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New Research at the Bank of Italy

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Contents

Highlights

On 21 September the Bank of Italy hosted the Third Conference on *"New Issues in Economic Policy"*, jointly organized by the Ente Einaudi and the Giornale degli Economisti. As usual, the conference focused on several issues relevant for the policy debate in Italy. On the impact of pension reforms on poverty measures, it was shown that the incidence of poverty among pensioners in Italy has declined to relatively low levels. However, given the cuts to the benefits to be paid to younger generations, for such cohorts the poverty risk after retirement has sharply risen. Concerning the performance of the *studi di settore* (audit selection mechanisms), it has been argued that the apparent increasing tax compliance observed since their introduction can be given a less benign interpretation; in fact, it might reflect the manipulation by firms of the parameters that determine whether they are audited or not.

With regard to privatizations in public sector utilities, after the reforms of the nineties in the water and electricity sectors the affordability of such services by households seems to have somewhat improved, though it is not clear whether this is due to the reforms. Finally, a broader analysis of the liberalizations of local public utilities showed that such reforms fell short of separating regulation from service provision, reducing fragmentation and reducing public subsidies. This was both the result of problems in the design of the reforms and difficulties in their implementation, the latter being due to resistances from a number of vested interests.

On 27-28 September the Bank of Italy hosted the Third BI-CEPR Conference on Money, Banking and Finance on *"Monetary Policy Design and Communication"*. In the last two decades there has been a substantial change in the attitude of most central banks towards communication. The old view that central bankers should speak in an opaque and convoluted language has been replaced by a new one which regards clear communication as mandatory. This change is the flip side of the independence gained by most central banks: independence requires accountability, and accountability requires transparent communication. Is then exhaustive communication always optimal? Is it feasible? Does it matter? Which aspects should it cover? These are the main issues tackled at the conference (for a review, see the article "The CEPR-Bank of Italy Conference on Monetary Policy Design and Communication", by G. Ferrero and M. Sbracia, at page 5 of this newsletter).

Latest working papers

No. 638: Comparative advantage patterns and domestic determinants in emerging countries: An analysis with a focus on technology

Daniela Marconi and Valeria Rolli

During the last two decades a number of emerging economies have become deeply engaged in technology-intensive production. This has been reflected in a shift in their international trade specialization from labor-intensive towards capital-intensive goods and in rapid productivity gains across all manufacturing activities. The paper draws on a sample of sixteen emerging countries to investigate the linkages between the pattern of revealed comparative advantages (RCAs), captured by a modified version of the Lafay index of international trade specialization, and the competitiveness structure of the domestic manufacturing sector, measured by a set of industry and country-specific variables. Positive and large RCAs are found to be associated with low unit labor costs in both low-technology (labor-intensive) and medium-or-high tech sectors; on the other hand, domestic accumulation of physical capital is associated with positive and large RCAs in medium-or-high tech sectors. The international disadvantage (negative RCAs) in technology-intensive production tends to increase for countries with low human capital, whereas it diminishes for countries that have large domestic markets and import technology through foreign capital goods.
(full pdf text)

No. 639: The generation gap: Relative earnings of young and old workers in Italy

Alfonso Rosolia and Roberto Torrini

We describe the evolution of the relative earnings of young male workers and the evolution of the age-earnings profiles across cohorts in the last three decades. We draw on administrative records to document a significant deterioration of entry wages over the 1990s in the presence of basically stable experience profiles. We supplement the analysis with the Bank of Italy's Survey on Household Income and Wealth and show that the wage gap between younger and older workers widened in the 90s for all levels of educational attainment. These developments are not accounted for by changes in relative skill-age labor supplies or in other potential socio-demographic determinants of wages. We argue that they were probably the result of partial labor market reforms that generated a dual labor market along the age dimension, opening a gap between the earnings of old incumbent workers and those of new labor market entrants.
(full pdf text)

No. 640: The financing of small innovative firms: The Italian case

Silvia Magri

Small firms encounter difficulties in raising external finance owing to greater information problems. For small innovative firms, whose activity is more difficult to evaluate, the cost of external finance could be even higher. This paper examines special features of the financial structure of small innovative firms, compared with firms of similar size that do not innovate.

