

NUMBER 59 JULY 2020

| Forthcoming events | 1 |
|---|----|
| Latest Working Papers | 3 |
| Latest Occasional Papers | 8 |
| Selection of Journal articles and books | 14 |
| Useful links | 17 |
| | |

Forthcoming events

3rd Bank of Italy-CEPR Labour workshop

(Rome, 10-11 September 2020)

The workshop aims at providing leading and emerging researchers in the field of labour economics an opportunity to present their research, relevant for the understanding of labour market dynamics and of their interaction with institutions. Three keynote lectures will be given by David Dorn (University of Zurich and CEPR), Lisa Kahn (University of Rochester and NBER) and Camille Landais (London School of Economics and CEPR).

Contents

The workshop will be held online. To attend, please register with <u>bdicepr conf@bancaditalia.it</u>. The program is available <u>here</u>.

2020 Banca d'Italia and Federal Reserve Board Joint "Virtual" Conference on Nontraditional Data & Statistical Learning with Applications to Macroeconomics

(Rome, 11-12 November 2020)

The workshop aims at providing all researchers from universities, central banks, national statistical institutes, and public and private agencies an opportunity to present their research related to the use of Big and Nontraditional data, combined with new machine learning methods for the analysis of macroeconomic phenomena and policy related questions.

The workshop will focus on research using large, granular structured and unstructured data and Machine Learning or Natural Language processing (NLP) techniques for applications in micro and macroeconomics, financial stability, banking supervision and central bank communication, with a special focus to the effects of the recent COVID.19 pandemic.

The event will be held virtually on November 11 and 12 2020 and to allow participation in different time zones it will be limited to a few hours per day.

The call for papers can be found <u>here</u> and the deadline for submitting a paper is August 30, 2020.

More information are available <u>here</u>.

The organizers are Giuseppe Bruno (Banca d'Italia), Riccardo Correa (Federal Reserve Board), Christopher J. Kurz (Federal Reserve Board), and Juri Marcucci (Banca d'Italia).

Forthcoming events

International research conference on firm financing and firm dynamics: "Firms in times of the pandemic"

(Banque de France - Paris, 4 December 2020)

Banque de France, Banca d'Italia and Sciences Po, in cooperation with the CEPR, are organizing their third joint research conference on trends in firm organization, firm financing and firm dynamics, to be held in Paris on the 4th of December 2020. This year's issue of the conference particularly welcomes contributions that aim at highlighting the immediate and the longer-term consequences of the Covid-19 pandemic for firms, in Europe and beyond, as well as assessing the cost and benefits of policies targeted at firms during the first wave of the pandemic in the first semester of 2020. The conference will feature two keynote lectures by Beata Javorcik (Oxford Univ. and EBRD) and David Thesmar (MIT Sloan).

Interested authors should submit a detailed extended abstract or, preferably, a complete paper in PDF format to: firmorgdyn2020@banque-france.fr by August 23rd, 2020.

For more information see the <u>call for papers</u>.

Depending on sanitary constraints at the time of the meeting, the event may be held entirely online.

5th CEPR Annual Meeting of the International Macroeconomics and Finance Programme (IMF)

(Rome, 10-11 December 2020)

The Bank of Italy will host the fifth edition of the workshop, which workshop aims at bringing together leading researchers aims at bringing together leading researchers contributing to the field of international macroeconomics and finance. A keynote lecture will be given by Pierre-Olivier Gourinchas (UC Berkeley, CEPR, and NBER). The scientific committee is composed by: Philippe Bacchetta (HEC - Université de Lausanne and CEPR), and Fadi Hassan (Bank of Italy). The submission deadline is on 3 August 2020.

The call for papers is available <u>here</u>.

Depending on sanitary constraints at the time of the meeting, the event may be held entirely online.

Bank of Italy/CEPR/EIEF Conference on "Ownership, Governance, Management & Firm Performance"

(Rome, 21-22 December 2020)

The conference brings together leading economists to discuss the role of managers and owners in shaping firms' performance, with a particular emphasis on micro-macro linkages (from firms' behaviour to aggregate productivity growth) and policy implications. Both theoretical and empirical works in macro and microeconomics are welcome. Two keynote lectures will be given by Renée Adams (Oxford – Saïd Business School) and Raffaella Sadun (Harvard Business School and CEPR).

The call for papers is available <u>here</u>.

Depending on sanitary constraints at the time of the meeting, the event may be held entirely online.

The Bank of Italy-CEPR conference "Closing the Gaps: The Future of Stabilisation Policies in a Low Interest Rate Environment", initially scheduled on the 1st and 2nd of October 2020, has been postponed to June 2021. The new conference dates and Call for Papers will be announced in due course.

No. 1290: The impact of the IRB approach on the relationship between the cost of credit for public companies and financial market conditions (July 2020)

Raffaele Gallo

T his work examines whether the loan rates applied to public companies by banks adopting the internal ratings-based (IRB) approach are more sensitive to financial market conditions compared with those applied to private firms. The analysis examines interest rates on loans granted to Italian firms between 2008 and 2018, comparing IRB banks with those adopting the standardized approach (SA).

The findings show that the interest rates on loans granted by IRB banks are lower for public companies than for private ones; the loan cost advantage of public borrowers decreases significantly as financial market volatility rises. In contrast, for credit granted by SA banks, public companies do not benefit from a significant loan cost advantage compared with private companies, and a change in financial market conditions has a similar impact on loan rates for both types of firms. Full text (pdf)

No. 1289: Trade shocks and credit reallocation (July 2020)

Stefano Federico, Fadi Hassan and Veronica Rappoport

The paper analyses the reallocation of bank credit between Italian sectors and companies following the entry of China into the World Trade Organization in 2001. It investigates whether this shock to world trade has had significant effects on the balance sheets of the banks most exposed to companies affected by Chinese competition, hindering the reallocation of the factors of production towards the most productive sectors or companies.

Trade liberalization with China led to a reduction in the supply of credit by the banks that, owing to the composition of their loan portfolio, were most exposed to the trade shock. The contraction of credit has affected not only the manufacturing firms most exposed to Chinese competition but also firms operating in the other manufacturing sectors (including those in which Italy has a comparative advantage) and in services. <u>Full text (pdf)</u>

No. 1288: The time-varying risk of Italian GDP (July 2020)

Fabio Busetti, Michele Caivano, Davide Delle Monache and Claudia Pacella

T his paper studies the predictive distribution of Italian GDP growth, taking account of various risk factors, both at global and national level. The methodology adopted (known as expectile regression) allows us to quantify the risks for GDP growth based on the impact of different factors on the tails of the distribution - the strongly negative scenarios on the left tail and positive ones on the right.

