Research in Economics at Banco de Portugal



# Spillovers

## Coverview

This is the first issue of Spillovers, the research newsletter of Banco de Portugal. The name Spillovers conveys the goal of the publication: to build bridges and foster research externalities both within and outside the Bank. The newsletter also aims at enhancing the transparency and accountability of the research activities undertaken at Banco de Portugal. Research is an integral part of the activities of a central bank. It contributes to establish sound foundations to the policy process, to inform and support policy decisions, as well as to ensure an independent and high-quality participation in academic and policy debates within the society. This is instrumental to foster the credibility of the central bank.

The communication of research activities involves specific challenges. These relate primarily with the need to transmit information in a way that is both useful and accessible to a general audience, while maintaining technical clarity and scientific rigor. Moreover, it is important to bridge the research activities with policy issues, in order to enhance the link with the debates undertaken at the various levels of intervention of the Bank.

The structure and content of Spillovers aims at addressing these challenges. In particular, we would like to highlight three features that will hopefully make the newsletter attractive both for researchers and the interested general public alike: (i) every issue will have a summary of two articles authored by Banco de Portugal staff, written by a renowned external economist; (ii) the newsletter will include executive summaries of all the research conferences organized by Banco de Portugal; (iii) in each issue there will be a short interview with two members of the research staff, discussing their research results and agenda.

The editor of Spillovers, one of our research economists, Luca David Opromolla, warmly welcomes any feedback and suggestions you may have on any aspect of the newsletter. The strength of research at Banco de Portugal lies in the quality of its staff. We trust this quality will translate into interesting Spillovers. We thus confidently invite you to become a regular reader of this newsletter going forward!

Nuno Alves and Mário Centeno Deputy Heads of the Economics and Research Department (DEE)

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This newsletter describes research activities of Banco de Portugal. More information is available at Banco de Portugal. The opinions expressed are those of the authors and do not necessarily coincide with those of Banco de Portugal or the Eurosystem.



In every issue, we ask an expert to briefly present and discuss two papers written by staff members. The first quest is Prof. José António Ferreira Machado, from Nova School of Business and Economics.

José António Ferreira Machado holds a Ph.D in Economics from the University of Illinois at Urbana-Champaign, U.S.A. His papers are published in some of the top journals of his field like, among others, The Journal of the American Statistical Society, Journal of Econometrics, Journal of Applied Econometrics, Econometric Theory. José Machado has been Dean at Nova School of Business and Economics, Lisbon-Portugal, since 2005 and of Angola Business School, Luanda-Angola, since 2010. He has also been a consultant of Banco de Portugal since 1992.

## Featured published paper

A Terms of Trade Channel for the of monetary policy shocks in a monetary union such as Transmission of Monetary Policy in a the euro area. As the authors put it, "the countries that Monetary Union

It is usually thought that a common shock hitting a group of similar countries with segmented labour markets (i.e. with limited mobility of workers across countries) and connected through trade will have an identical effect on each of the countries. A paper by Bernardino Adão and Isabel Correia recently published in European Economic Review ("Labour Immobility and the Transmission Mechanism of Monetary Policy in a Monetary Union", European Economic Review 63, 2013) shows that this current wisdom rests upon the (quite restrictive and unscrutinized) assumption that consumers have homothetic preferences. In simple terms, homothetic preferences between wine and beer imply that the proportion of budget allocated between these two drinks only depends on the relative price of wine and beer, not on the budget allocated to buy them; for instance, homotheticity implies that, in cross sections, rich and poor countries consume goods in the same proportions. A testable implication is that this type of preferences implies unitary income elasticity of the demand for goods.

In spite of the solid evidence from micro studies on non-unitary income elasticities and its implications having been known and explored in other contexts, homothetic preferences are often cavalierly assumed in international macroeconomics.

An application of great relevance is to the transmission

specialize in the goods with higher income elasticity benefit relatively more from a positive aggregate shock than the countries that specialize in goods with lower income elasticity; the opposite occurs with a negative aggregate shock". The usual mechanism rests on the direct effects of changes in the interest rate: a decline makes leisure relatively more expensive in both countries and, as a result, production increases. If labour is mobile or preferences homothetic the story ends here, as the terms of trade (*i.e.* the relative prices of exports in terms of imports) will always be equal to one and thus the relative production of "home" and "foreign" goods does not change. However, in general contexts, the relative supply of the goods depends on the interest rate and, consequently, monetary policy affects the equilibrium terms of trade.

