

New Research at the Bank of Italy

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Highlights

A new volume, Technological Innovation and Industrial Development after WWII (C. Antonelli, F. Barbiellini Amidei, R. Giannetti, M. Gomellini, S. Pastorelli and M. Pianta; in Italian), has been released in the Historical Series of the Bank of Italy, published by Editori Laterza. It consists of three essays on Italian economic growth in the first decades after the Second World War. The emphasis is on the role of technological change in shaping the main features and the pace of the industrial development. During this period the growth of the Italian economy was rapid and sustained as never before. Localised technological change fuelled the powerful growth of total factor productivity in industry. The impressive expansion of exports did not encourage any far-reaching change in the country's international product specialization. The shortcomings of Italy's system of innovation in those decades and the haphazard public efforts for innovation

are highlighted. This work casts new light on the historical roots of both the strengths and the weaknesses that still mark the Italian productive structure today. The themes of the volume were discussed by Vera Negri Zamagni (University of Bologna), Fabrizio Barca (Italian Ministry of Economy and Finance) and Fabrizio Onida (Bocconi University, Milan) in a presentation at the headquarters of the Bank of Italy on 14 November 2007.

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Latest working papers

No. 644: Bank consolidation and lending policies to small business: Differences across geographical areas

Enrico Beretta and Silvia Del Prete

This paper analyses the effects of the concentration of the banking industry on the availability of credit to small and medium-sized firms in Italy in the period 1990-2004. Employing a bank-based approach, the study investigates the differential effects of M&A in the various geographical areas, also considering the role of "new entry" banks and of those not involved in consolidations. The paper finds that the portion of credit allocated to small businesses decreases in the long run after mergers; this effect is stronger in the South and in the North East of Italy. In the case of acquisitions, instead, banking groups

The Bank of Italy is organizing an international conference on "DSGE models in the policy environment," to be held in Rome on 23-24 June, 2008. The deadline for papers submission is 31 March, 2008 (see the call for papers).

improve their "expertise" in small business lending in all the main geographical areas, except for the southern regions, where small firms are riskier and banks' takeovers are motivated mainly by the need to allow financial restructuring. However, in this market, the entry of new banks and close relationships between local banks and agglomerations of small firms partly offset the lower specialization on small business financing induced by acquisitions. (full pdf text; in Italian)

No. 645: Costs and benefits of creditor concentration: An empirical approach

Amanda Carmignani and Massimo Omiccioli

This paper tries to separate empirically the conflicting effects of a high level of creditor concentration. By enhancing lenders' ability to monitor, creditor concentration can reduce the likelihood of financial distress; by reducing coordination failure among creditors, it can help a distressed firm to avoid bankruptcy. On the other hand, a strong probability of debt renegotiation can give rise to a soft-budgetconstraint problem, thus increasing the likelihood of financial distress; moreover, high concentration of creditors can expose borrowers to greater liquidity risks. Using Italian data on manufacturing firms, our empirical results show that, if we control for the soft-budget-constraint and liquidity effects, high concentration of bank credit reduces the likelihood of financial distress and liquidation. But these benefits do not come without costs: enhanced monitoring is offset by the soft-budget-constraint effect; greater liquidity risks make both financial distress and liquidation more likely. Ultimately, the overall effect of more concentrated banking relations is a

lower probability of liquidation but a higher probability of financial distress. (full pdf text)

No. 646: Does the underground economy hold back financial deepening? Evidence from the Italian credit market

Giorgio Gobbi and Roberta Zizza

The paper investigates the relationship between the underground economy and financial deepening. Entrepreneurs can only access external finance by disclosing credible information in formal documentation. This may be impossible for many informal producers, who lack proper accounting records. Similarly, irregular workers may have difficulty borrowing to finance consumption and house purchases. Using panel data on local credit markets in Italy, we find that the share of irregular employment has a strong negative impact on outstanding credit to the private sector. According to our estimates, a shift of 1 per cent of employees from regular to irregular work corresponds to a decline of 1-2 percentage points of GDP in the volume of business lending and of 0.3 percentage points in outstanding credit to households. By contrast, the feedback effects of financial deepening on the size of the informal sector are weak and statistically not significant. Applying a difference-indifference approach that exploits the exogenous variation induced by the regularization programme for immigrant workers launched in 2002, we also find that irregular labour has a negative effect on banks' decisions to enter local credit markets.