The analysis confirms that the financial conditions are correlated with the left tail of the distribution. The indicators of global trade trends and uncertainty, on the other hand, have an impact on both tails. According to these estimates, the risks for the GDP growth in Italy were driven mostly by international trade developments throughout the global recession of 2008-09, by the domestic financial conditions at the time of sovereign debt crisis and by the uncertainty in more recent years. <u>Full text (pdf)</u>

No. 1287: **Court efficiency and aggregate productivity: the credit channel** (July 2020)

Guzmán González-Torres and Giacomo Rodano

The paper studies the effects of bankruptcy procedure efficiency on aggregate productivity in an economy populated by firms with heterogeneous productivity levels. Improving these procedures (by increasing and speeding up recovery rates) affects credit supply by reducing the expected value of losses creditors suffer in the event of default.

Improving bankruptcy procedures reduces borrowing rates and increases the quantity of credit supplied, prompting firms to increase their debt to expand production. At the same time, it enables relatively unproductive firms to enter the market and survive. The net effect on aggregate productivity turns out to be positive, due to the marked increase in size of the most productive firms in the economy.

Full text (pdf)

No. 1286: **Protectionism and the effective lower bound in the euro area** (July 2020)

Pietro Cova, Alessandro Notarpietro and Massimiliano Pisani

We evaluate the macroeconomic effects of protectionist measures introduced in the United States, China, and the euro area, using a multi-country dynamic general equilibrium model. In the euro area, the monetary policy rate is at its lower bound. We first consider a temporary increase in US tariffs on Chinese products, with retaliation. We then assume a moderate increase in US tariffs also on imports from the euro area, with retaliation.

A bilateral tariff dispute between the US and China would reduce economic activity in the two countries, with small positive effects on euro-area exports ('trade diversion' effect). A simultaneous tariff increase between the US and the euro area would reduce GDP and (ex-tariff) inflation in the euro area. The ELB would magnify the fall in GDP. Full text (pdf)

No. 1285: The economic drivers of volatility and uncertainty (July 2020)

Andrea Carriero, Francesco Corsello and Massimiliano Marcellino

high degree of financial and macroeconomic **A** uncertainty may have contractionary effects on the business cycle. This work studies the drivers behind changes in the volatility of macroeconomic and financial variables, using an econometric methodology and an identification scheme that allows us to measure the role played by demand, supply and financial or monetary shocks. To this end, the empirical application is performed by using 50 years (1964-2016) of monthly data relating to the US economy. In the United States, changes in the volatility of significant macroeconomic variables, such as disposable income, employment level, consumption, industrial production and inflation, are mostly driven by aggregate demand and supply shocks. Moreover, since the global financial crisis, the contribution of monetary and financial shocks to explaining the volatility of US employment levels has increased. Full text (pdf)

No. 1284: Uncertainty matters: evidence from a high-frequency identification strategy (June 2020)

Piergiorgio Alessandri, Andrea Gazzani and Alejandro Vicondoa

The paper studies the influence of uncertainty on the performance of the US economy between 1992 and 2019. In order to isolate the effects of uncertainty from those of other economic factors, the authors exploit daily observations on the price and expected volatility of the shares included in the S&P 500 stock price index. Changes in the expected volatility of the market that occur independently from the variations in the underlying S&P 500 price index are interpreted as uncertainty shocks. The authors employ monthly averages of the daily shocks to examine the relation between investor uncertainty and a range of macroeconomic indicators. The analysis confirms that uncertainty is an important driver of macroeconomic dynamics. In the US, uncertainty shocks are often associated with geopolitical events, such as the 9/11 attacks or the political tensions with North Korea in August 2017; they are generally followed by a significant drop in employment, real wages and industrial production, as well as a slight decline in consumer prices. Over the sample period, uncertainty explains overall approximately 20% of the observed volatility in employment and industrial production. Full text (pdf)

No. 1283: The macroeconomics of hedging income shares (June 2020)

Adriana Grasso, Juan Passadore and Facundo Piguillem

S everal recent studies have documented a marked accumulation of safe assets by firms; others have shown a generalized drop in interest rates. The work jointly rationalizes this evidence in a growth model with heterogeneous agents in which aggregate shocks induce variations in the shares of income from labor and capital, and financial frictions ('skin in the game' constraints) prevent an efficient sharing of risk. In the model, an accumulation of safe assets by companies naturally emerges as a tool to improve risk sharing in the presence of financial frictions. The demand for safe assets is greater the higher

the share of capital income, leading to a reduction in the interest rate. The work shows that these portfolio adjustments and the reduction in interest rates can be quantitatively relevant and in line with the empirical evidence for the United States. Full text (pdf)

No. 1282: How do house prices respond to mortgage supply? (June 2020)

Guglielmo Barone, Francesco David, Guido de Blasio and Sauro Mocetti

H ouse prices and household mortgages are characterized by large co-movements, but establishing a causal link between the two is a challenging task. Our paper aims to estimate the impact of mortgage supply policies on house prices and to examine whether the effect varies over the business cycle and/or across locations with different features.

Our results show that credit supply significantly affects the dynamics of household mortgages and, through these, house prices. The impact is moderately positive overall: a 10 per cent increase in mortgages causes a 1 per cent increase in prices. The effect is higher during housing market boom periods, in cities with a more rigid housing supply and where families are more dependent upon external finance.

Full text (pdf)

No. 1281: The effects of shop opening hours deregulation: evidence from Italy (June 2020)

Lucia Rizzica, Giacomo Roma and Gabriele Rovigatti

T his paper estimates the effects of the deregulation of shop opening hours on the market structure of the retail sector and on the size and composition of the labour force employed there. The analysis exploits the progressive removal of restrictions on opening hours which, starting from the 1990s, first only affected a number of Italian municipalities and, since 2011, the whole of Italy.

In a context of a general contraction of the retail sector, the reduction in the number of stores and workers was less in the municipalities affected by the deregulation measures. Larger commercial outlets benefited most from the measures; employment experienced a recomposition towards regular employees rather than selfemployed workers. Indirect positive effects were recorded in some services complementary to retail trade (e.g. restaurants). Full text (pdf)

No. 1280: The non-linear effects of the Fed's asset purchases (June 2020)

Alessio Anzuini

The work analyses, with reference to the United States, the effects of quantitative easing, i.e. the large-scale asset purchase made by the central bank, on economic activity, inflation, asset prices and interest rates. Quantitative easing is measured by the value of the securities purchased in relation to GDP. The work shows that the effects are different depending on the level of market volatility.