The evidence shows that small innovators rely less on financial debt and more on internal financial resources; no important differences appear for large firms. This is consistent with the view that informational problems mainly affect small firms; large firms, even when they innovate, continue to rely on their traditional set of financial instruments. Another finding is that in small innovative firms investment is less sensitive to cash flow than in small non-innovative firms, probably because the high incidence of internal financial resources allows them more flexibility in deciding their investments. No comparable difference is found between innovative and non-innovative large firms.
(full pdf text)

No. 641: **Assessing financial contagion in the interbank market: Maximum entropy versus observed interbank lending patterns**

Paolo Emilio Mistrulli

Interbank markets allow banks to cope with specific liquidity shocks. At the same time, they may be a channel allowing a bank default to spread to other banks. This paper analyzes how contagion propagates within the Italian interbank market using a unique data set including actual bilateral exposures. Since information on bilateral exposures was not available in most previous studies, they assumed that banks spread their lending as evenly as possible among all the other banks by maximizing the entropy of interbank linkages. Based on the data available on actual bilateral exposures for all Italian banks, the results obtained by assuming the maximum entropy are compared with those reflecting the observed structure of interbank claims. The comparison indicates that, in line with thesis prevailing in the literature, the maximum entropy method tends to underestimate the extent of contagion. However, this does not hold in general. Under certain circumstances, depending on the structure of the interbank linkages, the recovery rates of interbank exposures and banks' capitalization, the maximum entropy approach overestimates the scope for contagion.
(full pdf text)

No. 642: **Detecting long memory co-movements in macroeconomic time series**

Gianluca Moretti

Cointegration analysis tests for the existence of a significant long-run equilibrium among some economic variables. Standard econometric procedures to test for cointegration have proven unreliable when the long-run relation among the variables is characterized by non-linearities and persistent fluctuations around the equilibrium. As a consequence, many intuitive economic relations are empirically rejected. In this paper we propose a simple approach to account for non-linearities in the cointegrating equilibrium and possible long memory fluctuations from such equilibrium. We show that our correction allows us to test robustly for the presence of cointegration both under the null and alternative hypotheses. We apply our procedure to the Johansen-Juselius PPP-UIP database, and unlike the standard case, we do not fail to reject the null of no cointegration.
(full pdf text)

No. 643: **The producer service sector in Italy: Long-term growth and its local determinants**

Valter Di Giacinto and Giacinto Micucci

This paper analyses the local determinants of producer service growth in Italy, focusing on agglomeration economies. Using an OECD classification, we estimate a dynamic specification allowing for transitory dynamics around the long-run employment path derived from a model in which both demand and supply factors are considered. Compared with the prevailing modelling approach, the spatial scope of externalities is extended to include possible interactions across different urban areas. Our main findings are the following. Long-run employment growth is positively affected by Marshall-Arrow-Romer externalities, with a minor role played by urbanization externalities, a result similar to that reported in recent studies of the Italian manufacturing sector and its industrial districts. Among the remaining supply factors, human capital exerts a positive influence on the long-run employment level in producer services; among demand factors, the size of the local market appears to be important, given the still incomplete tradability of service output. Significant interactions across urban areas are also shown to occur.
(full pdf text)

Latest Occasional Papers

No. 9: Home affordability in Italy

Giovanni D'Alessio and Romina Gambacorta

During the last two decades, house prices in Italy have increased dramatically in real terms, particularly in large towns and cities; the rise in rents has been even more marked. This paper analyses home affordability for households, considering both the rent and the property markets. In particular, it looks at the trends in house prices, rents, household income, cost of loans and other elements affecting the demand for housing (such as population growth). The paper also assesses how widespread home difficulties are among the population, considering the physical and financial aspects, both actual and potential. The role of public housing in helping to the problems is also discussed. Despite the wide diffusion of home ownership, home-related distress affects 20 per cent of Italian households.
(full pdf text; in Italian)

No. 10: The Economy of the Italian Regions in the year 2006

The Economy of the Italian Regions in the year 2006 analyzes the evolution of production, labour market, financial aggregates and regional public finances in the four main Italian territorial areas. Topics analyzed focus on structural change in the Italian economy; trends in Mezzogiorno's exports; the evolution of local markets for university-level education after the introduction of a three-year degree; and the composition of households' financial assets and liabilities. Also examined are regional regulation in the commerce sector and the management of local public transportation. Two final points of focus relate to local public finances: the degree of regional taxation flexibility, and the main peculiarities of the five special statute regions.
(full pdf text; in Italian)

No. 11: Rainy day funds: Can they make a difference in Europe?

