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Highlights

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Seminars at the Bank. of Italy

Seminars at EIEF

Highlights

On 27-28 November 2008 the Bank of Italy hosted the conference "Trends in the Italian productive system" at its headquarters in Rome.

The aim of the conference was to bring together Italian economists from national institutions and academia to share their views on the unsatisfactory growth performance of the Italian economy for more than a decade.

The first session (presentations by Giuseppe Bertola, Roberta Zizza, Gianmarco Ottaviano and Silvia Fabiani; discussions by Roberto Torrini, Tito Boeri, Giorgio Barba Navaretti and Sergio De Nardis) focused on the impact of the intensifying competition stemming from the worldwide integration of product markets and the introduction of the euro. Generally, it was found, the sharper competitive pressures have had a positive effect on the Italian economy, forcing structural reforms in the labour market and thorough restructuring within manufacturing sectors and firms. (see the article on page 2 of this newsletter)

On 11 December 2008 the Bank of Italy hosted the conference "Corporate governance in Italy: 10 years after the Consolidated Law on Finance (TUF)"

The opening address by Governor Mario Draghi stressed the importance of corporate governance for a central bank that is also charged with banking supervision. The Governor reviewed the objectives of the 1998 law and asked how much the current ownership and control structure of Italian companies actually reflects the objectives of that reform.

The first session (papers by Luca Enriques, Marcello Bianchi et al., Colin

Mayer et al., discussion by Giovanna Nicodano) compared the evolution of the Italian institutional framework with that of actual ownership structure, also in the international context. Starting with the Consolidated Law on Finance in 1998, Italian corporate governance regulations have been significantly reformed, mostly in the right direction (increasing investor protection) but in some cases poorly cast, resulting in insufficient improvements. Partly for this reason, the ownership and control structure has changed less than expected, though there have been some modifications in control-enhancing instruments (fewer pyramids, more coalitions) and an increase in the presence of (foreign) institutional investors. By international standards, Italian companies have moved less markedly towards dispersed ownership than German or French companies, while family control remains more prevalent. (see the article on page 2 of this newsletter)

On 19-20 December 2008 the Bank of Italy hosted the 19th annual EC-squared Conference.

This year, the conference focused on recent developments in structural microeconometrics. Structural models are particularly useful for assessing the effects of policy interventions. As they are theoretically consistent, they may be taken to reflect optimal individual responses to policy variables. Jean-Marc Robin (Université de Paris 1 - Panthéon -Sorbonne and University College London) was the Programme Chairman. The programme included four invited lectures.

The first day Costas Meghir (University College London) presented the paper "Wage Risk and Employment Risk over the Lifecycle," which specifies a model of consumption with endogenous labour supply and job mobility. (see the article on page 2 of this newsletter) (Trends continued from page one) The second session (presentations by Guglielmo Barone, Francesca Lotti, Luca Nunziata and Enrico Sette; discussions by Francesco Daveri, Alessandro Sembenelli, Federico Cingano and Sandro Trento) dealt with the issue of productivity, examining the effects of regulation and innovation. It was emphasized that excessive regulation in product and labour markets hampers productivity, while product and process innovations foster it. The session also presented the findings of an ad hoc study conducted at the Bank of Italy on the Italian private equity and venture capital industry; the presentation focused on contract structure, entrepreneur characteristics and investors' propensity to provide advice to entrepreneurs.

The third session (presentations by Marco Pagano, Claudio Michelacci, and Giuseppe Parigi; discussions by Paolo Pinotti, Francesco Caselli and Luigi Guiso) was devoted to family firms, the most common ownership structure in Italy, and showed that such firms tend to perform worse in terms of investment and productivity. A robust finding is that they lag behind especially where the environment is uncertain and volatile.

In the final session Matteo Bugamelli presented the Report on trends in the Italian productive system, which summarized the results of the project launched at the beginning of 2007 by the Bank of Italy's Research Department to elucidate the reasons for the economy's structural difficulties. The Report concluded that underneath the considerable intrasectoral heterogeneity of firms, there are signs that a restructuring of the productive system is under way. Economic policy should correct some structural weaknesses, such as the excessive diffusion of small, family-owned and relatively uninnovative firms, which turns out to be quite inadequate to the new global challenges.