Quantitative easing induces an increase in economic activity and inflation, together with an increase in the prices of risky assets and a reduction in long-term interest rates. However, these results occur only in the presence of high volatility in the financial markets, which risks jeopardizing their proper functioning; the effectiveness of the monetary authorities' intervention stems from their ability to restore it. <u>Full text (pdf)</u>

No. 1279: The role of bank supply in the Italian credit market: evidence from a new regional survey (June 2020)

Andrea Orame

y using new data from the 'Regional Bank D Lending Survey' (RBLS), the work studies the contribution of supply to the dynamics of loans in the years 2009-2014. After assessing the information content of the new dataset, the work provides new and detailed empirical evidence in relation to possible sources of supply heterogeneity. Approximately 40 per cent of the decline in the stock of business loans after the financial crisis can be attributed to supply factors. Banks that had less liquidity, a riskier business model and were more connected to other financial players (because they belonged to a group) were also a potentially less stable source of funding for firms. Bank capital and the funding mix seemed to play no significant role. Full text (pdf)

No. 1278: **Trainspotting: board appointments in private firms** (June 2020)

Audinga Baltrunaite and Egle Karmaziene

he paper examines how the size of the corporate directors' labor market affects the quality of board appointments in Italian private firms. To establish the causality of the relationship, we exploit exogenous variations in firms' access to non-local potential directors following the gradual introduction of a high-speed train, which improved rail connections between cities. The analysis combines administrative data on board members and productivity measures of the universe of limited liability companies. The introduction of the high-speed train service results in a positive shock to the non-local director supply, through their increased mobility. In turn, high-efficiency firms improve the quality of their boards, while less efficient firms attract lowerquality directors. Furthermore, boards with better quality directors are associated with higher firm growth and productivity. Full text (pdf)

No. 1277: Going the extra mile: effort by workers and job-seekers (June 2020)

Matthias S. Hertweck, Vivien Lewis and Stefania Villa

T his paper examines the stability of the equilibrium in a macroeconomic model with labor search and matching frictions, incorporating two additional features. The first allows workers to provide variable effort, which generates increasing returns to hours in production. The second feature is variable search effort, through which agents actively search for a job, as opposed to the standard model with a one-sided search (on the part of firms).

This paper identifies two channels explaining the stability of the model, which is adversely affected by the 'wage channel' and positively affected by the 'hiring costs channel'. In the presence of workers' variable effort, their marginal product and therefore wages increase, expanding the combinations of parameters under which the model is not stable. In the second extension, workers are more active in search, limiting the increase in wages; therefore, the combinations of parameters generating stability increase. Full text (pdf)

Other recent Working Papers

- No. 1276: Spend today or spend tomorrow? The role of inflation expectations in consumer behaviour *Concetta Rondinelli and Roberta Zizza*
- No. 1275: Monetary policy gradualism and the nonlinear effects of monetary shocks *Luca Metelli, Filippo Natoli and Luca Rossi*
- No. 1274: Bridge Proxy-SVAR: estimating the macroeconomic effects of shocks identified at high-frequency *Andrea Gazzani and Alejandro Vicondoa*
- No. 1273: Immigration and the fear of unemployment: evidence from individual perceptions in Italy *Eleonora Porreca and Alfonso Rosolia*
- No. 1272: Mutual funds' performance: the role of distribution networks and bankaffiliation *Giorgio Albareto, Andrea Cardillo, Andrea Hamaui and Giuseppe Marinelli*
- No. 1271: An analysis of sovereign credit risk premia in the euro area: are they explained by local or global factors *Sara Cecchetti*

March 2020 — April 2020

- No. 1270: Asymmetry in the conditional distribution of euro-area inflation *Alex Tagliabracci*
- No. 1269: Expansionary yet different: credit supply and real effects of negative interest rate policy *Margherita Bottero, Camelia Minoiu, José-Luis Peydró, Andrea Polo, Andrea F. Presbitero and Enrico Sette*
- No. 1268: Public debt expansions and the dynamics of the household borrowing constraint *António Antunes and Valerio Ercolani*
- No. 1267: Housing supply elasticity and growth: evidence from Italian cities Antonio Accetturo, Andrea Lamorgese, Sauro Mocetti and Dario Pellegrino
- No. 1266: Determinants of the credit cycle: a flow analysis of the extensive margin *Vincenzo Cuciniello and Nicola di Iasio*

No. 575: **Bounded rationality and expectations in economics** (July 2020)

Ignazio Visco and Giordano Zevi

his contribution is forthcoming as a chapter in "Handbook of Bounded Rationality", R. Viale (ed.), Routledge, London. Starting from Simon's bounded rationality notion, here we consider some of the links between concepts of bounded rationality and the approaches followed by economists in their analysis of the role played by economic agents' expectations in driving the evolution of the economy through time. In this chapter it is argued that the degree of attention devoted to the formation of expectations by the macroeconomic theory has followed high and low cycles. In recent years, the increasing availability of survey data and the failings of models based on purely rational representative agents have prompted renewed interest in inquiries into the direct measurement of expectations and empirical studies of their formation. The intellectual legacy of Herbert Simon provides a useful guide for both these activities.

Full text (pdf)

No. 574: Business continuity in times of distress: debt restructuring agreements and compositions with creditors in Italy (July 2020)

Alessandro Danovi, Iacopo Donati, Ilaria Forestieri, Tommaso Orlando and Andrea Zorzi

he Italian insolvency framework makes available to firms and their creditors several restructuring tools, so that liquidation can be avoided and business continuity preserved. This paper analyses two such instruments: debt restructuring agreements (DRAs), in which judicial intervention is limited, and compositions with creditors (CCs), characterized by a higher degree of formality. The analysis is based on information on individual agreements collected at Italian courts. The effectiveness of these instruments - mostly utilized by large firms - in terms of business continuity is limited. Both display large rates of firm extinction, DRAs in particular. Firms that survive display only partial recovery, generally stronger in CCs. However, the apparently superior performance of CCs is overshadowed by the long time required to implement the restructuring plan. Full text (pdf)

No. 573: Connected Italy (July 2020)

Emanuela Ciapanna and Giacomo Roma

The paper describes the current status of and the prospects for telecommunications networks in Italy. It reviews the main technological solutions adopted for the deployment of ultrabroadband and analyses possible developments in digital infrastructures. In the face of the demand shock associated with the COVID-19 emergency, the paper studies the dynamics of some activities performed remotely, such as smart working, ecommerce and e-government.

