### Abstracts

#### 1 Macroeconomic Derivatives: An Initial Analysis of Market-Based Macro Forecasts, Uncertainty, and Risk

Refet S. Gürkaynak and Justin Wolfers

In September 2002, a new market in "Economic Derivatives" was launched allowing traders to take positions on future values of several macroeconomic data releases. We provide an initial analysis of the prices of these options. We find that market-based measures of expectations are similar to survey-based forecasts although the market-based measures somewhat more accurately predict financial market responses to surprises in data. These markets also provide implied probabilities of the full range of specific outcomes, allowing us to measure uncertainty, assess its driving forces, and compare this measure of uncertainty with the dispersion of point-estimates among individual forecasters (a measure of disagreement). We also assess the accuracy of market-generated probability density forecasts. A consistent theme is that few of the behavioral anomalies present in surveys of professional forecasts survive in equilibrium, and that these markets are remarkably well calibrated. Finally we assess the role of risk, finding little evidence that risk-aversion drives a wedge between market prices and probabilities in this market.

## 2 The Roots of Low European Employment: Family Culture? *Yann Algan and Pierre Cahuc*

OECD countries faced largely divergent employment rates during the last decades. However, the whole bulk of the cross-national and crosstemporal heterogeneity relies on specific demographic groups: primeage women and younger and older individuals. This paper argues that family labor supply interactions and cross-country heterogeneity in family culture are key for explaining these stylized facts.

First we provide a simple labor supply model in which heterogeneity in family preferences can account for cross-country variations in both the level and the dynamics of employment rates of demographic groups. Second, we provide evidence based on international individual surveys that family attitudes do differ across countries and are largely shaped by national features. We also document that cross-country differences in family culture *cause* cross-national differences in family attitudes. Studying the correlation between employment rates and family attitudes, we then show that the stronger preferences for family activities in European countries may explain both their lower female employment rate and the fall in the employment rates of young and older people.

#### 3 Shadow Sorting

Tito Boeri and Pietro Garibaldi

This paper investigates the border between formal employment, shadow employment, and unemployment in an equilibrium model of the labor market with market frictions. From the labor demand side, firms optimally create legal or shadow employment through a mechanism that is akin to tax evasion. From the labor supply side, heterogeneous workers sort across the two sectors, with high productivity workers entering the legal sector. Such worker sorting appears fully consistent with most empirical evidence on shadow employment. The model also sheds light on the "shadow puzzle," the increasing size of the shadow economy in OECD countries in spite of improvements in technologies detecting tax and social security evasion. Shadow employment is correlated with unemployment, and it is tolerated because the repression of shadow activity increases unemployment. The model implies that shadow wage gaps should be lower in depressed labor markets and that deregulation of labor markets is accompanied by a decline in the average skills of the workforce in both legal and shadow sectors. Based on micro data on two countries with a sizeable shadow economy, Italy and Brazil, we find empirical support for these implications of the model. The paper suggests also that policies aimed at reducing the shadow economy are likely to increase unemployment.

#### 4 Globalization and Equilibrium Inflation-Output Tradeoffs

Assaf Razin and Prakash Loungani

The paper shows that capital account and trade account liberalizations affect the inefficiency of a New Keynesian open economy macro equilibrium by altering the relative weights attached to the output gap and inflation terms in the representative household's utility-based loss function. It is well known that with capital account liberalization the household is able to smooth fluctuations in consumption, while trade liberalization permits specialization in domestic production and diversification in domestic consumption. We show that an important implication of these features is that capital market and trade openness (i.e., "globalization") reduce the weight of the output gap term in the utilitybased loss function. The paper provides a re-interpretation of evidence on the effect of openness on the inflation-output tradeoff, which supports the model's predictions.

# 5 Fiscal Externalities and Optimal Taxation in an Economic Community

Marianne Baxter and Robert G. King

The Stability and Growth Pact is a continuing source of economic controversy within Europe. The Pact recognizes that individual member states experience divergent business cycle conditions which may lead them to run deficits at certain points in time. However, the pact is designed to encourage member states to adopt fiscal policies that imply zero deficits on average and to limit their deficits to three percent of GDP at any point in time.

We study the nature of fiscal externalities within an economic community, such as Europe, which lacks explicit rules for fiscal policy coordination, assuming that each country chooses its tax rates optimally given the fiscal stance of other countries. Allowing for real shifts to country productivity and public expenditure, we find that the fiscal deficit can be a poor indicator of fiscal externalities: countries with different labor and consumption tax rates can exert exactly the same external effect but have very different fiscal deficit behavior. Trade deficits are, by contrast, much more informative about the effects that an individual country has on other members of the community.

#### 6 Fiscal Divergence and Business Cycle Synchronization: Irresponsibility Is Idiosyncratic

Zsolt Darvas, Andrew K. Rose, and György Szapáry

Using a panel of 21 OECD countries and 40 years of annual data, we find that countries with similar government budget positions tend to have business cycles that fluctuate more closely. That is, fiscal convergence (in the form of persistently similar ratios of government surplus/deficit to GDP) is systematically associated with more synchronized business cycles. We also find evidence that reduced fiscal deficits increase business cycle synchronization. The Maastricht "convergence criteria," used to determine eligibility for EMU, encouraged fiscal convergence and deficit reduction. They may thus have indirectly moved Europe closer to an optimum currency area, by reducing countries' abilities to create idiosyncratic fiscal shocks. Our empirical results are economically and statistically significant, and robust.

### 7 Dual Inflation and the Real Exchange Rate in New Open Economy Macroeconomics

Balázs Világi

This paper studies how the models of the new open economy macroeconomics, which usually focus on the relationship between the nominal exchange rate and the external real exchange rate, can explain the coexistence of permanent dual inflation, namely diverging inflation rates for tradable and non-tradable goods, and appreciation of the CPIbased real exchange rate in emerging market economies.

It is shown that the impact of asymmetric sectoral productivity growth on the CPI-based real exchange rate depends heavily on the market structure, and that the models of new open economy macroeconomics can be reconciled with the Balassa-Samuelson effect only if pricing to market is added to models.

It is demonstrated that the presence of nominal and real rigidities helps to explain the slow and incomplete adjustment of the relative price of non-tradables to tradables.

# 8 Trade Invoicing in the Accession Countries: Are They Suited to the Euro?

Linda S. Goldberg

The accession countries to the euro area are increasingly binding their economic activity, external and internal, to the euro area countries. One aspect of this phenomenon concerns the currency invoicing of international trade transactions, where accession countries have reduced their use of the U.S. dollar in invoicing international trade transactions. Theory predicts that the optimal invoicing choices for accession countries depend on the composition of goods in exports and imports and on the macroeconomic fluctuations of trade partners, both bearing on the role of herding and hedging considerations within exporter profitability. These considerations yield country-specific estimates about the degree of euro-denominated invoicing of exports. I find that the exporters of some accession countries, even in their trade transactions with the euro zone and other European Union countries, might be pricing too much of their trade in euros rather than in dollars, thus taking on excessive risk in international markets.