(full pdf text)

No. 647: Optimal monetary policy under low trend inflation

Guido Ascari and Tiziano Ropele

In the monetary policy literature it is commonly assumed that trend inflation is zero, despite overwhelming evidence that zero inflation is neither empirically relevant nor a practical objective for central bank policy. We therefore extend the standard New Keynesian model to allow for positive trend inflation, showing that even low trend inflation has strong effects on optimal monetary policy and the dynamics of inflation, output, and interest rates. Under discretion, the efficient policy deteriorates and there is no guarantee of determinacy. Even with commitment, targeting non-zero trend inflation leads to substantial welfare losses. Our results serve as a warning against indiscriminate use of models assuming zero trend inflation. (full pdf text)

No. 648: Balance-sheet ratios and stock returns: An analysis for Italian banks

Angela Romagnoli

The paper assesses whether the monthly returns of the listed shares of Italian banks are predicted by changes in balance-sheet indicators. The sample covers the period from January 1997 to June 2003. Estimates use both unadjusted and risk-adjusted returns. Results show that the stock returns of Italian banks are positively related to past profitability, liquidity, and asset quality, while they are not significantly affected by banks' capital ratios. Furthermore, in the sample period an increase in traditional lending activity leads to higher stock returns.

(full pdf text; in Italian)

No. 649: Bank profitability and taxation

Ugo Albertazzi and Leonardo Gambacorta

This paper investigates how bank profitability is affected by corporate income tax (CIT) using aggregate data on the banking sector of the main industrialized countries for the period 1981-2003. Two main novelties emerge with respect to the existing literature. First, the paper explicitly considers that CIT is not specific to the banking sector, so that changes in the CIT rate can affect both banks and borrowing firms' behaviour. Thus, with the help of a simple theoretical model we derive a set of predictions about the impact of CIT on banks' income statement. Second, by considering all the main components of banks' profit and loss accounts, we are able to test such predictions and to disentangle the extent to which a bank is able to shift its tax-burden onto its borrowers, depositors, and purchasers of fee-generating services. It turns out that CIT has a substantial impact on the composition of banking sector revenues but cannot explain large differences in the level of profitability across countries.

(full pdf text)

No. 650: Modelling bank lending in the euro area: A non-linear approach

Leonardo Gambacorta and Carlotta Rossi

This paper investigates possible nonlinearities in the response of bank lending to monetary policy shocks in the euro area. The credit market is modelled over the period 1985-2005 by means of an Asymmetric Vector Error Correction Model (AVECM) involving four endogenous variables (loans to the private sector, real GDP, lending rate, and consumer price index) and one exogenous variable (money market rate). The main features of the model are the existence of two co-integrating equations representing the long-run credit demand and supply and the possibility for loading and lagged-term coefficients to assume different values depending on the monetary policy regime (easing or tightening). The paper finds that the effect on credit, GDP, and prices of a monetary policy tightening is larger than the effect of a monetary policy easing. This result supports the existence of an asymmetric broad credit channel in the euro area.

(full pdf text)

No. 651: Revisiting poverty and welfare dominance

Gian Maria Tomat

The paper reviews the theory of the measurement of poverty. The axiomatic theory is described and the axiomatic properties of poverty indexes are related to assumptions on the functional form of the poverty index function. The notion of poverty ordering is then introduced and followed by a review of the relations between the poverty orderings than can be defined from classes of poverty index functions with well-defined functional form properties and the notions of first order and second order stochastic dominance. The analysis applies the results used in the theory of economic inequality to study the relationship between welfare orderings and Lorenz dominance. The theory is used to analyze poverty patterns in Italy in 1997-2005.

(full pdf text)

No. 652 The general equilibrium effects of fiscal policy: Estimates for the euro area

Lorenzo Forni, Libero Monteforte and Luca Sessa

This paper reconsiders the economic effects of fiscal policy using an estimated dynamic stochastic general equilibrium model for the euro area. We try to better understand how these effects depend on the composition of expenditures and revenues, as well as on the interaction with monetary policy. The model accounts for distortionary taxation on labor, capital income and consumption, while expenditures are detailed into purchases of goods and services, compensations for public employees and transfers to households. A newly computed quarterly data set for fiscal variables is used. Our results point to the prevalence of mild Keynesian effects of fiscal policy. In particular, although innovations in fiscal policy variables tend to be rather persistent, the expansionary effects of the main expenditure items are limited and short lived; on the revenue side, the effects have a similar magnitude on impact, but last longer. Finally, based on our evidence, most fiscal policy variables contribute little to the cyclical variability of the main macro variables.

(full pdf text)

No. 653 Securitisation and the bank lending channel

Yener Altunbas, Leonardo Gambacorta and David Marqués

The dramatic increase in securitisation activity has modified the functioning of credit markets by reducing the fundamental role of liquidity transformation performed by financial intermediaries. We claim that

the changing role of banks from "originate and hold" to "originate, repackage and sell" has also modified banks' abilities to grant credit and the effectiveness of the bank lending channel of monetary policy. Using a large sample of European banks, we find that the use of securitisation appears to shelter banks' loan supply from the effects of monetary policy. Securitisation activity has also strengthened the capacity of banks to supply new loans but this capacity depends upon business cycle conditions as well as upon banks' risk positions. In this respect the recent experience of the subprime mortgage loans crisis is very instructive.

