voth)

Can the adoption of labor-saving technology lead to social instability and unrest? We examine a canonical historical case, the so-called 'Captain Swing' riots in 1830s Britain. Variouslly attributed to the adverse consequences of weather shocks, the shortcomings of the Poor Law, or the after-effects of enclosure, we emphasize the importance of a new technology – the threshing machine. Invented in the 1780s, it spread during and after the Napoleonic Wars. Using farm advertisements from newspapers published in 60 English and Welsh towns, we compile a new measure of the technology's diffusion. Parishes with evidence of threshing machine adoption had much higher riot probabilities in 1830. Threshing machines were much cheaper to operate with water power, and they were initially only useful for wheat. We show that suitability for both predicts technology adoption. IV results suggest that the spread of threshing machines was responsible for unrest. We also show that areas with more generous poor law provision saw much less rioting, even in areas where threshing machines were common. This suggests that the welfare state can facilitate technology adoption.



Adjusting to Globalization in Germany

Wolfgang Dauth (with Sebastian Findeisen and Jens Suedekum)

We study the impact of trade exposure in the job biographies, measured with daily accuracy, of 2.4 million workers in Germany. To profit from export opportunities, workers adjust through increased employer switching. Highly skilled workers benefit the most, consistent with an increase in skill demand. The incidence of import shocks falls mostly on low-skilled workers, as they are not able to adjust as well as medium- and high-skilled workers. Imports also destroy rents by workers at high-wage plants who separate from their original firm. We connect our results to the growing theoretical literature on the labor market effects of trade.

A Panel Data Approach for Spatial and Network Selection Models

Sophia Ding (with Peter H. Egger)

Many data in the social sciences at large and in economics in particular feature some form of spatial or network interdependence. For instance, firms have been shown to adopt certain strategies (market entry, exporting, foreign plant set-up, etc.) in a way that suggests spatial or network interdependence among firms that share the same geography or the same input-output network relations. However, often the data on firms featuring the aforementioned forms of interdependence are incomplete (in the sample- or treatment-selection sense). However, there are no models to date that would allow researchers to account both for selection on unobservables as well as spatial or network patterns with panel-data. The present paper contributes to the literature by proposing a two-step approach towards selection on unobservables in the spirit of Heckman (1976, 1979) and Wooldridge (1995) but for panel-data with spatial or network interdependencies in both the selection and the outcome equation. Apart from outlining the econometric model and the associated estimation procedure for parameter point estimates as well as their variance-covariance matrix, the paper illustrates the suitability of the proposed approach in finite samples by way of Monte Carlo simulations. Moreover, we apply the model to illustrate the relevance of self-selection of firms into exporting when analyzing the size of the exporter-wage premium in China.

One Labor Market, Two Currencies: Evidence from the French-Swiss Border Region

Sandro Favre

We use rich administrative data to study job search in the French-Swiss border region. This region forms a binational labor market on which labor can move freely, but which is also characterized by sharp institutional and economic discontinuities. We find that wages of French cross-border workers in Switzerland (CBW) are substantially higher than those of French residents working in France. Furthermore, wages and hence unemployment benefits of CBW strongly correlate with the exchange rate (EUR/CHF). In particular, we observe a sharp increase in all three variables between 2008 and 2011. A concurrent increase in the unemployment duration of CBW relative to French residents working in France suggests that this increase affects job search behavior of CBW.

Inequality and Growth through Creative Destruction

Adrian Jäggi (with Ulrich Schetter and Maik T. Schneider)

Developing countries satisfy their demand for high quality via importing. This will feed back into the incentives of domestic firms to invest themselves in quality upgrading. In this paper we will analyze how these effects are shaped by inequality within a country, a country's openness and its distance from the frontier. This will allow us to shed additional lights of the growth effects of larger inequality within countries.



The saturation of spending diversity and the truth about Mr Brown and Mrs Jones

Christian Kiedaisch (with Andreas Chai and Nicholas Rohde)

Several cross country studies find that rising household income leads to consumption spending being spread more evenly across different spending categories (Clements et al., 2006). We argue that this result is likely due to aggregation. Using more dis-aggregated UK household level spending data, we show that the spending diversity of households only rises up to a certain income level and then starts to decline as households concentrate more of their spending on particular expenditure categories that differ across households. It is precisely because of this growing heterogeneity of spending pattern on the household level that the average spending diversity of the population can nevertheless always rise in income. We build a model to capture this observed pattern and use it to show that ignoring preference heterogeneity across households and focusing on a model with representative households leads to an underestimation of the value of product variety.

The Economic Geography of Innovation

Nicole Loumeau

This paper outlines a multi-region quantitative model to assess the importance of country-level tax incentives towards innovation at the level of 5,633 micro-regions of different size. While incentives vary across countries (and time) the responses are largely heterogeneous across regions within as well as across countries. The reason for this heterogeneity roots in average technology differences – in terms the production of both output and innovation – as well as in the geography (location) and amenities across regions. The cross-sectional unit of observation underlying the quantitative analysis are PATSTAT regions, whose patenting output we measure and link to population as well as income statistics. The model and quantitative analysis take the tradability of output as well as the mobility of people across regions into account. In particular, in the counterfactual equilibrium analysis we focus on the effects on three key variables -- place-specific employment, productivity, and welfare -- in a scenario where tax incentives towards innovation are abandoned. We find that the use of policy instruments which are designed to stimulate private R&D are globally beneficial in terms of productivity and welfare. Particularly, regions with high amenities and low degree of transport remoteness tend to benefit from such policy instruments.



Social Activity on Saturday Afternoon



Taking a Stroll at Langis

Outdoor activity if weather permits.
Warm clothing recommended

We will drive from Hotel Wilerbad to Langis at 1:30 pm with the bus (about 20 minutes), we will then walk for about an hour and a half. After the walk time for refreshments at Berghotel Langis. The area around Langis is a wonderful landscape of protected high moorland with panoramic views. The bus will leave at around 4 pm direction Zurich.