Italy lags behind in the development of ultrabroadband networks, which are spread unevenly throughout the country; their deployment is proceeding slowly both in potentially profitable areas and where public intervention is necessary for their realization. The low level of digital skills of individuals, as well as the poor digital culture and the fragmentation of the production and bureaucratic systems, negatively influence the use of ICT in work, retail and administrative activities. Full text (pdf)

No. 572: Robots and employment: evidence from Italy (July 2020)

Davide Dottori

his work assesses the effects of the increased diffusion of robots on employment in Italy, the second European country after Germany for robot use. These effects are a priori unclear, as robots could both substitute and complement human labour. The analysis covers the period between the early 1990s and 2016 and is carried out at both the local labour market level and at the worker level using administrative micro-data from a matched employer-employee dataset. The results suggests that there is no evidence of a statistically significant negative effect of increased diffusion of robots use on total local employment, nor, at the individual level, on average employment and the wages of incumbent workers in manufacturing. Robotization may instead have contributed to the intersectoral reallocation of

new workers, by increasing the share of the tertiary sector. <u>Full text (pdf)</u>

No. 571: Financial spillovers to emerging economies: the role of exchange rates and domestic fundamentals (July 2020)

Alessio Ciarlone and Daniela Marconi

The paper revisits the debate over the role of exchange rates and other country-specific economic and financial fundamentals in shaping the sensitivity of domestic financial markets to the global financial cycle in emerging economies. In particular, we look at the sensitivity of equity returns, sovereign spreads, short-term money market rates and the rate of growth of domestic credit. Together with exchange rate regimes, we consider the role of other variables, such as the fiscal balance, the current account balance, the level of dollar-denominated debt, the degree of real and financial integration.

More flexible exchange rates and solid domestic fundamentals tend to mitigate the sensitivity of emerging countries' financial markets to the global financial cycle. The flexibility of exchange rates matters more in mitigating the transmission to equity markets and short-term rates, while other fundamentals, such as the degree of dollar debt exposure, the current account balance and real and financial integration, matter more in shaping the response of sovereign spreads and in the transmission to domestic credit conditions. Full text (pdf)

No. 570: From 8,000 to 1,000? Rationalization and governance of Italian Government-owned enterprises (July 2020)

Sauro Mocetti and Giacomo Roma

G overnment-owned enterprises at state and local level represent a significant share of the Italian economy. They have undergone various reforms, most recently the 2016 Consolidated Law. The paper examines their diffusion, their main characteristics and recent developments, in light also of the interventions undertaken to reduce the scope of their activities and their number. It also assesses the regulatory framework for their corporate governance, comparing it with best international practices.

Government-owned enterprises are present in various sectors and throughout the whole territory. Although their number decreased between 2011 and 2018, the objectives of the rationalization and the closure of smaller and inefficient companies have been disregarded. The quality of governance also remains far from international best practices. The results suggest that an improvement in the professional skills of the directors and the quality of the public administration would positively influence their performance.

Full text (pdf) in Italian only

No. 569: Italian workers at risk during the Covid-19 epidemic (June 2020)

Teresa Barbieri, Gaetano Basso and Sergio Scicchitano

O ccupational tasks and workplace characteristics determine whether workers are subject to risks of contagion from Covid-19: this is more likely if they operate in physical proximity to other people or because frequent exposure to diseases and infections. This paper analyzes these dimensions of risk for the universe of Italian workers and elaborates an indicator of the extent to which work activities can be carried out from remote.

The service and retail trade sectors are characterized by high physical proximity and, therefore, are more exposed to diseases and infections. Men over the age of 50, who face higher risk of complications from Covid-19, operate mainly in sectors that are little exposed to proximity, or where there is the possibility of working remotely. The lockdown measures implemented by the Government in March 2020 have affected up to 35 percent of total employment: many workers were employed in sectors with a high physical proximity index. <u>Full text (pdf)</u>

No. 568: Economies of scales revisited: evidence from Italian banks (June 2020)

Emilia Bonaccorsi di Patti and Federica Ciocchetta

The paper presents an analysis of scale economies for the Italian banking industry,

using data for 2006-2017, with the aim of assessing potential benefits from an increase in the size of banks. Scale economies are measured by the elasticity of operating costs to a proportional increase in bank outputs. The indicator is obtained through the estimation of a multiproduct cost function according to which banks produce various types of loan, payment and asset management services.

The results of the analysis show that an increase in the size, through consolidation, could yield significant benefits in terms of cost efficiency for small and medium-sized banks, especially if accompanied by a more extensive adoption of new technologies in the provision of services and a reorganization of the branch network. An important caveat to this conclusion is that we focus solely on operating costs. Full text (pdf)

No. 567: Financial crises, macroprudential policy and the reliability of creditto-GDP gaps (June 2020)

Piergiorgio Alessandri, Pierluigi Bologna and Maddalena Galardo

The paper studies the properties of the methodology for estimating the credit-to-GDP gap currently used by Banca d'Italia for making its decisions on the Countercyclical capital buffer (CCyB). To this end, the methodology is applied to a panel of 26 countries between 1971 and 2018. The study aims to assess in particular whether the positive properties of the methodology already shown for Italy in a previous research, are also confirmed for other countries.

