Toulouse Network for Information Technology

List of Abstracts

Luis Garicano, *Firm Size Distortions and the Productivity Distribution: Evidence from France*

Abstract: We show how size-contingent laws can be used to identify the equilibrium and welfare effects of labor regulation. Our framework incorporates such regulations into the Lucas (1978) model and applies this to France where many labor laws start to bind on firms with exactly 50 or more employees. Using data on the population of firms between 2002 and 2007 period, we structurally estimate the key parameters of our model to construct counterfactual size, productivity and welfare distributions. With flexible wages, the deadweight loss of the regulation is below 1% of GDP, but when wages are downwardly rigid welfare losses exceed 5%. We also show, regardless of wage flexibility, that the main losers from the regulation are workers (and to a lesser extent large firms) and the main winners are small firms.

Nicholas Bloom, *Can IT improve work-life balance? Evidence from a Chinese field experiment*

Abstract: The frequency of working from home has been rising rapidly in the US, with over 10% of the workforce now regularly work from home. But there is skepticism over the effectiveness of this, highlighted by phrases like “shirking from home”. We report the results of the first randomized experiment on home working in a 13,000 employee NASDAQ listed Chinese firm. Call center employees who volunteered to work from home were randomized by even/odd birth-date in a 9-month experiment of working at home or in the office. We find a 12% increase in performance from home- working, of which 8.5% is from working more minutes of per shift (fewer breaks and sick-days) and 3.5% from higher performance per minute (quieter working environment). We find no negative spillovers onto workers left in the office. Home workers also reported substantially higher work satisfaction and psychological attitude scores, and their job attrition rates fell by 50%. Despite this ex post success, the impact of home-working was ex ante unclear to the firm, which is why it ran the experiment. Employees were also ex ante uncertain, with one half of employees changing their minds on home working after the experiment. This highlights how the impact of new management practices are unclear to both firms and employees.

Daron Acemoglu (with Ufuk Akcigit, Nick Bloom and Bill Kerr*), Innovation, Reallocation and Growth*

Abstract: We build a model of firm-level innovation, productivity growth and reallocation featuring endogenous entry and exit. A key feature is the selection between high- and low-type firms, which differ in terms of their innovative capacity. We estimate the parameters of the model using detailed US Census micro data on firm-level output, R&D and patenting. The model provides a good fit to the dynamics of firm entry and exit, output and R&D, and its implied elasticities are in the ballpark of a range of micro estimates. We find industrial policy subsidizing either the R&D or the continued operation of incumbents reduces growth and welfare. For example, a subsidy to incumbent R&D equivalent to 5% of GDP reduces welfare by about 1.5% because it deters entry of new high-type firms. On the contrary, substantial improvements (of the order of 5% improvement in welfare) are possible if the continued operation of incumbents is taxed while at the same time R&D by incumbents and new entrants is subsidized. This is because of a strong selection effect: R&D resources (skilled labor) are inefficiently used by low-type incumbent firms. Subsidies to incumbents encourage the survival and expansion of these firms at the expense of

potential high-type entrants. We show that optimal policy encourages the exit of low-type firms and supports R&D by high-type incumbents and entry.

Mike Whinston (with Ben Handel and Igal Hendel), ***Equilibrium in Health Exchanges: Adverse Selection vs. Reclassification Risk***

Abstract: This paper studies equilibrium and welfare in a class of regulated health insurance markets known as exchanges. We use detailed health plan choice and utilization data to model individual-level (i) projected health risk and (ii) risk preferences. We combine these micro-foundations with a model of competitive insurance markets that generates predictions for plan prices, costs, and market shares under different counterfactual pricing /contract regulations and several equilibrium solution con- cepts. We investigate the welfare implications of different pricing regulations, with a focus on (i) adverse selection and (ii) premium re-classification risk.

We find that market unraveling from adverse selection is substantial under the proposed pricing rules in the Affordable Care Act (ACA), implying limited coverage for individuals beyond the lowest tier (Bronze) health plan. Though adverse selection can be attenuated by allowing (partial) pricing of health status, the welfare loss from re-classification risk is substantially higher than the gains of increasing coverage. Finally, we compute the subsidies / tax penalties that are required to induce dfferent levels of participation in the exchanges.

