

BANCA D'ITALIA



New Research at the Bank of Italy

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Highlights

Two workshops investigating the relationships between socio-economic variables and macroeconomic performance were held at the Bank of Italy last January.

On January 19, the Economic Research Department hosted the workshop "SHARE: A Survey of Health, Ageing and Retirement in Europe". SHARE is a new cross-border survey that collects data on the life circumstances of individuals aged 50 and over. In the first wave, data have been collected in 11 European countries, from Scandinavia to the Mediterranean, and new countries are gradually joining the project. SHARE has made an effort to collect highly comparable data, adopting a fully centralised definition of the questionnaire items; data are also comparable with those collected by the HRS in the US and ELSA in England. The research opportunities offered by the information made available by SHARE are well illustrated by the range of topics covered in the workshop: labour supply and health conditions, portfolio choices and cognitive capacities, capital accumulation and bequest motives, expectations and attitudes to risk.

On January 24, the Economic Research Department hosted the workshop "Autonomy and Evaluation of School in Europe." The initiative is part of a growing effort on the part of the Bank of Italy to understand the role of human capital in fostering economic and social progress. The opening addresses were delivered by Mario Draghi, Governor of the Bank of Italy, and Giuseppe Fioroni, Minister of Education. The workshop appraised the systems of school evaluation adopted in three European countries (England, Sweden and France) and explored the relationship between evaluation systems and students' performances using PISA data. The workshop ended with a roundtable discussion, which focused on the ways in which the educational system contributes to building up a country's human capital, both directly, by passing on a codified body of knowledge, and indirectly, by encouraging critical thinking and the ability to learn.

March 31, 2007 is the deadline for the submission of papers to the 3rd Bank of Italy-CEPR conference on Money, Banking and Finance, devoted to "Monetary policy design and Communication" (see the <u>call for papers</u>).

The Bank of Italy, the OECD, the University of Rome "Tor Vergata" and the EC are organising the International Conference "Is happiness measurable and what do those measures mean for policy?," to be held in Rome on April 2 and 3, 2007. For more information: http://www.oecd.org/oecdworldforum/happiness

Abstracts of the latest working papers

No. 612: **A neural network architecture for data editing in the Bank of Italy's business surveys**

Claudia Biancotti, Leandro D'Aurizio and Raffaele Tartaglia-Polcini

This paper presents an application of neural network models to predictive classification for data quality control. Our aim is to identify data affected by measurement error in the Bank of Italy's business surveys; specifically, we build three networks for variables related to employment, sales and investment respectively. The networks are trained on input matrices extracted from the error-free final survey database for the 2003 wave, and subjected to stochastic transformations reproducing known error patterns. On independent, out-of-sample test sets the share of correct predictions are 92, 80 and 70 per cent for employments, sales and investment, respectively. On our data, neural networks perform much better as classifiers than logistic regression, one of the most popular competing methods. They appear to provide a valid means of improving the efficiency of the quality control process and, ultimately, the reliability of survey data. (full pdf text)

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No. 613: **Outward FDI and local employment growth in Italy**

Stefano Federico and Gaetano Alfredo Minerva

Using several data sources, we assess the impact of Italy's outward foreign direct

investment (FDI) on local employment growth between 1996 and 2001 for 12 manufacturing industries and 103 administrative provinces. Our main result is that, controlling for the local industrial structure and area fixed effects, FDI is associated with faster local employment growth, relatively to the national industry average. We also find that employment in small plants is not negatively influenced by higher levels of FDI. Our findings do not support therefore the idea that FDI is detrimental to local employment growth in the home country. (full pdf text)

No. 614: Testing for trend

Fabio Busetti and Andrew Harvey

The paper examines various tests for assessing whether a time series model requires a slope component. We first consider a t-test modified to deal with serial correlation on the mean of first differences and show that it achieves high power against the alternative hypothesis of a stochastic nonstationary slope as well as against a purely deterministic slope. Using local limiting power arguments we compare the t-test with the nonparametric tests of Vogelsang (1998) and with a modified stationarity test. Overall the t-test seems a good choice, particularly if it is implemented by fitting a parametric model to the data. When standardized by the square root of the sample size, the simple tstatistic, with no correction for serial correlation, has a limiting distribution if the slope is stochastic. We investigate whether it is a viable test for the null hypothesis of a stochastic slope and conclude that its value may be limited by an inability to reject a small deterministic slope. Empirical illustrations are provided using euro-area price series and data on global temperature. (full pdf text)