Fabrizio Balassone, Daniele Franco and Stefania Zotteri

Rainy Day Funds (RDFs) have an important role in the USA. They allow States to limit procyclical fiscal policies.

This paper examines the possible role of RDFs in the European fiscal framework. The analysis suggests that RDFs would not fundamentally alter the incentive problems at the root of the difficulties in the implementation of the Stability and Growth Pact. Moreover, RDFs are not an option for countries with high deficits. However, for low-deficit countries, RDFs can lessen the rigidity of the 3 per cent threshold in bad times. RDFs could be introduced on a voluntary basis at the national level and could contribute to make the rules more country-specific. This would require a change in the definition of the "Maastricht deficit": deposits and withdrawals should be considered respectively as budget expense and revenue. To ensure that RDFs are not used opportunistically, deposits should only be made out of budget surpluses, circumstances allowing withdrawals should be specified ex ante. (full pdf text)

The CEPR-Bank of Italy Conference on Monetary policy design and communication

(continued from page one) The paper by **Cukierman** sets the stage, arguing that full transparency cannot be achieved — as the limited understanding of the economic environment by the central bank implies some degrees of fuzziness — and that, even if it were achievable, it is likely to be sub-optimal. An example is offered by central bank information about liquidity or solvency problems in the banking sector: premature release of this news may trigger a bank run and reduce welfare by hampering investments and consumption smoothing. Another argument against full transparency, originally introduced by Morris and Shin, claims that the information provided by the central bank could be given too much weight, crowding out private information. This might occur when private agents need to form an expectation about other agents expectations (as in Keynes's "beauty contest" example). In this case, the public signal may act as a focal point and receive too much attention; this is detrimental when its precision is low relative to that of private signals. **Ehrmann and Fratzscher** find empirical support for this argument: policy statements of the Federal Reserve enhance predictability when the precision of private signals is low, but reduce it when the precision is high. Moreover, predictability is lower when there is greater concern for other people's expectations.

Following a different approach, **Dale, Orphanides, and Österholm** obtain a conclusion similar to that of Morris and Shin, when the private sector and the central bank are in a perpetual state of learning and the market is unable to correctly assess the quality of central bank information.

Lack of full independence provides another case against full transparency. **Geraats** argues that if the central bank is not fully independent, then some degree of opaqueness can provide a useful shield from political pressures; only when independence is warranted full transparency may be pursued.

Full transparency on some specific features of the monetary policy framework, such as the inflation target, appears nonetheless to be beneficial. **Aoki and Kimura** show that when central bank decisions depend on private sector expectations, transparent communication of the inflation target reduces agents' uncertainty and, in turn, increases the effectiveness of monetary policy decisions.

Melecky, Rodríguez Palenzuela, and Söderström quantify the extent to which announcing the inflation target reduces economic volatility: the gain is rather small if the private sector can assess correctly the process governing the inflation target, but it may be quite large otherwise.

The benefits from full transparency are still controversial in two hotly debated issues. The first is related to the difficulties that a collegial decision-making body might find in agreeing on a single position to be disclosed. **Swank and Visser** show that in a transparent decision-making process, disclosure of committee members' opinions may hurt their reputation, hampering a frank and efficient information sharing. The optimal solution then is to set up an informal and closed pre-meeting in which committee members share their private information, converge on first-best results and, in the formal meeting, "speak with one voice", hiding previous disagreements. **Claussen and Røisland** analyze the related question of whether committee members should first agree about policy rates and then communicate a view about the unknown state of the economy that is consistent with the agreed policy decision or first agree on a view about the state of the economy and then set the interest rate consistently with the agreed view. They find that the two alternatives lead to the same policy actions, but the latter has the advantage of disclosing a view about the state of the economy that turns out to be closer to the real one.