The conference ended with a roundtable discussion in which Giampio Bracchi (Italian Association of Private Equity and Venture Capital), Innocenzo Cipolletta (Ferrovie dello Stato) and Fabrizio Onida (Bocconi University) built on the conclusions of the Report and discussed the policy options for strengthening the economy.

The conference programme, papers and presentations are available at the following link:

http://www.bancaditalia.it/studiricerche/convegni/atti/sistema_prod

(Corporate governance continued from page one) In the second session (papers by Luigi Zingales, John Armour et al., Marco Pagano et al., discussed by Luigi Spaventa), some of the instruments that the recent literature sees as improving investor protection were discussed: the role of directors elected by minority shareholders (mainly to guarantee that "bad" news about the company also emerges when necessary), the actual relevance of private enforcement of company law by investors (to supplement or substitute for public enforcement by supervisory agencies), the role of (costly) high-quality auditing and pay incentive schemes for managers to deter fraud.

In the third session (papers by Renée Adams et al., Bruna Szego et al., discussion by Marco Onado) some aspects of banks' governance (specifically the role of boards of directors) were discussed. In the United States, it appears, larger boards of directors do not harm banks' performance (as they do for non-financial companies), possibly because the more intense M&A activity in the banking sector naturally produces a greater number of board members. In Italy the role of banks' boards of directors (in particular their ability to detect, manage and control risk) is especially relevant to regulation, since their efficiency is crucial for supervisory goals. Over the last ten years boards have grown in size, with more executive directors and fewer independent directors.

The conference ended with a roundtable, chaired by Ignazio Visco, where Luca Enriques, Guido Ferrarini, Vittorio Grilli, Marcello Messori, Stefano Micossi and Giuseppe Zadra offered some views on such major policy issues as the role of Italian institutional investors, the obstacles to growth faced by Italian firms, the role of the supervisory authorities, and the relevance of European regulation. All in all, the improvements since 1998 have been significant indeed. Some further measures might be necessary and might follow the implementation of European Union directives. Other elements necessary to a well functioning corporate governance system – such as an efficient civil justice – are still missing.

The conference programme, papers and presentations are available at the following link:

http://www.bancaditalia.it/studiricerche/convegni/atti/corp_gov_it

(EC-squared continued from page one) Unlike the standard life cycle models, which have just a single exogenous source of risk, Meghir's model provides for investigating the role of different sources of risk and the optimal individual response to each. The afternoon session was closed by Jean-Pierre Florens (University of Toulouse I) with a lecture on "The Practice of Nonparametric Estimation by Solving Inverse Problems". Florens showed how an inverse approach to nonparametric estimation of structural parameters can be effectively implemented in practice. The third invited lecture, on the morning of Saturday the 20th, was given by Zvi Eckstein (Tel Aviv University), who offered an overview of recent developments in structural dynamic models of female labour supply. Finally, Elie Tamer (Northwestern University) lectured on "Inference Methods on Market Power in Markets with Multiple Equilibria". The paper focuses on the modelling of entry decisions, allowing for different types of firm heterogeneity that are relevant in determining market structures. A number of other papers were presented during the seven sessions (the detailed program is available at http://www.ec2-rome2008.net/). A selection of those contributions will be published in a special issue of the Econometrics Journal.

Latest working papers

No. 694: Tax revenue and the macroeconomic framework in Italy

Alberto Locarno and Alessandra Staderini

The performance of tax receipts in Italy during the period 1978-2006 is analysed through the relationship between the growth of revenue and the evolution of the macroeconomic framework. Series of actual tax receipts are adjusted to take account of discretionary measures, transformed into implicit tax rates, and then broken down into the structural components. A regression analysis of the trend element shows that the performance of tax revenue depends not only on the main variables used in forecasting models, but also on a number of factors, some of which (interest rates, oil prices, the output gap, and inflation) have a direct impact on implicit tax rates. Other factors (the share of profits of banks and listed companies, the proportion of energy consumption in total spending, and purchases of durable goods) indirectly effect the incidence of taxation by causing shifts in the tax base among sectors with different opportunities for tax evasion. (full pdf text - only in Italian)