In a model with flexible prices and assuming that the subsistence level of the (continuum) of goods produced in the home country is higher than the corresponding quantity for goods produced in the foreign country, a decline in the interest rate will increase the production in both countries (the usual direct effect), but will decrease the relative average price of home production, which will reduce average income in the home country (the richer country) and will increase it in the foreign country. "It is this indirect effect of the monetary shock that creates the asymmetric responses across countries". This basic insight of the flexible prices model holds in a model with nominal rigidities (Calvo prices).

## Fiscal Multipliers in Portugal

The global economic crisis following the collapse of absolute value over a one year period) and statistically Lehman Brothers in September 2008 brought into the significant: direct taxation and compensation of public limelight the long forgotten debate about the magniemployees. Social transfers come next in magnitude tude of fiscal multipliers – the measures of the impact and indirect taxes and government purchases of goods on GDP of changes in several instruments of budgetary and services have negligible impacts on the economic policy. The reasons for the renewed interest are clear: activity. The cumulative one-year multiplier indicates that for each 100 Euros of fall in the receipts of direct the first relates to the potentially limited efficacy of traditional monetary policy as a tool for counter-cyclical taxes output will increase by around 120 Euros (for the benchmark specification), while the same increase in policy in a context of interest rates close to the zero bound; secondly, concerns have emerged that the costs compensation will have an impact of 170 Euros. Given the linear nature of the model, these results imply that in terms of output and employment of the fiscal consolthese two budgetary variables have also the biggest idation programs adopted by several countries in the euro area might be larger than anticipated. recessive impact.

Manuel Coutinho Pereira and Lara Wemans visit this An obvious caveat is that the model does not include interest rates or debt dynamics that may be imporquestion using Portuguese data in a recent Banco de tant to evaluate fiscal multipliers, especially when debt Portugal Economic Bulletin article ("Output effects of sustainability concerns are paramount. The authors fiscal policy in Portugal: a structural VAR approach", spring 2013). With guarterly data for the period 1995address this by extending the initial specification in 2011, the authors estimate a structural Vector Autorethat direction. Although results do not change qualitatively, the quantitative impacts are attenuated (i.e., gressive Model with 5 variables: taxes, social transfers, government consumption, output and inflation. The shrunken towards zero) and less precisely estimated. A fiscal block is then further disaggregated making it more serious caveat - this pertaining to the approach not the model itself - is that "the estimated effects of possible to estimate the effects of more detailed fiscal shocks such as to direct and indirect taxes, and public fiscal policy mirror the type of shocks and the macroemployees' compensation. economic relationships arising in the sample period, [and these] could have changed considerably in recent All of the multipliers (except for goods and services times". These caveats notwithstanding, the conclusion is that, in the sampling period, the disposable income was the main transmission channel of fiscal policy.

outlays) were found to have the conventional signs: positive for public expenditure items and negative for taxes. Yet, only two variables were estimated to have effects that are numerically big (greater than one in

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## Featured Bulletin article

## Recently published

Our economists publish in a wide range of economic and finance journals, and scholarly books.

## Mathematical and Quantitative Methods

Carvalho, Miguel de, António Rua, and K. F. Turkman. 2013. "Dynamic Threshold Modelling and the US Business Cycle." Journal of the Royal Statistical Society Series C, 62(4): 535-550.

Costa, Sónia and Ana Beatriz Galvão. 2013. "Does the Euro Area Forward Rate Provide Accurate Forecasts of the Short Rate?" International Journal of Forecasting 29: 131-141.

Dias, Francisco, Maximiano Pinheiro, and António Rua. 2013. "Dynamic Factor Models with Jagged Edge Panel Data: Taking on Board the Dynamics of the Idiosyncratic Components." Oxford Bulletin of Economics and Statistics, 75:1, 80-102.

Duarte Rita, and Carlos Robalo Margues. 2013. "The Dynamic Effects of Shocks to Wages and Prices in the United States and the Euro Area." Empirical Economics, 44(2): 613-638.