No. 615: Macroeconomic uncertainty and banks' lending decisions: The case of Italy

Mario Quagliariello

This paper discusses the role that macroeconomic uncertainty plays in banks' decisions on the optimal asset allocation. Using a portfolio model recently proposed in the literature, the paper aims at ascertaining how Italian banks choose between loans and risk-free assets as the uncertainty on macroeconomic conditions increases. The econometric results confirm that macroeconomic uncertainty is a significant determinant of banks' investment decisions, also after controlling for other factors. Also, in periods of increasing turmoil, herding behaviour tends to emerge, as witnessed by the reduction of the cross-sectional variance of the share of loans held in portfolio. (full pdf text)

No. 616: Entry barriers in Italian retail trade

Fabiano Schivardi and Eliana Viviano

The 1998 reform of the Italian retail trade sector delegated to the regional governments the regulation of entry of large retail shops. We use the local variation in regulation to determine the effects of entry barriers on firm performance for a representative sample of medium and large retail outlets. Using a diff-in-diff approach, we find that entry barriers are associated with substantially higher profit margins and substantially lower productivity of incumbent firms. We also find that liberalizing entry has a positive effect on investment in ICT, which the recent literature has shown to be the main driver of the remarkable sectoral productivity growth in the US. Finally, in

the average of the period 2000-2004 yearly inflation in the CPI component "food and beverages" was approximately half a percentage point lower in the most liberal regions than in the other ones: higher productivity coupled with lower margins resulted in lower consumer prices. (full pdf text)

No. 617: **A policy-sensible coreinflation measure for the euro area**

Stefano Siviero and Giovanni Veronese

Although the concept of core inflation is intuitively appealing, its practical usefulness has often been questioned on at least two accounts: first, existing core inflation measures are based on statistical criteria and thus lack a firm theoretical justification; second, there appears to be no generally accepted criterion to assess the empirical performance of competing measures. In this paper we propose an indicator of core inflation that aims to overcome those drawbacks. Our measure is obtained by combining disaggregate information coming from price sub-indices, as is the case for the most popular core inflation measures. We depart from all other approaches by combining the information available in price sub-indices in such a way so as to provide the best guidance to a forward-looking monetary policy-maker. Accordingly, our measure of core inflation is based on the solution of a standard monetary policy optimisation problem. We illustrate our approach using a simple estimated model of the euro-area economy and appraise the performance of a few of the most popular core inflation measures in use. We find that one cannot recommend the use of those measures to support monetary policy-making (full pdf text)

*No. 618***: The opinion of Italians on tax evasion**

Luigi Cannari and Giovanni D'Alessio

In this paper we use data from the Bank of Italy's Survey on Household Income and Wealth (SHIW) to study what Italian households think of tax evasion, and to estimate their propensity to evade taxes. This propensity turns out to be larger for the self-employed than for employees; within the group of employees, the propensity is higher for blue-collar workers than for white-collars workers. The propensity decreases with both education and age; it is higher in provincial capitals with higher unemployment and crime rates, and where social capital and the quality of public services are lower. The aversion to tax evasion turns out to be quite low across all social classes; this result suggests that mechanisms of general reprobation have a modest role in hampering tax evasion. Comparing SHIW data with those collected through a similar survey carried out by the Ministry of Finance, we find that the propensity to evade taxes has increased from 1992 to 2004. (full pdf text)

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No. 619: Memory for prices and the euro cash changeover: An analysis for cinema prices in Italy

Vincenzo Cestari, Paolo Del Giovane and Clelia Rossi-Arnaud

The question addressed by this study is whether consumers remember past prices correctly. We test Italian citizens' memory for cinema prices with questionnaires distributed to moviegoers. The analysis concentrates on the memory of pre-euro prices, but the recall for a more recent period is also investigated. The results show that only a small percentage of respondents recalled the correct price, and that the average prices recalled were much lower than the actual pre-euro prices and dated back to years before the changeover. Price recall is less accurate for the respondents who perceive higher and more persistent inflation; it is also worse for the older respondents and for the less frequent movie-goers. (full pdf text)