The results show that the methodology used by Banca d'Italia mitigates some of the weaknesses of the methodology proposed by the Basel Committee on Banking Supervision. The use of different methods is allowed by the regulation. In particular, the proposed methodology:

1) obtains more accurate estimates of the credit-to -GDP gap;

2) is a better predictor of financial crises;

3) increases the probability of the CCyB being at its maximum one year before the beginning of a crisis. Full text (pdf)

No. 566: Recent export developments in the pharmaceutical sector in Italy and in the Lazio region (June 2020)

Gloria Allione, Raffaello Bronzini and Claire Giordano

ccording to the official international trade **C** statistics, pharmaceutical goods export developments in Italy and its main exporting region, Lazio, were very favourable in 2019. This study investigates the determinants of these dynamics, employing a variety of data sources, including goods export series broken down by economic sector sourced from the national accounts and information drawn from the Bank of Italy's Survey of Industrial and Service Firms. Italy's pharmaceutical export dynamics benefited from the recent investments undertaken by a number of firms in the sector in Lazio. A statistical factor, linked to the growing presence of contract manufacturing, in particular of transactions that do not imply a change in the ownership of a good between the foreign contractee and the contractor in Italy ("processing"), also contributed to these developments. The positive contribution of the sector to total goods export growth in Italy is smaller when measured based on national account data, which do not include the value of processed products, as opposed to international trade statistics. Full text (pdf) in Italian only

No. 565: The Matthew effect and modern finance: on the nexus between wealth inequality, financial development and financial technology (June 2020)

Jon Frost, Leonardo Gambacorta and Romina Gambacorta

There is growing empirical evidence from multiple countries that the wealthy are able to achieve higher financial returns. This accumulation by the wealthy is often called the "Matthew effect" in the social sciences. This paper analyses how the development of the financial sector and progress in financial technology have contributed to higher returns. It assesses whether these benefits could be greater for the wealthiest households, and therefore contribute to an

increase in wealth inequality.

The results show that, while financial development and innovations in financial technology offer benefits to all households in Italy, they seem to benefit the wealthiest more. In recent years, the advantages for richer investors appear to have moderated, in parallel with a reduction in the number of bank branches and a more widespread use of remote banking services. Full text (pdf)

No. 564: Indicators of uncertainty: a brief user's guide (June 2020)

Luca Rossi

O ver the last decade economic research has devoted large effort to build reliable uncertainty indexes, be it survey-based, modelbased, or news-based. With no ambition to be exhaustive, the note discusses the main indicators in each category, highlighting their main properties, as well as the benefits and risks of using them for policy purposes.

News-based indexes, characterized by greater intuitiveness, transparency and real-time availability, are the most popular both in policy debates and in the academic literature. They are also quite noisy, though, and could be misleading in particular when relying on a limited number of newspapers, or referring to a small, peripheral country. Well-developed probabilistic surveys still represent a hard-to-beat benchmark when one is interested in uncertainty concerning specific variables as opposed to more abstract concepts such as Economic Policy Uncertainty. <u>Full text (pdf)</u>

No. 563: **Job-to-job flows and wage dynamics in France and Italy** (June 2020)

Clémence Berson, Marta De Philippis and Eliana Viviano

J ob-to-job flows positively affect aggregate wage dynamics both directly, due to the wage premium usually associated with the transition to a new job, and indirectly, since employers respond to other firms' poaching by increasing the wages of their workers. In the U.S., wage dynamics seem more influenced by job-to-job flows than by flows into or out of employment. In this paper, we evaluate whether this result holds also for France and Italy, characterized by a different labour market structure.

Using comparable administrative data referring to the last 20 years we find that, job-to-job transitions contribute positively to wage growth both in France and Italy. Job-to-job flows and the associated wage gains tend to be larger in highskilled occupations and for permanent workers. As in the U.S., individuals are more likely to move to younger firms, which intensively poach workers from other firms. However, since total job-to-job flows are smaller and display much lower cyclicality than in the U.S., their contribution to aggregate wage dynamics is low, while the contribution of flows into and out of employment remains sizeable.

Full text (pdf)

No. 562: Payment card fraud: global trends and empirical evidence on Internet card fraud in Italy (June 2020)

Guerino Ardizzi, Elisa Bonifacio and Laura Painelli

P ayment card fraud has long been a subject of attention in Europe. The expansion of retail trade at global level, facilitated by the Internet, has led European lawmakers to reinforce security measures for online transactions. This paper assesses trends in fraud in recent years, with a special focus on Internet card fraud, in light of the most recent regulatory measures.

In Italy, the rate of card fraud is below the average for the euro area. In the last three years, the online fraud rate has also come down. We show how this trend reflects the benefits of the adoption of recent EBA guidelines on internet payments security: losses from frauds have lowered starting in 2016. It also illustrates the main anti-fraud measures taken by banks and outlines consumer-protection mechanisms, to make online purchases more secure.

Full text (pdf) in Italian only

No. 561: Mind the gap! Machine learning, ESG metrics and sustainable investment (June 2020)

Ariel Lanza, Enrico Bernardini and Ivan Faiella

T his study aims to overcome some of the limits of the sustainability ratings of firms (known as ESG scores - Environment, Social and Governance) by using artificial intelligence techniques to better identify the components of these metrics that contribute most to identifying efficient portfolios.

The proposed methodology selects indicators which, both as regards sustainability factors as a whole and the environmental component alone, contribute significantly to identifying portfolios with better risk-return profiles (i.e. they provide greater returns for a given risk or present lower risks for a known return).

Full text (pdf)

No. 560: The Italian public sector workforce: recent evolution in the light of the rules on turnover (June 2020)

Lucia Rizzica

The paper provides an analysis of the evolution of public sector employment in Italy over the past ten years. After discussing the main legislative measures that governed hiring and retirement by limiting the turnover rate, I analyze its effects on the observed flows and on the composition of the workforce. Particular attention is paid to the case of universities, where the contraction in employment was greater. While allowing a reduction in public spending, the introduction of limits on the turnover rate produced a sharp contraction in public employment combined with a significant ageing of the active workforce. The effect was not uniform: the contraction was greater in public universities, ministries and local authorities and, in general, in institutions located in the South, where the impact of the limits on turnover was amplified by the simultaneous introduction of stricter spending control rules.

Full text (pdf)

Other recent Occasional Papers

March 2020 — April 2020

- No. 559: An introduction to Italian balance sheets: methodology and stylized facts *Luigi Infante and Francesco Vercelli*
- No. 558: SMEs' direct and indirect access to public guarantees: an evaluation of regional regulations *Luciano Lavecchia, Luigi Leva and David Loschiavo*
- No. 557: The carbon footprint of Italian loans Ivan Faiella and Luciano Lavecchia
- No. 556: An update of the Bank of Italy methodology underlying the estimation of price-competitiveness misalignments *Claire Giordano*
- No. 555: Firms' listings: what is new? Italy versus the main European stock exchanges Paolo Finaldi Russo, Fabio Parlapiano, Daniele Pianeselli and Ilaria Supino
- No. 554: Credit risk statistical information of the Bank of Italy and the new AnaCredit data collection *Maria di Noia and Davide Moretti*
- No. 553: Goods exports and soft export indicators: is a disconnect under way? *Claire Giordano*
- No. 552: Diversity and inclusion in Italian banks: an empirical analysis of measures to support gender diversity on the board of directors *Diana Capone*