Gomes, Sandra, Pascal Jacquinot, Matthias Mohr and Massimiliano Pisani. 2013. "Structural Reforms and Macroeconomic Performance in the Euro Area Countries: A Model Based Assessment." International Finance 16(1): 23-44.

Pereira, Ana, and João Valle e Azevedo. 2013. "Approximating and Forecasting Macroeconomic Signals in Real-Time." International Journal of Forecasting 29(3): 479-492.

Rodrigues, Paulo M.M. 2013. "Recursive Adjustment, Unit Root Tests and Structural Breaks." Journal of Time Series Analysis, 34(1): 62-82.

Rodrigues, Paulo M.M., António Rubia, and João Valle e Azevedo. 2013. "Finite Sample Performance of Frequency and Time Domain Tests for Seasonal Fractional Integration." Journal of Statistical Computation and Simulation 83(7): 1373-1384.

Rua, António. 2013. "Worldwide Synchronization Since the Nineteenth Century: a Wavelet-based View." Applied Economics Letters, 20: 773-776.

## forthcoming

Carvalho, Miguel de, and António Rua. 2013. "Extremal **Dependence in International Output Growth: Tales** from the Tails." Oxford Bulletin of Economics and Statistics.

Castro, B. Tomas, Paulo M.M. Rodrigues, and A.M.Robert Taylor. "The Impact of Persistent Cycles on Zero Frequency Unit Root Tests." Econometric Theory.

Dias, Francisco, Maximiano Pinheiro and António Rua. "Determining the Number of Global and Country-Specific Factors in the Euro Area." Studies in Nonlinear Dynamics & Econometrics.

Martins, Luís, and Paulo M.M. Rodrigues. "Testing for Persistence Change in Fractionally Integrated Models: an Application to World Inflation Rates." Computational Statistics and Data Analysis.

Pereira, Manuel C., and Artur S. Lopes. "Time-varying Fiscal Policy in the U.S." Studies in Nonlinear Dynamics & Econometrics.

Rodrigues, Paulo M.M., and Carla Soares. "Determinants of the EONIA Spread and the Financial Crisis." The Manchester School.

## Microeconomics

Antunes, António, Tiago Cavalcanti and Anne Villamil. 2013. "Costly Intermediation and Consumption Smoothing." Economic Inquiry, 51(1): 459-472.

Dias, Daniel, Carlos Robalo Margues, and Fernando Martins. 2013. "Choosing Between Time and State Dependence: Micro Evidence on Firms' Price Reviewing Strategies." Scandinavian Journal of Economics, 115(3): 756-780.

## Macroeconomics and Monetary Economics

Correia, Isabel, and Bernardino Adão. 2013. "Labour Immobility and the Transmission of Monetary Policy in a Monetary Union." European Economic Review, 63: 23-46.

Correia, Isabel, Emmanuel Farhi, Juan Pablo Nicolini and Pedro Teles. 2013. "Unconventional Fiscal Policy at the Zero Bound." American Economic Review, 103(4): 1172-1211.

Dib, Ali, Caterina Mendicino, and Yahong Zhang. 2013. "Price-Level Targeting Rules and Financial Shocks: the Case of Canada." Economic Modelling, 30: 941-953.

Gelain Paolo, Kevin Lansing, and Caterina Mendicino. 2013. "House Prices, Credit Growth, and Excess Volatility: Implications for Monetary and Macroprudential Policy." International Journal of Central Banking, 9(2): 219-276.

Lambertini, Luisa, Caterina Mendicino, and Maria Teresa Punzi. 2013. "Leaning Against Boom-Bust Cycles in Credit and Housing Prices: Monetary and Macroprudential Policy." Journal Economic Dynamics and Control,37(8): 1500–1522.

Dias, Daniel, Carlos Robalo Margues, and Fernando Martins. 2013. "Wage Rigidity and Employment Adjustment at the Firm Level: Evidence from Survey Data." Labour Economics, 23(C): 40-49.

## forthcoming

Antunes, António, Tiago Cavalcanti. "The Welfare Gains of Financial Liberalization: Capital Accumulation and Heterogeneity." Journal of the European Economic Association.

Lambertini, Luisa, Caterina Mendicino, and Maria Teresa Punzi. "Expectation-Driven Cycles in the Housing Market: Evidence from Survey Data." Journal of Financial Stability.