No. 695: Immigrant earnings in the Italian labour market

Antonio Accetturo and Luigi Infante

The aim of this paper is to assess the relationship between individual skills and labour market performance of immigrants residing in Lombardy during the period 2001-2005. We use a recent dataset collected by the NGO ISMU, which includes information on individual characteristics and the legal status of each immigrant. Our results show that returns on schooling are positive and range from 0.8 per cent to 0.9 per cent, a figure that is much lower than the one estimated for native Italians. This result is robust to a number of specifications and tests. In particular, it is not influenced by the legal status of the alien or by a possible self-selection in the labour supply. Moreover, although more talented immigrants tend to self-select in the Lombardy region compared with the other Italian regions, their return on schooling remains low compared with natives. We also show that a certain heterogeneity exists across educational levels and countries of origin: immigrants from Eastern Europe are better able to exploit their human capital, especially when they hold a university degree,

while the school-wage profile of Latin Americans and Asians is basically flat. Finally, there is some evidence of a cohort effect in migration, but this tends to impact on the return on experience rather than on the return on schooling. (full pdf text)

No. 696: Reservation wages: explaining some puzzling regional patterns

Paolo Sestito and Eliana Viviano

We use the Italian Labour Force Survey and the European Household Panel Survey to analyse the distribution of the reservation wages reported by jobseekers. In Italy, reservation wages appear to be higher in the South - the low income and high unemployment area of the country - than in the North and Centre. A similar, rather counterintuitive, pattern, however, can also

be found in Finland, France and Spain. First, we show that the way in which these data are commonly collected generates double selection bias. Second, we show that this bias has a strong effect on the estimation of the geographical pattern of reservation wages in many countries. The size of this bias is substantial in Italy. When controlling for it, reservation wages are 10 per cent higher in the North and Centre than in the South.



(full pdf text)

No. 697: Technological change and the demand for currency: an analysis with household data

Francesco Lippi and Alessandro Secchi

Advances in transaction technology allow agents to economize on the cost of cash management. We argue that accounting for the impact of new transaction technologies on currency holding behaviour is important to obtain theoretically consistent estimates of the demand for money. We modify a standard inventory model to study the effect of withdrawal technology on the demand for currency. An empirical specification for households' demand schedule is suggested, in which both the level of currency holdings and the interest rate elasticity of demand depend on the withdrawal technology available to agents (e.g. ATM card ownership or a

high/low density of bank branches, ATMs). The theoretical implications are tested using a unique panel of Italian household data (on currency holdings, deposit interest rates, consumption, development of banking services, etc.) for the period 1989-2004. (full pdf text)

No. 698: Immigration and crime: an empirical analysis

Milo Bianchi, Paolo Buonanno and Paolo Pinotti

In this paper we examine the empirical relationship between immigration and crime across Italian provinces during the period 1990-2003. Drawing on police data, we first document that the size of the immigrant population is positively correlated with the incidence of property crimes and with the overall crime rate. We then use instrumental variables based on migration towards other European countries to identify the causal impact of exogenous changes in the immigrant population of Italy. According to these estimates, immigration increases only the incidence of robberies and has no effect on all other types of crime. Since robberies represent a very small fraction of all criminal offences, the effect on the overall crime rate is not significantly different from zero. (full pdf text)

Forthcoming working

papers

- Ascari G. and T. Ropele, *Trend inflation, Taylor principle and indeterminacy*
- Atkinson A. and A. Brandolini, On analysing the world distribution of income
- Bugamelli M., F. Schivardi and R. Zizza, *The euro and firm restructuring*
- Cappariello R. and R. Zizza, Dropping the books and working off the books

Decarolis F. When the highest bidder loses the auction: theory and evidence from public procurement

- Finicelli A., P. Pagano and M. Sbracia, The selection effect of international competition
- Giordano R. and P. Tommasino, What determines debt intolerance? The role of financial and monetary institutions