Susan Athey (with Mark Mobius), ***The Impact of Aggregators and Paywalls on Internet News Consumption***

Abstract: This paper analyzes the impact of news aggregators on the quantity and composition of internet news consumption. In principle, news aggregators can be a substitute or a complement to the news outlets who invest in the creation of news stories. A policy debate centers around the decrease in the incentives for news creation that results if readers choose to consume their news through aggregators without clicking through to the news websites or generating any revenue for the outlets. This paper provides a case analysis of an example where Google News added local content to their news home page for users who chose to enter their location. Using a dataset of user browsing behavior, we compare users who adopt the localization feature to a sample of control users who are similar to the treatment users in terms of recent internet news consumption. We find that users who adopt the localization feature subsequently increase their usage of Google News, which in turn leads to additional consumption of local news. Users also navigate directly to the new sites they have discovered, further increasing their local news consumption. The increase in local news consumption diminishes over time, however, and in the longer run most of the additional local news consumption derives from increased Google News usage. Patterns of news consumption change: users read a wider variety of outlets, more outlets that are new to them, and a larger fraction of their news "home page" views come from Google News rather than the home page of other news outlets. Thus, the inclusion of local content by Google News had mixed effects on local outlets: it increased their traffic, especially in the short run, but it also increased the reliance of users on Google News for their choices of news, and increased the dispersion of user attention across outlets.

Jonathan Levin, ***Sales Taxes and Internet Commerce***

Abstract: We estimate the sensitivity of Internet retail purchasing to sales taxes using data from the eBay marketplace. Our first approach exploits the fact that seller locations are revealed only

after buyers have expressed interest in an item by clicking on its listing. We use millions of location “surprises” to estimate price elasticities with respect to the effective sales tax. We then use aggregated data to estimate cross-state substitution parameters, and substitution between offline and online purchases, relying on the variation in state and local sales taxes, and on changes in these rates over time. We find substantial sensitivity to sales taxes. Using our item-level approach, we find a price elasticity of around -2 for interested buyers. Using our aggregate approach, we find that a one percentage point increase in a state’s sales tax increases online purchases by state residents by just under two percent, but decreases their online purchases from home-state retailers by 3-4 percent.

Suzanne Scotchmer (with Junjie Zhou), ***Picking Winners in Rounds of Elimination***
Abstract: We study the optimal way to select projects or agents in environments where information arrives in well defined rounds. Examples include academic environments where review periods are set by policy, aptitude tests such as those given by software developers to programmers applying for jobs, venture capital protocols where the rounds of funding may be stopped before the project is complete, and FDA testing, where drugs can be dropped at well defined junctures. Sequential rounds of elimination reduce the cost of selection, but also reduce the average quality of surviving projects. We characterize the nature of the optimal screening process with and without "memory."

Yi Qian, ***Counterfeiters: Foes or Friends***
Abstract: A key concern about counterfeits and weak intellectual property protection is that they may hamper innovation by displacing legitimate sales. This paper combines a natural policy experiment with randomized lab experiments to estimate the heterogeneous impacts of counterfeiting on the sales and consumer purchase intent related to branded products of various quality levels. I collect new product- line-level panel data (1993-2004) on Chinese shoe companies. I identify heterogeneous effects of counterfeit entry on sales of authentic products of three quality tiers, finding that counterfeits have both advertising effects for a brand and substitution effects for authentic products, additionally the effects

linger for some years. The advertising effect dominates the substitution effect for high-end authentic- product sales, and the substitution effect outweighs the advertising effect for low-end product sales. The positive effect of counterfeits is most pronounced for high-fashion products (such as women’s high-leg boots and dress shoes), for shoes tailored to young customers, and for high-end products of brands not yet well-known at the time of counterfeiter entry.

Ilya Segal (with Mike Whinston), Property Rights and the Efficiency of Bargaining
Abstract : The problem of optimal allocation of property rights di§ers from the classical economic problem of optimal allocation of goods in an important way: while property rights may ináuence economic allocations, many of the details of the allocation are left for future specification by the agents, either unilaterally or by negotiation with each other. In this paper, we examine the effect of property rights on subsequent negotiations over economic allocations. We find that the notions of opt- out types and marginal contributions are useful for establishing inefficiency results for bargaining under various property rights regimes. Furthermore, we use these notions to have a simple calculation for the expected subsidy needed for first-best bargaining underthose regimes. This offers one simple way to examine the comparative statics of property rights. We have compared this to other benchmarks, such as the expected surplus at the default, and the second-best expected bargaining surplus. As applications, we consider simple property rules, liability rules and "dual-chooser" (posted- price) rules.