Abstracts of the latest Occasional Papers

No. 5: Reforming taxi services in Italy: Why and how

Chiara Bentivogli and Manuela Calderini

This paper contributes quantitative and analytical documentation to the debate on the liberalization of taxi services. The results of a survey by the Bank of Italy of the main Italian cities show that the supply of taxis is much lower than in cities abroad. The paper also provides some quantitative and qualitative evidence of the negative effects on consumers and on the creation of rents due to the present regulation of taxi services. An economic analysis of recent experiences of liberalization in other countries and their positive outcome indicate that rigid regulation of tariffs and supply, such as in Italy, lacks a sound analytical or empirical basis. Probably, the availability of fewer taxis in Italy reflects not only quantity and price regulation but also other features of the law itself, such as the prohibition against corporations operating on the market and the decentralized decision-making process, which places the interests of taxi drivers above those of consumers. The paper also



makes some proposals for reforming the sector in the light of the effects of the recent Bersani decree.

(full pdf text; available only in Italian)

Forthcoming working papers

- Orazio P. Attanasio and Monica Paiella, Intertemporal consumption choices, transaction costs and limited participation to financial markets: Reconciling data and theory.
- Kristian Behrens, Andrea R. Lamorgese, Gianmarco I.P. Ottaviano and Takatoshi Tabuchi, *Changes in transport and non-transport costs: local vs global impacts in a spatial network.*
- Maria Elena Bontempi, Roberto Golinelli and Giuseppe Parigi, *Employment, innovation and productivity: Evidence from Italian microdata.*
- Andrea Brandolini, *Measurement of income distribution in supranational entities: The case of the european union.*
- Massimo Del Gatto, Gianmarco I.P. Ottaviano and Marcello Pagnini, Openness to trade and industry cost dispersion: Evidence from a panel of Italian firms.
- Ivan Faiella and Romina Gambacorta, *The* weighting process in the SHIW.
- Brownyn H. Hall, Francesca Lotti and Jacques Mairesse, *Measurement of income distribution in supranational entities: The case of the European Union.*

Fabio Maccheroni, Massimo Marinacci, Aldo Rustichini and Marco Taboga, Portfolio selection with monotone mean-variance preferences.

Monica Paiella, *The forgone gains of incomplete portfolios*.

Forthcoming occasional papers

- Chiara Bentivogli, Emidio Cocozza, Antonella Foglia and Simonetta Iannotti, *The bank-firm relationship after Basel 2: A survey of Italian firms*.
- Andrea Finicelli, *House price* developments and fundamentals in the United States.

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Recently published working papers

- No. 611 Stefano Iezzi, Spatial polarization of per capita income: The analysis of the Italian case based on province-level data (December 2006).
- No. 610 Leandro D'Aurizio, Ivan Faiella, Stefano Iezzi and Andrea Neri, *The under-reporting of financial wealth in the survey on household income and wealth* (December 2006).
- No. 609 Roberto Golinelli and Sandro Momigliano, *Real-time determinants of fiscal policies in the Euro Area: Fiscal rules, cyclical conditions and elections* (December 2006).
- No. 608 Filippo Vergara Caffarelli, *Merge* and compete. Strategic incentives for vertical integration (December 2006).

- No. 607 Luca Dedola and Stefano Neri, What does a technology shock do? A VAR analysis with model-based sign restrictions (December 2006).
- No. 606 Andrea Nobili and Stefano Neri, *The transmission of monetary policy shocks from the US to the Euro Area* (December 2006).
- No. 605 Sabrina Di Addario, *Job search in thick markets: Evidence from Italy* (December 2006).
- No. 604 Pietro Tommasino, *The political* economy of investor protection (December 2006).

Recently published occasional papers



- No. 3: Francesco Cannata , *The effects of Basel 2 on Italian banks: Evidence from the fifth quantitative impact study* (November 2006).
- No. 4: Luigi Cannari, Leandro D'Aurizio and Guido de Blasio, *The effectiveness* of investment subsidies: Evidence from survey data (December 2006).