## International Economics

Amador, João, and Luca David Opromolla. 2013. "Product and Destination Mix in Export Markets." Review of World Economics (Weltwirtschaftliches Archiv), 149(1): 23-53.

Impullitti Giammario, Alfonso Irarrazabal, and Luca David Opromolla. 2013. "A Theory of Entry into and Exit from Export Markets." Journal of International Economics, 90(1): 75-90.

Irarrazabal, Alfonso, Andreas Moxnes, and Luca David Opromolla. 2013. "The Margins of Multinational Production and the Role of Intrafirm Trade." Journal of Political Economy, 121(1): 74-126.

Saldías, Martín. "A Market-based Approach to Sector **Risk Determinants and Transmission in the Euro** Area." Journal of Banking and Finance.

Saldías, Martín. "Systemic Risk Analysis Using Forward-Looking Distance-to-Default Series." Journal of Financial Stability.

## **Financial Economics**

## forthcoming

Barros, Pedro P., Diana Bonfim, Moshe Kim, and Nuno C. Martins. "Counterfactual Analysis of Bank Mergers." **Empirical Economics.** 

## Labour and Demographic Economics

## forthcoming

Addison, John T., Pedro Portugal and José Varejão, "Labour Demand: The Case for Improving the Match of Data to Theory." Labour Economics.

Addison, John T., José A. F. Machado, Pedro Portugal, "The Reservation Wage Unemployment Duration Nexus." Oxford Bulletin of Economics and Statistics.

Carneiro, Anabela, Pedro Portugal and José Varejão, "Catastrophic Job Destruction." Journal of Macroeconomics.

Centeno, Mário, and Álvaro A. Novo. "Do Low-wage Workers React Less To Longer Unemployment Benefits? Quasi-experimental Evidence." Oxford Bulletin of Economics and Statistics.

## New titles in the Working Papers series

Technical working papers intended for publication in leading finance and economics journals. Find here the complete list of working papers.

## Mathematical and Quantitative Methods

Macroeconomic Forecasting Using Low-Frequency Filters

by João Valle e Azevedo, Ana Pereira - BP WP 1/2013

We explore univariate low-frequency filters in macroeconomic forecasting. Simulations and an empirical application using US data that target only specific fluctuations in the time series result in high gains in forecast accuracy. We characterize the optimal cut-off defining low and high frequencies.

## Macroeconomics and Monetary Economics

The Output Effects of (Non-Separable) Government Consumption at the Zero Lower Bound

by Valerio Ercolani, João Valle e Azevedo - BP WP 10/2013

We find that the reaction of output to government spending shocks -at the zero lower bound on the nominal interest rate- can be much smaller if government and private consumption are substitute goods. An aggressive debt-stabilizing fiscal rule reinforces the negative effect on the size of the multipliers.

Ageing and Fiscal Sustainability in a Small Euro Area Economy

by Gabriela Castro, José R. Maria, Ricardo Mourinho Félix, Cláudia Rodrigues Braz - BP WP 4/2013

Using PESSOA, a small open economy DSGE model, we find that the impact of ageing can be significant and depends on the magnitude and pace of the ageing dynamics, the existing rules for social benefits and the policy response to ensure fiscal sustanaibility.

### Monetary Policy Shocks: We Got News!

by Sandra Gomes, Nikolay Iskrev, Caterina Mendicino -BP WP 7/2013

Monetary policy news shocks improve the performance of a DSGE model fit it to US data both in terms of marginal data density and of its ability to match the empirical moments of observables. Identification analysis reveals that adding these news shocks does not lead to identification problems.

### Fiscal Multipliers in a Small Euro Area Economy: How Big Can They Get in Crisis Times?

by Gabriela Castro, Ricardo M. Felix, Paulo Júlio, José R. Maria - BP WP 11/2013

Using PESSOA, a small open economy DSGE model, we find that first year fiscal multipliers can be around 60-70 percent larger in crisis times vis-à-vis normal times for a government consumption-based fiscal consolidation, and around 40-60 percent larger for a revenue-based fiscal consolidation.

## International Economics

## Is There a Role for Domestic Demand Pressure on Export Performance?

by Paulo Soares Esteves, António Rua - BP WP 3/2013

Traditionally, exports are linked to foreign demand and the real exchange rate. Using Portuguese data, we show that domestic demand is also relevant for the short-run dynamics of exports. The relationship is asymmetric, being stronger when domestic demand is falling than when it is increasing.