- No. 551: Repo market and leverage ratio in the euro area *Luca Baldo, Filippo Pasqualone and Antonio Scalia*
- No. 550: Don't look back in anger: The use of derivatives in public debt management in Italy Mauro Bucci, Ilaria De Angelis and Emilio Vadalà
- No. 549: FinTech credit: a critical review of empirical literature Nicola Branzoli and Ilaria Supino
- No. 548: Institutional sector classifier, a machine learning approach Oliver Giudice, Paolo Massaro and Ilaria Vannini
- No. 547: Quality checks on granular banking data: an experimental approach based on machine learning? *Fabio Zambuto, Maria Rosaria Buzzi, Giuseppe Costanzo, Marco Di Lucido, Barbara La Ganga, Pasquale Maddaloni, Fabio Papale and Emiliano Svezia*
- No. 546: Irpef: (Un)Fairness and (in)efficiency. A structural analysis based on the BIMic microsimulation model *Nicola Curci, Pietro Rizza, Marzia Romanelli and Marco Savegnago*

Selection of Journal articles and books

Authors' names in boldface: Bank of Italy Full list since 1990

Forthcoming

- Acceturo A., G. Albanese and A. D'Ignazio, "A New Phoenix? Large Plants Regeneration Policies in Italy", *Journal of Regional Science*.
- Affinito M., G. Albareto and R. Santioni, "Purchases of Sovereign Debt Securities by Italian Banks During the Crisis: the Role of Balance-Sheet Conditions", *Journal of Banking & Finance*. (<u>OP No. 330</u>)
- Alpino M. and E. Hammersmark, "The Role of Historical Christian Missions in the Location of World Bank Aid in Africa", *World Bank Economic Review*.
- Arduini T., E. Patacchini and E. Rainone, "Treatment Effects with Heterogeneous Externalities", *Journal of Business & Economic Statistics*. (WP No. 974)
- Audinga B., C. Giorgiantonio, S. Mocetti and T. Orlando, "Discretion and Supplier Selection in Public Procurement", *Journal of Law, Economics, and* Organization. (WP No. 1178)
- Ballatore R., M. Paccagnella and M. Tonello, "Bullied Because Younger Than My Mates? The Effect of Age Rank on Victimisation at School", *Journal of Labour Economics*.
- Barone G., F. David, G. de Blasio and S. Mocetti, "How do House Prices Respond to Mortgage Supply?", *Journal of Economic Geography*.
- Bottero M., F. Mezzanotti and S. Lenzu, "Sovereign Debt Exposure and the Bank Lending Channel: Impact on Credit Supply and the Real Economy", *Journal of International Economics*. (WP No. 1032)
- Bronzini R., S. Mocetti and M. Mongardini, "The Economic Effects of Big Events: Evidence from the Great Jubilee 2000 in Rome", *Journal of Regional Science*. (<u>WP No. 1208</u>)
- **Carta F.** and M. De Philippis, Discussion on "Labor Market Trends and the Changing Value of Time" by J. Boerma and L. Karabarbounis, *Journal of Economic Dynamics and Control.*
- **Cova P.** and **F. Natoli**, "The Risk-Taking Channel of International Financial Flows", *Journal of International Money and Finance*. (WP No. 1152)
- Cova P., A. Notarpietro, P. Pagano and M. Pisani, "Secular Stagnation, R&D, Public Investment and Monetary Policy: a Global-Model Perspective", *Macroeconomic Dynamics*. (WP No. 1156)
- **Delle Monache D.**, I. Petrella and F. Venditti, "Price Dividend Ratio and Long-Run Stock Returns: a Score Driven State Space Model", *Journal of Business & Economic Statistics*.
- **Del Prete S.** and **S. Federico**, "Do Links between Banks Matter for Bilateral Trade? Evidence from Financial Crises", *Review of World Economics*. (WP No. 1217)

- **Depalo D.**, "The Side Effects on Health of a Recovery Plan in Italy. A Nonparametric Bounding Approach", *Regional Science and Urban Economics*.
- **De Philipis M.** and F. Rossi, "The Parents, Schools and Human Capital Differences across Countries", *Journal of the European Economic Association*.
- **Di Giacinto V., G. Micucci** and **A. Tosoni**, "Knowledge Intensive Business Services and Urban Areas: An Analysis of Localization and Productivity on Italian Data", *Annals of Regional Science*. (<u>OP No. 443</u>)
- Gerali A. and S. Neri, "Natural Rates Across the Atlantic", *Journal of Macroeconomics*. (WP No. 1140)
- **Giordano R.**, S. Lanau, **P. Tommasino** and P. Topalova, "Does Public Sector Inefficiency Constrain Firm Productivity? Evidence from Italian Provinces", *International Tax and Public Finance.*
- Giordano C. and F. Zollino, "Long-Run Factor Accumulation and Productivity Trends in Italy", *Journal of Economic Surveys*.
- Liberati D. and M. Loberto, "Taxation and Housing Markets with Search Frictions", *Journal of Housing Economics*. (WP No. 1105)
- Loschiavo D., "Household Debt and Income Inequality: Evidence from Italian Survey Data", *Review of Income* and Wealth. (WP No. 1095)
- Mele A., K. Molnár and **S. Santoro**, "On the Perils of Stabilizing Prices when Agents are Learning", *Journal of Monetary Economics*.
- Mocetti S. and T. Orlando, "Corruption, Workforce Selection and Mismatch in the Public Sector", *European Journal of Political Economy*. (OP No. 402)
- Mocetti S., G. Roma and E. Rubolino, "Knocking on Parents' Doors: Regulation and Intergenerational Mobility", *Journal of Human Resources*. (WP No. 1182)
- Nispi Landi V. and A. Schiavone, "The Effectiveness of Capital Controls", *Open Economies Review*. (WP No. 1200)
- Pancrazi R. and **M. Pietrunti**, "Natural Expectations and Home Equity Extraction", *Journal Journal of Housing Economics*. (WP No. 984)
- Pavan G., A. Pozzi and G. Rovigatti, "Strategic Entry and Potential Competition: Evidence from Compressed Gas Fuel Retail", *International Journal of Industrial* Organization.
- Pereda Fernandez S., "Copula-Based Random Effects Models for Clustered Data", *Journal of Business & Economic Statistics*. (WP No. 1092)
- **Pietrunti M.** and **F. M. Signoretti**, "Unconventional Monetary Policy and Household Debt: the Role of Cash-Flow Effects", *Journal of Macroeconomics*.