The second issue is the publication of central bank's forecasts of its own future interest rate decisions, a practice recently adopted by the central banks of Norway, New Zealand and Sweden. In principle, by publishing its expectations on interest rates, the central bank reveals its own information about future shocks. This allows the market to price financial assets more efficiently and helps the central bank to enforce the optimal policy. The matter is more critical, however, when the announcement of future policy intentions reflects noisy information about the economic outlook. **Gosselin, Lotz, and Wyplosz** show that, in this case, opacity may raise welfare by reducing inflation volatility: if the central bank takes a decision based on incorrect forecasts without revealing its expectations about future interest rates, then the private sector may form its own expectations, offsetting the effect of the central bank forecast error. Another argument against the publication of future policy intentions is that the public might not understand the conditional nature of the forecasts and this could undermine the credibility of the central bank if actual decisions were to differ from the pre-announced path. **Ferrero and Secchi**, however, present some evidence suggesting that, for New Zealand, this does not seem to be the case: financial markets understand the conditional nature of the announcements; moreover, private expectations adjust consistently with the information conveyed by the central bank communication.

The lack of a consensus view in the theoretical literature about the optimal degree of information sharing has fuelled the interest for empirical studies. The literature has mainly focused on the impact of the central bank communication on financial markets. **Van Bleijswijk, Bierut, and van Dijk** find that, in the U.S., the release of FOMC statements tends to increase the volatility of bond and stock prices; however, preliminary evidence indicates that the inclusion of additional forward-looking elements into the statements (such as the votes or the balance of risks) attenuates the market reaction. The latter result suggests that the recent move towards increased transparency may have contributed to the decline in the volatility of asset prices observed in the last decade. **Rosa and Verga** show that futures on Euribor interest rates react significantly to the ECB decisions and statements, especially when announcements are unexpected — a result that supports the hypothesis that the ECB is credible, as markets seem to believe that the central bank does what it says it would do.

The conference provided the opportunity for an effective interaction between views from the academia and from central banks, with a lively debate and reciprocal learning. Clearly, there is still room to assess the empirical relevance of the assumptions maintained in different theoretical models. For instance, the importance of other agents' expectations for market participants and their ability to correctly assess the quality of public information remain largely unexplored. Most importantly, while empirical studies have mainly focused on the impact of communication and transparency on financial markets and on the predictability of policy decisions, evidence is still needed about the ability of communication to improve the effectiveness of the monetary authority in achieving its final goals.

Giuseppe Ferrero and Massimo Sbracia

Forthcoming working papers

Albertazzi U. and G. Gambacorta, *Bank profitability and taxation.*

Ascari G. and T. Ropele, *Optimal monetary policy under low trend inflation.*

Beretta E. and S. Del Prete, *Bank consolidation and lending policies to small business: Differences across geographical areas.*

Bortolotti B. and P. Pinotti, *Delayed privatization.*

Carmignani A. and M. Omiccioli, *Costs and benefits of creditor concentration: An empirical approach.*

Cristadoro R., A. Gerali, S. Neri and P. Pisani, *Exchange rate volatility and disconnect: An empirical investigation.*

Del Giovane P., S. Fabiani and R. Sabbatini, *What's behind "inflation perceptions"? A survey-based analysis on Italian consumers.*

Forni L., L. Monteforte and L. Sessa, *The general equilibrium effects of fiscal policy: Estimates for the euro area.*

Gambacorta L. and C. Rossi, *Modeling bank lending in the euro area: A non linear approach.*

Giordano R., S. Momigliano, S. Neri and R. Perotti, *The effects of fiscal policy in Italy: Evidence from a VAR model.*

Gobbi G. and R. Zizza, *Does the underground economy hold back financial deepening? Evidence from the Italian credit market.*

Iacoviello M. and S. Neri, *The role of housing collateral in an estimated two-sector model of the U. S. economy.*

Maccheroni F., M. Marinacci, A. Rustichini and M. Taboga, *Portfolio selection with monotone mean-variance preferences.*

Romagnoli A., *Balance-sheet ratios and stock returns: An analysis for Italian banks.*

