Abstracts

Sticky Prices: A New Monetarist Approach
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Why do some sellers set nominal prices that apparently do not respond to changes in the aggregate price level? In many models, prices are sticky by assumption; here it is a result. We use search theory, with two consequences: prices are set in dollars, since money is the medium of exchange; and equilibrium implies a nondegenerate price distribution. When the money supply increases, some sellers may keep prices constant, earning less per unit but making it up on volume so profit stays constant. The calibrated model matches price-change data well. But, in contrast to typical sticky-price models, money is neutral.

Economics and Climate Change: Integrated Assessment in a Multi-Region World
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This paper develops a model that integrates the climate and the global economy—an integrated assessment model—with which different policy scenarios can be analyzed and compared. The model is a dynamic stochastic general-equilibrium setup with a continuum of regions. Thus, it is a full stochastic general-equilibrium version of RICE, Nordhaus's pioneering multi-region integrated assessment model. Like RICE, our model features traded fossil fuel but otherwise has no markets across regions—there is no insurance nor any intertemporal trade across them. The extreme form of market incompleteness is not fully realistic but arguably not a bad approximation of reality. Its major advantage is that, along with a set of reasonable assumptions on preferences, technology, and nature, it allows a closed-form model solution. We use the model to assess the welfare consequences of carbon taxes that differ across as well as within oil-consuming and -producing regions. We show that, surprisingly, only taxes on oil producers can improve the climate: taxes on oil consumers have no effect at all. The calibrated model suggests large differences in views on climate policy across regions.

Credit Constraints and the Cyclicality of R&D investment: Evidence from France
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We use a French firm-level data set containing 13,000 firms over the period 1994-2004 to analyze the relationship between credit constraints and firms’ R&D behavior over the business cycle. Our main results can be summarized as follows: (i) R&D investment is countercyclical without credit constraints, but it becomes procyclical as firms face tighter credit constraints; (ii) this result is only observed for firms in sectors that depend more heavily upon external finance, or that are characterized by a low degree of asset tangibility; (iii) in more credit constrained firms, R&D investment plummets during recessions but does not increase proportionally during upturns.
Routes of Infection: Exports and HIV Incidence in Sub-Saharan Africa

Emily Oster, University of Chicago

This paper estimates whether exports affect the incidence of HIV in Africa. This relationship has implications for HIV prevention policy as well as for the consequences of trade increases in Africa. I estimate this impact using two sources of data on HIV incidence, one generated based on UNAIDS estimates and the other based on observed HIV mortality. These data are combined with data on export value and volume. I find a fairly consistent positive relationship between exports and new HIV infections: doubling exports leads to a 10%-70% increase in new HIV infections. Consistent with theory, this relationship is larger in areas with higher baseline HIV prevalence. I interpret the result as suggesting that increased exports increase the movement of people (trucking), which increases sexual contacts. Consistent with this interpretation, the effect is larger for export growth than for income growth per se and is larger in areas with more extensive road networks.

Oil and the Macroeconomy: A Quantitative Structural Analysis

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We model an open economy where macroeconomic variables fluctuate in response to oil supply shocks, as well as aggregate demand and supply shocks generated domestically and abroad. We use several robust predictions of the model to identify five fundamental shocks underlying the fluctuations of the (real) oil price, the US activity and the global business cycle. The estimates show that supply shocks generated in the global economy explain the largest fraction of the oil price fluctuations, about four times more than canonical oil-supply shocks. The correlation between oil prices and the US activity varies with the type of shock.

Measuring Self-Control Problems: A Structural Estimation

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We adopt a two-stage Method of Simulated Moments to estimate the preference parameters in a life-cycle consumption-saving model augmented with temptation disutility. Our approach estimates the parameters from the comparison between simulated moments with empirical moments observed in the US Survey of Consumer Finances; to identify the parameters we consider moments from liquid and illiquid asset holdings at different ages. We find evidence of a small but significantly positive degree of temptation. The temptation model predicts consumption choices similar to the model with standard preferences, and holdings of liquid and illiquid assets closer to those observed in the empirical data.

How Market Fragmentation Can Facilitate Collusion

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Economists have recommended the fragmentation of capacities before regulated markets are liberalized because static oligopoly models imply that outcomes approximate perfect competition with a fragmented enough market structure. This intuition fails under collusion. When individual firms are capacity constrained relative to total demand, the fragmentation of capacity facilitates collusion and increases the highest sustainable collusive price. Collusive outcomes remain feasible even for arbitrarily fragmented capacity. These results can explain the finding in Sweeting (2007) that dramatic fragmentation of generation capacity in the English electricity industry did not reduce price cost margins.

Categorize Then Choose: Boundedly Rational Choice and Welfare

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We propose a boundedly rational model of choice where agents categorize alternatives before choosing. The model explains some behavioral anomalies, and it is fully characterised by a property of choice data: a categorizer can never exhibit certain patterns of ’revealed preference reversals’. This model offers clues on the problem of making welfare judgements in the presence of boundedly rational agents.
Sign restrictions on the responses generated by structural vector autoregressive models have been proposed as an alternative approach to the use of exclusion restrictions on the impact multiplier matrix. In recent years such models have been increasingly used to identify demand and supply shocks in the market for crude oil. We demonstrate that sign restrictions alone are insufficient to infer the responses of the real price of oil to such shocks. Moreover, the conventional assumption that all admissible models are equally likely is routinely violated in oil market models, calling into question the use of posterior median responses to characterize the responses to structural shocks. When combining sign restrictions with additional empirically plausible bounds on the magnitude of the short-run oil supply elasticity and on the impact response of real activity, however, it is possible to reduce the set of admissible model solutions to a small number of qualitatively similar estimates. The resulting model estimates are broadly consistent with earlier results regarding the relative importance of demand and supply shocks for the real price of oil based on structural VAR models identified by exclusion restrictions, but imply very different dynamics from the posterior median responses in VAR models based on sign restrictions only.

Under Pressure: Gender Differences in Output Quality and Quantity under Competition and Time Constraints
Olga Shurchkov

Gender gaps in the workplace are widespread. One explanation for gender inequality stems from the effects of the interaction between competition and two pressure sources, namely, task stereotypes and time constraints. This study uses a laboratory experiment to find that the gender gap in performance under competition and preferences for competition can be partly explained by the differential responses of men and women to the above pressures. In particular, while women underperform the men in a high-pressure math-based tournament, women greatly increase their performance levels and their willingness to compete in a low-pressure verbal environment, such that they actually surpass the men. This effect appears largely due to the fact that extra time in a verbal competition improves the quality of women’s work, reducing their mistake share. On the other hand, men use this extra time to increase only the quantity of work, which results in a greater relative number of mistakes. A labor market study suggests that the nature of the job and the stress level are correlated with the gender gap in the labor market in a manner consistent with the results of my experiment.