Foreign Direct Investment and Institutional Reform: Evidence and an Application to Portugal

by Paulo Júlio, Ricardo Pinheiro-Alves, José Tavares - BP WP 6/2013

The article examines drivers of FDI in Europe to evaluate potential institutional reforms in Portugal. Reforms promoting independent financial institutions, a leaner bureaucracy, low political risk and corruption, and a better investment code may significantly affect Portugal's inward FDI.

## Labour and Demographic Economics

Everything You Always Wanted to Know About Sex Discrimination

by Ana Rute Cardoso, Paulo Guimarães, Pedro Portugal - BP WP 2/2013

We provide a clear measure of how the gender pay gap depends on the allocation of workers to firms and to job titles. We find that both account for one fifth of the gender pay gap. We show that the glass ceiling effect operates mainly through worker allocation to firms rather than occupations.

Working Papers series

New titles in the

Mind The Gap! The Relative Wages of Immigrants in the Portuguese Labour Market by Sónia Cabral, Cláudia Duarte - BP WP 5/2013

Most of the wage gap upon arrival of immigrants is due to different returns to the variables and to the immigrant status effect. The subsequent wage convergence is modest and the assimilation rates are stronger in the first years after migration and for immigrants with more foreign experience.

**The Sources of Wage Variation: a Three-Way High-Dimensional Fixed Effects Regression Model** by Sónia Torres, Pedro Portugal , John T. Addison, Paulo Guimarães - BP WP 9/2013

We estimate a wage equation with three high-dimensional fixed effects. The variation in log real hourly wages is decomposed into worker, firm, and job title characteristics (both observed and unobserved). We found definitive evidence that more productive workers match with more productive firms.

## Industrial Organization

Competition in the Portuguese Economy: Estimated Price-Cost Margins Under Imperfect Labour Markets by João Amador, Ana Cristina Soares - BP WP 8/2013

This article jointly estimates product and labour market imperfection, following Roeger (1995). We found that using firm-level data for 2005-2009, perfect competition is widely rejected for Portuguese product and labour markets. Moreover, imperfections in these markets are positively correlated.

## Other activities

## Research grants

These are the researchers - and the projects they carried on - that were awarded a research grant since January 2013:

- Qinglei Dai (Nova School of Business and Economics), "Capital Structure, Job Creation and Growth: New Evidence with Firm-Level Data".
- Sónia Félix (Nova School of Business and Economics), "Wages, Productivity, Unit Labour Costs and Competitiveness".
- Paul McNelis (Fordham University), "Macrodynamic Adjustment to Sudden Stops in Small Open Economies".
- Tereza Punzi (University of Nottingham), **"Macropru** dential Policy: Taxes and Caps", and "The impact of Capital Requirement on GDP Growth: Implications of Basel III".
- Alessandro Sforza (LSE), "Managers' Mobility and Knowledge Transfer".

## Visiting researchers

The Economics and Research Department (DEE) regularly hosts researchers from other institutions that collaborate, exchange ideas and expertise with internal economists. So far this year we benefited from the presence of a number of distinguished visitors, including:

John Addison (University of South Carolina), Juan Pablo Nicolini (Torcuato di Tella University and Federal Reserve Bank Minneapolis), Beatriz Mariano (Universidad Carlos III de Madrid and LSE), Uwe Hassler (Goethe Universität Frankfurt am Main), Paulo Guimarães (Universidade do Porto and University of South Carolina), Ana Rute Cardoso (Institute of Economic Analysis and Barcelona GSE), Guay Lim (University of Melbourne), Oreste Tristani (European Central Bank), Daniel Dias (University of Illinois at Urbana-Champaign), Matilde Machado (Universidad Carlos III de Madrid), Tomas del Barrio (Universitat de les Illes Balears), Pedro Carneiro (UCL), Sokbae Lee (Seoul National University), Miguel Carvalho (Universidade Católica Portuguesa), Pedro Raposo (Universidade Católica Portuguesa), Geraldo Cerqueiro (Universidade Católica Portuguesa), Simone Giansante (School of Management, University of Bath), Leonor Coutinho (University of Cyprus and Europrism Research), Stephane Moyen (Deutsche Bundesbank).