Tomat G.M., *Revising poverty and welfare dominance.*

Recently published working papers

No. 637 Alessio Ciarlone, Paolo Piselli and Giorgio Trebeschi, *Emerging markets spreads and global financial conditions* (June 2007)

No. 636 Ivan Faiella and Romina Gambacorta, *The weighting process in the SHIW* (June 2007)

No. 635 Gianmarco I.P. Ottaviano and Marcello Pagnini, *Openness to trade and industry cost dispersion: Evidence from a panel of Italian firms* (June 2007)

No. 634 Matteo Bugamelli, *Export prices, product quality and firms' characteristics: An analysis on a sample of Italian firms* (June 2007; in Italian)

No. 633 Fabrizio Balassone, Daniele Franco and Stefania Zotteri, *The reliability of EMU fiscal indicators: Risks and safeguards* (June 2007)

No. 632 Alessio Anzuini, Patrizio Pagano and Massimiliano Pisani, *Oil supply news in a VAR: Information from financial markets* (June 2007)

No. 631 Filippo Altissimo, Riccardo Cristadoro, Mario Forni, Marco Lippi and Giovanni Veronese, *New Eurocoin: Tracking economic growth in real time* (June 2007)

No. 630 Daniela Marconi, *Endogenous growth and trade liberalization between asymmetric countries* (June 2007)

No. 629 João Sousa and Andrea Zaghini, *Monetary policy shocks in the euro area and global liquidity spillovers* (June 2007)

Recently published occasional papers

No. 8: Riccardo Cesari, Giuseppe Grande and Fabio Panetta, *Supplementary pension schemes in Italy: Features, development and opportunities for workers* (May 2007; in Italian)

Selection of forthcoming or recently published articles and books by Bank of Italy's staff

(full list since 1990)

Angelini P. and **A. Generale**, *Firm size distribution: Do financial constraints explain it all? Evidence from survey data*, Forthcoming, American Economic Review (WP No. 549)

Ascari G. and **T. Ropele**, *Optimal monetary policy under low trend inflation*, Forthcoming, Journal of Monetary Economics

Busetti F., **L. Forni**, A. Harvey and **F. Venditti**, *Inflation convergence and divergence within the European monetary union*, Forthcoming, International Journal of Central Banking

Cipollone P. and **A. Rosolia**, *Social interactions in high school: Lessons from an earthquake*, Forthcoming, American Economic Review (WP No. 596)

Del Giovane P. and **R. Sabbatini** (eds.), *The euro, inflation and consumers perceptions. Lessons from the case of Italy*, Forthcoming, Springer.

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 forgone gains of incomplete portfolios*, Forthcoming, Review of Financial Studies (WP No. 625)

Bonaccorsi di Patti E. and **G. Gobbi** (2007), *Winners or losers? The effects of banking consolidation on corporate borrowers*, Journal of Finance, 62, 669-695 (WP No. 479)

Fabiani S., C. Loupias, F. Martins and **R. Sabbatini** (eds.) (2007), *Pricing decisions in the euro area: How firms set prices and why*, Oxford University Press, New York

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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)

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Dedola L. and **S. Neri** (2006), *What does a technology shock do? A VAR analysis with model-based sign restrictions*, Journal of Monetary Economics, 54, 2, 512-549 (WP No. 607)

Druant, M., **S. Fabiani,** 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

Engle R.F. and **J. Marcucci** (2006), *A long-run pure variance common features model for the common volatilities of the Dow Jones*, Journal of Econometrics, 132, 7-42

Fuchs W. and **F. Lippi** (2006), *Monetary union with voluntary participation*, Review of Economic Studies, 73, 437-457 (WP No. 512)

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, 38, 8, 2013-2038 (WP No. 525)

Lippi F. and **S. Neri** (2004), *Information variables for monetary policy in a small structural model of the euro area*, Journal of Monetary Economics, 54, 4, 1256-1270 (WP No. 511)

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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

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)

Del Giovane P., F. Lippi and **R. Sabbatini** (eds.) (2005), *Euro and inflation: Perceptions, facts and analysis*, il Mulino, Bologna (in Italian)

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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)

Useful 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
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