(full pdf text)

Forthcoming working papers

- Affinito M. and G. Piazza, What borders are (likely) made of? An analysis of barriers to European banking integration.
- Bortolotti B. and P. Pinotti, *Delayed privatization*.
- Bronzini R., G. de Blasio, G. Pellegrini and A. Scognamiglio, *The effect of investment tax credit: Evidence from an atypical programme in Italy.*
- Ciapanna E., Directed matching with endogenous Markov probability: Clients or competitors?
- Cristadoro R., A. Gerali, S. Neri and P. Pisani, *Real 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.
- Faiella I., Accounting for sampling design

- in the survey on household income and wealth.
- Fantino D., R&D and market structure in a horizontal differentiation framework.
- Giordano R., S. Momigliano, S. Neri and R. Perotti, *The effects of fiscal policy in Italy: Evidence from a VAR model.*
- Golinelli R. and S. Momigliano, *The* cyclical response of fiscal policies in the euro area. Why do results of empirical research differ so strongly?.
- Iacoviello M. and S. Neri, *Housing market* spillovers: Evidence from an estimated DGSE model.
- Lamorgese A., Innovation driven sectoral shocks and aggregate city cycles.
- Maccheroni F., M. Marinacci, A. Rustichini and M. Taboga, *Portfolio* selection with monotone mean-variance preferences.
- Roffia B. and A. Zaghini, *Excess money growth and inflation dynamics*.
- Sette E., Competition and opportunistic advice of financial analysts: Theory and evidence.

Recently published working papers

- No. 643 Valter di Giacinto and Giacinto Micucci, *The producer service sector in Italy: Long-term growth and its local determinants* (September 2007)
- No. 642 Gianluca Moretti, *Detecting long* memory co-movements in macroeconomic time series (September 2007)
- No. 641 Paolo Emilio Mistrulli, Assessing financial contagion in the interbank market: Maximum entropy versus

- observed interbank lending patterns (September 2007)
- No. 640 Silvia Magri, *The financing of* small innovative firms: The Italian case (September 2007)
- No. 639 Alfonso Rosolia and Roberto Torrini, *The generation gap: Relative* earnings of young and old workers in Italy (September 2007)
- No. 638 Daniela Marconi and Valeria Rolli, Comparative advantage patterns and domestic determinants in emerging countries: An analysis with a focus on technology (September 2007)

Recently published occasional papers

- No. 11: Fabrizio Balassone, Daniele Franco and Stefania Zotteri, *Rainy day funds: Can they make a difference in Europe?* (September 2007)
- No. 10: The Economy of the Italian Regions in the year 2006 (July 2007)
- No. 9: Giovanni D'Alessio and Romina Gambacorta, *Home affordability in Italy* (July 2007; in Italian)

Selection of recent journal 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)
- Angelini P. and F. Lippi, Did prices really soar after the euro cash changeover? Evidence from ATM withdrawals, Forthcoming, International Journal of Central Banking (WP No. 581)
- Ascari G. and **T. Ropele**, *Optimal* monetary policy under low trend inflation, Forthcoming, Journal of Monetary Economics (WP No. 647)
- **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

- **Lippi F.** and **S. Neri** (2007), *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)
- **Locarno A.** (2007), *Imperfect knowledge*, adaptive learning, and the bias against activist monetary policies, International Journal of Central Banking, 3, 3, 47-85 (WP No. 590)

2006

- Álvarez, L. J., E. Dhyne, M. Hoeberichts, C. Kwapil, H. Le Bihan, P. Lünnemann, F. Martins, **R. Sabbatini**, H. Stahl, P. Vermeulen, J. Vilmunen, *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, *Pyramidal* groups and debt, European Economic Review, 50, 937-961
- **Brandolini A., P. Cipollone** and **E. Viviano**, *Does the ILO definition capture all unemployment?*, Journal of the European Economic Association, 4, 153-179 (WP No. 529)
- **Busetti, F.**, Tests of seasonal integration and cointegration in multivariate unobserved component models, Journal of Applied Econometrics, 21, 419-438
- Dhyne, E., E. Vilmunen, L.J. Ãlvarez, H. Le Bihan, **G. Veronese**, D. Dias, J. Hoffmann, N. Jonker, P. Lannemann, F. Rumler, *Price changes in the euro area and the United States: Some facts from individual consumer price data*, Journal of Economic Perspectives, 20, 171-192
- **Dedola L.** and **S. Neri**, 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, *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**, 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**, *Monetary union* with voluntary participation, Review of Economic Studies, 73, 437-457 (WP No. 512)
- Gaiotti E. and A. Secchi, 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)

2005

- Adalid R., G. Coenen, P. McAdam and S. Siviero, 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, *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**, *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**, *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.), *Euro and inflation: Perceptions, facts and analysis*, il Mulino, Bologna (in Italian)

Gambacorta L., *Inside the bank lending channel*, European Economic Review, 49, 1737-1759

Guiso L., L. Pistaferri and **F. Schivardi**, *Insurance within the firm*, Journal of Political Economy, 113, 1054-1087 (WP No. 414)

Marchetti D.J. and Nucci F., *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
Oesterreichische Nationalbank
Banco de Portugal
Bank of Slovenia
Bank of Finland
European Central Bank

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