## Sharing knowledge: conferences, seminars, and courses

DEE regularly organizes conferences to discuss topics of relevance to the general public and the academic community. The goal is to promote the exchange of ideas, and inform the public debate. Information on past and upcoming conferences can be found here.

# June Conferences

## Conference on program evaluation, minimum wage, and firms financing and the labour market

minimum wage and employment protection.

firms financing on labour market outcomes capital accumulation, and the intergenerational becomes more important than ever. The first transmission of poverty. main question was "should we encourage private equity"? Critics focus mainly on the potential of The final session discussed the topic of the short-term job losses resulting from leveraged minimum wage and the role of employment buyouts, while benefits are concentrated in the protection in a two tier labour market system. longer term positive impacts on the new plants Both papers dealing with the minimum wage in terms of productivity and, to a less extent, focused on the US. One found no detectable on employment growth. The key feature seems employment losses from the minimum wage to be the reallocation/efficient plant selection, increases, while the other pointed to evidence which may rely on good management.

The second paper highlighted a negative rela- Freeman discussion on minimum wage summationship between job applications and firm rizes the policy implications. financial health. The main policy implication was "The goal of a minimum wage is not, of course, to that distressed firms may struggle to retain or reduce employment, but to redistribute earnings attract workers who could contribute to recovery, to low-paid workers. The redistributive effects of suggesting labour market frictions are important a minimum wage depend on the labour market considerations for corporate risk-taking.

between job destruction and negative credit ment." growth is robust. In terms of policy it is critical The session on employment protection highto separate between a pure productivity shock lighted the strong segmentation of the Portu-(labour demand story) leading to reduction in guese labour market and the wage flexibility the demand for credit, and a pure shock to credit introduced by new contracts. This generates (credit supply story) leading to reduction in both a wage premium and is consistent with the financing flows and jobs.

choices and labour market outcomes. Main find- ended and fixed-term contracts.

The 2013 Banco de Portugal Labour Confer- ings: active labour market programs tend to be ence was focused on five topics with particular ineffective but early childhood interventions can relevance in the current economic crisis: firms have dramatic impacts in individuals' lives, with financing, welfare system, formal childcare, very high rates of return. While the insurance and anti-poverty value of a tax credit systems may be substantial, policy may need to counteract the In the midst of the current crisis the impact of potential negative effects on education, human

of disemployment effects. In terms of policy,

and redistributive system in which it operates, The last paper showed that the correlation on the level of the minimum, and on its enforce-

reduced role of wages as an incentive for fixedterm worker. Therefore, there is clear evidence The second session addressed the impact of that employment protection decreases wages changes in the welfare system on educational and increases the wage gap between open-

## May 23rd

## Conference on consensus and institutional reform

Banco de Portugal, the Economic and Social Council and the Calouste Gulbenkian Foundation organised a Conference on the importance of consensus in institutional reform processes. The purpose was to provide broad consideration on the need to make the institutional reform process more inclusive, in social terms. Some European examples of acknowledged success were reviewed: the Swedish, Dutch and German cases, as well as political and constitutional institutions requiring consensus. The addresses and interventions of the participants in the Conference revolved around five main topics.

Need for broad consensus, based on social partners. Consensus must be obtained from a Program Evaluation, plurality of opinions. Institutions must operate Minimum Wage, systemically, with strong concerns in terms of and Firms Financing refining the relationships established among and the Labour Market them, but also among the different social and economic players. The German case is paradigmatic given the importance of bringing all players to the negotiation table in a permanent and inclusive manner, at both the national level, CONSENSUS REFORMA a more centralised representation of social part-INSTITUCIONAL ners, and business level, where representation is made by workers' commissions. Some addresses highlighted the existence of institutions that are sub-optimal at the individual level, but may have positive systemic effects. One example showed In the German case, one of the reforms presthe high external rigidity of employment reguently under consideration, to address the rise lations in Germany (accounting for some recent in inequalities that have been generated by the reforms), which is accompanied by strong reform process over the last decade, is the introinternal flexibility resting on management reguduction of a national minimum wage. Reducing lations of the labour input – working hours – and inequalities should be associated with social in-house representation of workers, facilitating mobility and these two virtuous dynamics in the adoption of adjustment measures vis-à-vis society depend on the development of a more the business cycle. Another example was the inclusive educational system, where opportuni-Swedish case, where the centralisation of collecties should be distributed more equally. tive bargaining operates in the context of strong The governance model, either more adverrepresentation and accountability of the unions sarial or more consensual (with a checks and and the social role of these unions that goes balances system as an interim solution), has beyond their relevance in the world of work. consequences for the type of solutions devel-More inclusive labour regulations, where investoped. The governance and political representament in human capital is enhanced, are essential tion model has consequences for the manner to increase productivity. of implementation of the options taken in