Lippi F. and A. Nobili,

Oil and the macroeconomy: a structural VAR analysis with sign restrictions

Neri A.,

Measuring wealth mobility

Pericoli M. and M. Taboga,

Bond risk premia, macroeconomic fundamentals and the exchange rate

Pinotti P.,

Financial development and the demand for Pay-As-You-Go social security

Sette E.,

Competition and opportunistic advice of financial analysts: theory and evidence

Recently published working papers

- No. 682: Emanuele Breda, Rita Cappariello and Roberta Zizza, Vertical specialization in Europe: evidence from the import content of exports (August 2008)
- No. 683: Andrea Mercatanti, A likelihood-based analysis for relaxing the exclusion restriction in randomized experiments with imperfect compliance (August 2008)
- No. 684: Piero Casadio and Martina Lo Conte, Balancing work and family in Italy: new mothers' employment decisions after childbirth (August 2008)
- No. 685: Andrea Silvestrini and David Veredas, Temporal aggregation of univariate and multivariate time series models: a survey (August 2008)
- No. 686: Luca Arciero, Claudia Biancotti, Leandro D'Aurizio and Claudio Impenna, *Exploring agent*based methods for the analysis of payment systems: a crisis model for StarLogo TNG (August 2008)
- No. 687: Francesco D'Amuri, Gianmarco I. P. Ottaviano and Giovanni Peri, *The labor market impact of immigration in western Germany in the 1990's* (September 2008)
- No. 688: Antonio Accetturo, Agglomeration and growth: the effects of commuting costs (September 2008)
- No. 689: Stefano Nobili and Gerardo Palazzo, A beta based framework for (lower) bond risk premia (September 2008)
- No. 690: Alessandro Calza and Andrea Zaghini, Nonlinearities in the dynamics of the euro area demand for M1 (September 2008)

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- No. 691: Sauro Mocetti, Educational choices and the selection process before and after compulsory schooling (September 2008)
- No. 692: Stefano Iezzi, Investors' risk attitude and risky behavior: a Bayesian approach with imperfect information (September 2008)
- No. 693: Enrico Sette, *Competing influence* (September 2008)

Latest occasional papers

No. 31: Italian Public debt since national unification. A reconstruction of the time series

Maura Francese and Angelo Pace

The paper presents the results of a reconstruction of the Italian public debt series since national unification. Computations use today's statistical methodology to obtain a database consistent with the national accounts. The reference sector is general government, not the state sector, as in many previous studies; the definition refers to consolidated gross debt (within and across subsectors). The database includes monthly times series for overall debt and its breakdowns by instrument and subsector. Given their frequency and length, the new data might be a useful tool for economic historians and students of public economics. The work briefly presents the methodology and describes public debt developments over the last 150 years. Compared with previous data, the new series show higher debt average. The project is completed by a methodological annex in which sources and methods are described in more detail and by a database with monthly time series for the debt, its breakdown by instrument and subsector, and the consolidating items. All three components are available on the Bank of Italy website; in the future the series will be updated monthly and will remain available on the statistical section of the website. (full pdf text)

No. 32: The risk of home mortgages in Italy: evidence from one million contracts

Emilia Bonaccorsi di Patti and Roberto Felici

This study analyzes the main characteristics of loans for house purchase issued in Italy between 2004 and

2007 employing the data on individual contracts from the Sample Survey of Lending Rates. Variables describing the type of mortgage and the borrower are related to the ex post probability of late payments and defaults. We also estimate the difference in ex post risk between mortgages that have subsequently been securitized and those that have not. The main results are: variable rate contracts proved to be more risky than fixed rate contracts; the difference is larger for mortgages issued at the end of 2005, when market rates were at their lowest; late payments have been more frequent for borrowers that are younger, resident in the South or immigrants from non-EU countries; non-securitized mortgages were more likely to run into difficulties with late payments and defaults than securitized ones. (full pdf text - only in Italian)

No. 33: New policy challenges from financial integration and deepening in the emerging areas of Asia and Central and Eastern Europe Valeria Rolli

Since the mid-nineties international financial integration has advanced gradually in the emerging areas of Asia, while it has progressed rapidly in Central and Eastern Europe. This process has helped provide long-term benefits for the economies of the two regions in terms of faster productivity growth and deepening of domestic financial markets. The strong surge of international capital inflows since the early years of the current decade has, however, also potentially increased the financial vulnerability and the external sources of contagion for a number of countries, particularly those in Central and Eastern Europe that have seen a significant increase in their foreign borrowing, and also those with still relatively underdeveloped financial systems. We thus analyze the risks of financial instability and asset bubbles in the emerging economies of the two regions, taking into account the degree of development of their domestic financial systems. We conclude by discussing possible policy responses to these challenges by the monetary authorities of the concerned countries. (full pdf text)