Selection of forthcoming or recent articles by Bank of Italy's staff

(full list since 1990)

Bonaccorsi di Patti E. and **G. Gobbi**, Winners or losers? The effects of banking consolidation on corporate *borrowers*. Forthcoming, Journal of Finance. (WP No. 479)

- Cipollone P. and A. Rosolia, Social interactions in high school: Lessons from an earthquake. Forthcoming, American Economic Review. (WP No. 596)
- **Dedola L.** and **S. Neri**, *What does a technology shock do? A VAR analysis with model-based sign restrictions.* Forthcoming, Journal of Monetary Economics (WP No. 607).
- Marchetti D. J. and F. Nucci, *Pricing* behavior and the response of hours to productivity shocks, Forthcoming, Journal of Money, Credit and Banking (WP No. 524).
- **Paiella, M.**, *The foregone gains of incomplete portfolios*, Forthcoming, Review of Financial Studies.
- Álvarez, L. J., E. Dhyne, M. Hoeberichts, C. Kwapil, H. Le Bihan, P.
 Lünnemann, F. Martins, **R. Sabbatini**, H. Stahl, P. Vermeulen, J. Vilmunen (2006), *Sticky prices in the euro area: a summary of new micro evidence*, Journal of the European Economic Association, 4, 575-584.
- **Bianco M.** and G. Nicodano (2006), *Pyramidal groups and debt*, European Economic Review, 50, 937-961.
- **Busetti, F.** (2006), *Tests of seasonal integration and cointegration in multivariate unobserved component models*, Journal of Applied Econometrics, 21, 419-438.
- Dhyne, E., E. Vilmunen, L.J. Älvarez, H.
 Le Bihan, G. Veronese, D. Dias, J.
 Hoffmann, N. Jonker, P. Lannemann,
 F. Rumler (2006), *Price changes in the Euro Area and the United States: Some facts from individual consumer price*

data, Journal of Economic Perspectives, 20, 171 – 192.

- Fabiani, S., Druant, M., I. Hernando, C. Kwapil, B. Landau, C. Loupias, F. Martins, T. Mathä, R. Sabbatini, H. Stahl, A. Stokman (2006), What firms' surveys tell US about price-setting behaviour in the euro area, International Journal of Central Banking, 2, 3-47.
- Gaiotti E. and A. Secchi (2006), *Is there a* cost channel of monetary transmission? An investigation into the pricing behaviour of 2000 firms, Journal of Money, Credit, and Banking, 2006, 38, 8, 2013-2038 (WP No. 525).
- Lippi F. and S. Neri (2006), Information variables for monetary policy in a small structural model of the Euro Area, Forthcoming, Journal of Monetary Economics (WP No. 511).
- Brandolini A., P. Cipollone and E. Viviano (2006), "Does the ILO definition capture all unemployment?", Journal of the European Economic Association, 4, 153-179. (WP No. 529)
- Fuchs W. and F. Lippi (2006), Monetary union with voluntary participation, Review of Economic Studies, 73, 437-457 (WP No. 512).

Busetti F. and R. Taylor (2005), Stationarity tests for irregularly spaced observations and the effects of sampling frequency on power, Econometric Theory, 21, 757-794.

- **Cristadoro R.**, M. Forni, L. Reichlin and **G. Veronese** (2005), *A core inflation indicator for the euro area*, Journal of Money, Credit, and Banking, 37, 539-560. (WP No. 435)
- **Dedola L.** and **F. Lippi** (2005), *The* monetary transmission mechanism: Evidence from the industries of five

OECD countries, European Economic Review, 49, 1543-69 (WP No. 389).

- Guiso L., L. Pistaferri and **F. Schivardi** (2005), *Insurance within the firm*, Journal of Political Economy, 113, 1054-1087, (WP No. 414).
- Adalid R., G. Coenen, P. McAdam and S. Siviero (2005), *The performance and robustness of interest-rate rules in models of the euro area*, International Journal of Central Banking, 1, 95-132.
- Gambacorta L. (2005), *Inside the bank lending channel*, European Economic Review, 49, 1737-1759.
- Marchetti D.J. and Nucci F. (2005), *Price* stickiness and the contractionary effects of technology shocks, European Economic Review, 49, 1137-1164 (WP No. 392).

\mathbf{U} seful links



Working papers of the other euro-area central banks:

Banque Nationale de Belgique Deutsche Bundesbank Bank of Greece Banco de España Banque de France Central Bank of Ireland Banque Centrale du Luxembourg De Nederlandsche Bank Oesterreichische Nationalbank Banco de Portugal Bank of Slovenia Bank of Finland European Central Bank

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