Selection of Journal articles and books

- Rainone E., "The Network Nature of OTC Interest Rates", Journal of Financial Markets. (<u>WP No. 1022</u>)
- Santioni R., F. Schiantarelli and P. Strahan, "Internal Capital Markets in Times of Crisis: The Benefit of Group Affiliation", *Review of Finance*. (<u>WP No. 1146</u>)
- Sbrana G. and A. Silvestrini, "Forecasting with the Damped Trend Model Using the Structural Approach", *International Journal of Economics*.
- Schiantarelli F., M. Stacchini and P. Strahan, "Bank Quality, Judicial Efficiency and Loan Repayment Delays in Italy", *Journal of Finance*. (WP No. 1072)
- Stagnaro C, C. Amenta, G. Di Croce. and L. Lavecchia, "Managing the Liberalization of Italy's Retail Electricity Market: A Policy Proposal", *Energy Policy*.

2020

- Accetturo A., "Geographical Labor Market Imbalances. Recent Explanations and Cures", *Papers in Regional Science*, v. 95, 2, pp. 437-438.
- Accetturo A., A. Dalmazzo and G. de Blasio, "Spatial Equilibrium in Deviations: An Application to Skill-Premium and Skill-Mix Heterogeneity", *Journal* of Regional Science, v. 59, 4, pp. 615-632.
- Baltrunaite A., "Political Contributions and Public Procurement: Evidence from Lithuania", *Journal of the European Economic Association*, v. 18, 2, pp. 541-582.
- Bragoli D., F. Cortelezzi, G. Marseguerra and M. Rigon, "Innovative Investments, Financial Imperfections, and the Italian Business Cycle", *Oxford Economic Papers*, v. 72, 2, pp. 412-434.
- Bripi L., D. Loschiavo and D. Revelli, "Services Trade and Credit Frictions: Evidence with Matched Bank – Firm Data", *The World Economy*, v. 43, 5, pp. 1216-1252. (WP No. 1110)
- Coibion O., Y. Gorodnichenko and T. Ropele, "Inflation Expectations and Firms' Decisions: New Causal Evidence", *Quarterly Journal of Economics*, v. 135, 1, pp. 165-219. (WP No. 1219)
- **Corsello F.** and **V. Nispi Landi**, "Labor Market and Financial Shocks: a Time-Varying Analysis", *Journal* of Money, Credit and Banking, v. 52, 4, pp. 777-801. (WP No. 1179)
- **Depalo D.** and **S. Pereda Fernandez**, "Consistent Estimates of the Public/Private Wage Gap", *Empirical Economics*, v. 58, pp. 2937-2947.
- D'Ignazio A. and C. Menon, "The Causal Effect of Credit Guarantees for SMEs: Evidence from Italy", *Scandinavian Journal of Economics*, v. 122, 1, pp. 191-218. (WP No. 900)
- Gazzani A., "News and Noise Bubbles in the Housing Market", *Review of Economic Dynamics*, v. 36, pp. 46-72.

- Ladu G., **A. Linarello** and F. Oropallo, "Trade Shocks, Product Mix Adjustment and Productivity Growth in Italian Manufacturing", *The World Economy*, v. 43, 5, pp. 1434-1451. (<u>OP No. 513</u>)
- Mäkinen T., L. Sarno and G. Zinna, "Services Risky Bank Guarantees", *Journal of Financial Economics*, v. 136, 2, pp. 490-522.
- Rainone E. and F. Vacirca, "Estimating the Money Market Microstructure with Negative and Zero Interest Rates", *Quantitative Finance*, v. 20, 2, pp. 207-234. (<u>WP No. 1059</u>)
- **Rizzica L.**, "Raising Aspirations and Higher Education. Evidence from the UK's Widening Participation Policy", *Journal of Labor Economics*, v. 38, 1, pp. 183-214. (<u>WP No. 1188</u>)
- Segura A. and J. Zeng, "Off-Balance Sheet Funding, Voluntary Support and Investment Efficiency", *Journal of Financial Economics*, v. 137, 1, pp. 90-107.

2019

- Accetturo A., M. Cascarano, P. Degasperi and F. Modena, "The Effects of Common Culture and Language on Economic Exchanges: Evidence from Tourist Flows", *Regional Studies*, v. 53, 11, pp. 1575-1590.
- Albanese G., M. Cioffi and P. Tommasino, "Legislators' Behaviour and Electoral Rules: Evidence from an Italian Reform", *European Journal of Political Economy*, v. 59, pp. 423-444. (WP No. 1135)
- Alessandri P. and H. Mumtaz, "Financial Regimes and Uncertainty Shocks", *Journal of Monetary Economics*, v. 101, pp. 31-46.
- Andini C. and M. Andini, "Social Capital and Growth: Causal Evidence from Italian Municipalities", *Journal of Economic Geography*, v. 19, 3, pp. 619-653.
- Aprigliano V., G. Ardizzi and L. Monteforte, "Using the Payment System Data to Forecast the Economic Activity", *International Journal of Central Banking*, v. 15, 4, pp. 55-80. (<u>WP No. 1098</u>)
- Attinasi M.G., D. Prammer, N. Stalher, M. Tasso and S. van Parys, "Budget-Neutral Labour Tax Wedge Reductions: A Simulation-Based Analysis for Selected Euro Area Countries", *International Journal of Central Banking*, v. 15, 4, pp. 1-54.
- **Baltrunaite A.**, A. Casarico, P. Profeta and G. Savio, "Let the Voters Choose Women", *Journal of Public Economics*, v. 180.
- Barboni G. and C. Rossi, "Does Your Neighbour Know you Better? The Supportive Role of Local Banks in the Financial Crisis", *Journal of Banking & Finance*, 106, pp. 514-526.

Selection of Journal articles and books

Barone G., A. D'Alessandro and **G. de Blasio**, "A Ticket to Ride: Education and Migration from Lagging Areas", *Papers in Regional Science*, v. 98, 5, pp. 1893-1902.

Barone G., G. de Blasio, A. D'Ignazio and A. Salvati, "Incentives to Local Public Service Provision: An Evaluation of Italy's Obiettivi di Servizio", *Papers in Regional Science*, v. 98, 2, 1195-1213. (OP No. 388)

Bartiloro L., M. Bottone and A. Rosolia, "The Heterogeneity of the Inflation Expectations of Italian Firms Along the Business Cycle", *International Journal of Central Banking*, v. 15, 5, pp. 175-205. (OP No. 414)

Bartoletto S., B. Chiarini, E. Marzano and P. Piselli, "Business Cycles, Credit Cycles and Bank Holdings of Sovereign Bonds: Historical Evidence for Italy 1861-2013", *Journal of Macroeconomics*, v. 61.