No. 34: Broadband in Italy: an overview Emanuela Capanna and Daniele Sabbatini

High-speed Internet, or broadband, access is an essential infrastructure that has been proven to stimulate competition, productivity and growth and it is considered the engine of the so called knowledgeinformation economy. In this paper, we first provide a technical survey of the standard broadband technologies (copper wire, optical fiber and Wi-Fi), then based on Eurostat and OECD data, we conduct an analysis regarding the diffusion and average available quality of broadband internet access in Italy. We find that Italy is behind compared to the other OECD countries in both broadband penetration rate and average available speed. The main determinants of this delay are the scarce diffusion of PCs and the persistently low ICT alphabetization of the Italian population, the geographical and density characteristics of the country as well as strategic factors (market structure and bureaucratic constraints). Finally, we examine the main regulations and policy instruments that have been established to foster broadband diffusion and we provide policy indications aimed at improving average quality and reducing digital-divide. (full pdf text - only in Italian)

No. 35: Emerging market spreads in the recent financial turmoil

Alessio Ciarlone, Paolo Piselli and Giorgio Trebeschi

This work examines how much of the variation in emerging market economies' (EMEs) spreads can be ascribed to 'country-specific' factors rather than to 'common' factors, once the existence of an interaction between the state of macroeconomic fundamentals and global financial conditions is properly taken into account. By means of factor analysis we find that a single common factor is able to explain a large part of the covariation in EME spreads in the period January 1998-June 2008; in turn, the common factor can be traced back mainly to financial market volatility. Once we have controlled for a set of idiosyncratic macroeconomic fundamentals, the common factor turns out to be a significant determinant of EME spread variations in the recent period of financial turmoil. Finally, the interaction term between global financial conditions and the state of macroeconomic fundamentals plays a significant role in most of the countries, allowing us to show that, for some less virtuous economies, the negative effects of a worsening of global conditions have been magnified by weakening domestic macroeconomic fundamentals. (full pdf text)

No. 36: Remote processing of firm microdata at the Bank of Italy

Giuseppe Bruno, Leandro D'Aurizio and Raffaele Tartaglia-Polcini

Providing the possibility to run personalised econometric/statistical analyses on the appropriate data sets by remote processing allows greater flexibility in the production of economic information. Binding confidentiality requirements are required with business survey data. The Bank of Italy's infrastructure allows its business survey data to be exploited, while preserving anonymity of individual data. The system is based on the LISSY platform and has been already adopted by the Luxembourg Income Study (LIS) and other research centres. Firms' privacy is safeguarded by forbidding potentially confidentiality-breaking programme statements and by denying the visualisation of individual data. Data confidentiality is protected by removing key identifiers from the database and by trimming data in the right tail of the distribution. The platform provides its services through plain-text e-mails. The authorised user sends an email containing an identifying header followed by a statistical programme to a predetermined address. The system checks the validity of the header, strips out the code and submits it in a batch to one of the econometric/statistical packages available (SAS and Stata). The outputs are mailed back to the user after passing an array of automatic and manual checks. (full pdf text)

No. 37: Stress testing credit risk: a survey of authorities' approaches

Antonella Foglia

This paper reviews the quantitative methods used at selected central banks to stress testing credit risk, focusing in particular on the methods used to link macroeconomic drivers of stress with bank specific measures of credit risk (macro stress test). Stress testing credit risk is an essential element of the Basel II Framework; because of their financial stability perspective, central banks and supervisors are particularly interested in quantifying the macro-to-micro linkages and have developed a specific modeling expertise in this field. In assessing current macro stress testing practices, the paper highlights the more recent developments and a number of methodological challenges that may be useful for supervisors in their review process of the banks' stress test models as required by the Basel II Framework. It also contributes to the on-going macroprudential research efforts that aim to integrate macroeconomic oversight and prudential supervision, in the direction of early identification of key vulnerabilities and assessment of macro-financial linkages. (full pdf text)

Selection of recent journal articles and books by Bank of Italy's staff

(full list since 1990)

Forthcoming

Affinito M. and F. Farabullini, Does the law of one price hold in euro-area retail banking?, International Journal of Central Banking)

Forni L., L. Monteforte and L. Sessa,

The general equilibrium effects of fiscal policy: estimates for the euro area, Journal of Public Economics (<u>WP</u> <u>No. 652</u>)

2008

- Angelini P., P. Del Giovane, S. Siviero and D. Terlizzese, Monetary policy in a monetary union: What role for regional information?, International Journal of Central Banking, 4, 3, 1-28 (<u>WP No.</u> 457)
- Angelini P. and A. Generale, On the Evolution of Firm Size Distributions, American Economic Review 98, 1, 426-438, (WP No. 549)
- Busetti F. and A. Harvey, *Testing for Trend*, Econometric Theory,

24, 1, 72-87 (<u>WP No. 614</u>)

Cesarano F., Money and monetary systems: selected essays of Filippo Cesarano, Cheltenham, Elgar

Casolaro L., D. Focarelli and A. Pozzolo, *The pricing effect of certification on syndicated loans*, Journal of Monetary Economics, 55, 2, 335-349

De Bonis R., La Banca, Carocci, Roma

Del Giovane P. and **R. Sabbatini** (eds.), *The euro, inflation and consumers' perceptions. Lessons from Italy*, Springer, Berlin-Heidelberg

Gambacorta L., *How do banks set interest rates?*, European Economic Review, 52, 5, 792-819 (<u>WP No. 542</u>)

Pericoli M. and M. Taboga, Canonical term-structure models with observable factors and the dynamics of bond risk premia, Journal of Money, Credit and Banking, 40, 7, 1471-88 (WP No. 580)

2007

- Angelini P. and F. Lippi, Did prices really soar after the euro cash changeover? Evidence from ATM withdrawals, International Journal of Central Banking, 3, 4, 1-22 (<u>WP No. 581</u>)
- Ascari G. and T. Ropele, Optimal monetary policy under low trend inflation, Journal of Monetary Economics, 54, 8, 2568-2583 (WP No. 647)
- Busetti F., L. Forni, A. Harvey and F. Venditti, Inflation convergence and divergence within the European monetary union, International Journal of Central Banking, 3, 2, 95-121
- Bonaccorsi di Patti E. and G. Gobbi, Winners or losers? The effects of banking consolidation on corporate borrowers, Journal of Finance, 62, 669-695 (<u>WP No.</u> <u>479</u>)
- Cesarano F., Monetary theory in retrospect: The selected essays of Filippo Cesarano, Routledge, Abington
- Devicienti F., A. Maida and **P. Sestito**, *Downward wage rigidity in Italy: Micro based measures and implications*, Economic Journal, 117, 524, F530-F552
- Fabiani S., C. Loupias, F. Martins and R. Sabbatini (eds.), *Pricing decisions in the euro area: How firms set prices and why*, Oxford University Press, New York
- Lippi F. and **S. Neri**, *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.**, Imperfect knowledge, adaptive learning, and the bias against activist monetary policies, International Journal of Central Banking, 3, 3, 47-85 (<u>WP No.</u> <u>590</u>)
- Magnoli Bocchi A. and **M. Piazza**, *La Banca mondiale*, Il Mulino Editore, Bologna
- Marchetti D.J. and F. Nucci, *Pricing behavior and the response of hours to productivity shocks*, Journal of Money, Credit and Banking, 39, 7, 1587-1611 (<u>WP No. 524</u>)
- Paiella, M., The forgone gains of incomplete portfolios, Review of Financial Studies, 20, 5, 1623-1646 (WP No. 625)
- Rossi S., La politica economica italiana 1968-2007, Laterza, Bari-Roma

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Álvarez, L. J., E. Dhyne, M. Hoeberichts, C. Kwapil, H. Le Bihan, P. Lünnemann, F. Martins, **R. Sabbatini**, H. Stahl, P. Vermeulen, J. Vilmunen,

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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

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Dhyne, E., E. Vilmunen, L.J. Älvarez, H. Le Bihan, G. Veronese, D. Dias, J. Hoffmann, N. Jonker, P. Lannemann and 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 and 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)

Rossi S., La Regina e il Cavallo. Quattro mosse contro il declino, Laterza, Bari-Roma

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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