Bassanetti A., C. Cottarelli and A. Presbitero, "Lost and Found: Market Access and Public Debt Dynamics", *Oxford Economic Papers*, v. 71, 2, pp. 445-471

Basso G., F. d'Amuri and G. Peri, "Immigrants, Labor Market Dynamics and Adjustment to Shocks in the Euro Area", *IMF Economic Review*, v. 67, 3, pp. 528-572. (<u>WP No. 1195</u>)

Batini N., G. Melina and S. Villa, "Fiscal Buffers, Private Debt, and Recession: The Good, the Bad and the Ugly", *Journal of Macroeconomics*, v. 62. (WP No. 1186)

Cappelletti G. and G. Guazzarotti, "The Role of Counterparty Risk and Asymmetric Information in the Interbank Market", *International Journal of Central Banking*, v. 15, 5, pp. 101-135.

Cappelletti G., G. Guazzarotti and P. Tommasino, "Tax Deferral and Mutual Fund Inflows: Evidence from a Quasi-Natural Experiment", *Fiscal Studies*, v. 40, 2, pp. 211-237 (<u>WP No. 938</u>)

Cardani R., A. Paccagnini and S. Villa, "Forecasting with Instabilities: An Application to DSGE Models with Financial Frictions", *Journal of Macroeconomics*, v. 61. (<u>WP No. 1234</u>)

Casiraghi M. and M. Miccoli, "Inflation Risk Premia and Risk-Adjusted Inflation Expectations", *Economics Letters*, v. 175, pag. 36-39 (<u>OP No. 286</u>)

Ciani E., F. David and G. de Blasio, "Local Responses to Labor Demand Shocks: A Re-Assessment of the Case of Italy", *Regional Science and Urban Economics*, v. 75, pp. 1-21. (<u>WP No. 1112</u>)

Conflitti C. and M. Luciani, "Oil Price Pass-Through into Core Inflation", *Energy Journal*, v. 40, 6, pp. 221-247.

Cova P., P. Pagano and M. Pisani, "Domestic and International Effects of the Eurosystem Expanded Asset Purchase Programme: A Structural Model-Based Analysis", *IMF Economic Review*, v. 67, 2, pp. 315-348 (WP No. 1036)

D'Alessandro A., G. Fella and L. Melosi, "Fiscal Stimulus with Learning-By-Doing", *Regional International Economic Review*, v.60, 3, pp.1413-1432. **De Matteis P.**, F. Pietrovito and A. Pozzolo, "Local Context and Exports: an Analysis with a Matched Sample of Firm-Province Data", *Regional Studies*, v. 53, 4, pp. 550-561.

Delle Monache D. and I. Petrella, "Efficient Matrix Approach for Classical Inference in State Space Models", *Economics Letters*, v.181, pp. 22-27.

Ercolani V. and J. Valle e Azevedo, "How Can the Government Spending Multiplier be Small at the Zero Lower Bound?", *Macroeconomic Dynamics*, v. 23, 8, pp. 3457-2482. (WP No. 1174)

Foa G., L. Gambacorta, L. Guiso and P. E. Mistrulli, "The Supply Side of Household Finance", *Review of Financial Studies*, v.32, 10, pp. 3762-3798. (WP No. 1044)

Gambacorta L., **S. Schiaffi** and A. van Rixtel, "Changing Business Models in International Bank Funding", *Economic Inquiry*, v. 57, 2, pp. 1038-1055.

Gara M., M. Gianmatteo and E. Tosti, "Magic Mirror in my Hand ... How Trade Mirror Statistics Can Help Us Detect Illegal Financial Flows", *The World Economy*, v. 42, 11, pp. 3120-3147. (<u>OP No. 445</u>)

Mercatanti A., T. Makinen and A. Silvestrini, "The Role of Financial Factors for European Corporate Investment", *Journal of International Money and Finance*, v. 96, pp. 246-258. (WP No. 1148)

Miccoli M. and S. Neri, "Inflation Surprises and Inflation Expectations in the Euro Area", *Applied Economics*, v. 51, 6, pp. 651-662 (<u>OP No. 265</u>)

Neri S. and A. Notarpietro, "Collateral Constraints, the Zero Lower Bound, and the Debt–Deflation Mechanism", *Economics Letters*, v. 174, pp. 144-148 (WP No. 1040)

Neri S. and T. Ropele, "Disinflationary Shocks and Inflation Target Uncertainty", *Economics Letters*, v. 181, pp. 77-80.

Pihl A. M, and G. Basso, "Did California Paid Family Leave Impact Infant Health?", *Journal of Policy Analysis and Management*, v. 38, 1, pp. 155-180.

Riggi M., "Capital Destruction, Jobless Recoveries, and the Discipline Device Role of Unemployment", *Macroeconomic Dynamics*, v. 23, 2, pp. 590-624 (<u>WP No. 871</u>)

Sbrana G. and A. Silvestrini, "Random Switching Exponential Smoothing: A New Estimation Approach", *International Journal of Production Economics*, v. 211, pp. 211-220.

Useful links

WORKING PAPERS OF THE OTHER EURO AREA CENTRAL BANKS:

European Central Bank

<u>Banco de España</u>

Banco de Portugal

<u>Bank of Estonia</u>

Bank of Finland

Bank of Greece

Bank of Slovenia

Banque Centrale du Luxembourg

<u>Banque de France</u>

Banque Nationale de Belgique

<u>Central Bank of Cyprus</u>

<u>Central Bank of Ireland</u>

<u>Central Bank of Malta</u>

Central Bank of the Republic of Lithuania

De Nederlandsche Bank

Deutsche Bundesbank

Národná banka Slovenska

Latvijas Banka

Oesterreichische Nationalbank

OTHER

BIS Central Bank Research Hub Einaudi Institute for Economics and Finance OECD working papers series Research at the IMF Research at the World Bank



<u>www.bancaditalia.it</u>



You Tube <u>Youtube.com/bancaditalia</u>



@UfficioStampaBI

The views expressed in the publications, papers, and seminars summarized in this Newsletter are those of the authors and do not necessarily reflect the position of the Bank of Italy.