Need to reduce inequalities. European experielections and government efficiency, in particular for how voters acknowledge the political ences show that it is easier to obtain consensus system in force. The governance model also on institutional reforms when income is more evenly distributed. Players are then subject affects the government timing. The models in to similar economic conditions and develop which the government can act largely autonomously (cabinet system) tend to generate small similar attitudes towards the problems faced.



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BANCO DE PORTUGAL CONFERENCES C

Financial Intermediatio

**Sth Conference on** 

BANCO DE PORTUGAL BP CONFERENCES C

shock reactions that have not been subject to may lead to the disruption of the whole system, advance commitments. The models based on the which should be understood as an integrated consensus, in turn, generate late reactions and system of business relationships. The recent wars of attrition that may be doubly penalising, German case draws attention to the systemic as they give rise to protracted periods of failure nature of the reform process and to the need to act.

in order to be effective. A plural debate is required in response to specific operation difficulties. in the process for obtaining consensus. Political The reform and consensus generation process alternatives are essential for the pluralism and more intensive when the systems in force trigger renovation of political ideas. Poor consensuses, disruptions and require a profound regeneration which do not consider the actual challenges of of existing share capital. An institutional reform society and the economy, contribute to sub- privileging social and economic mobility mechaoptimal results in terms of sustained growth. nisms, with new inclusive institutions, has been One of the key points for sustainable success of a widely identified as the path to be followed in reform process is to make it inclusive and based the construction of consensus and institutional on reforms resulting from an actual appropria- reform. tion of the consensus results.

to evaluate whether these reforms are a trans-Consensus needs the possibility of disagreement formation of the model or merely adjustments

The reform process must be liable to ongoing "Box 1.3: Consensus and Institutional Reform" of the refinement. The break down of existing equilibria Economic Bulletin - Summer 2013.

A longer version of this summary was published in

June 28th\_29th

## Conference on financial intermediation

The conference on financial intermediation comprised sessions on government guarantees Second, carefully designed government interand systemic risk, bank liquidity regulation, and vention helps preventing bank runs and acting unintended consequences of bank capital regu- as lender of last resort. An important insight lation. In an environment of lively discussion along these lines is that partial deposit insurance and high quality interventions, three essential is possibly preferable to blanket warranties that insights emerged.

tion of stricter capital ratios in good times or, up increasing the probability of runs justified by conversely, the relaxation of capital ratios in fundamentals (and not by panic). recessions - is supported by different classes of models and can assume different shapes. It Third, liquidity standards form an important counter-cyclical whether the need for regulation impose certain liquidity regulations to allow comes from a fundamental friction such as the governments to assess the systemic relevance of insufficient ability to pledge returns from invest- banks and decide to eventually support a bank ments, or from losses coming from cyclical deval- hit by a liquidity shock in the role of lender of last uations of equity. Practical measures include the resort. A related problem is herding behaviour of need to use historical (or perhaps through-the- banks in their liquidity strategies; this suggests cycle) equity as the basis of the definition of a macroprudential approach in the design of counter-cyclical capital requirements. Capital requirements should take into consideration the level of total banking capital and lending in the economy.

rule out bank runs caused by panic. This results from the fact that extensive deposit protection First, counter-cyclical regulation - the imposi- lead banks to choose riskier loans, which ends

was shown that capital regulations should be barrier to bank failures. It can be optimal to liquidity requirements.

> António Antunes, Diana Bonfim, Luisa Farinha Caterina Mendicino, and Nuno Silva

## seminars

DEE regularly invites experts in various fields of economics to present their latest research. Banco de Portugal staff, as well as researchers from other central banks, Portuguese and foreign universities are invited to attend. The following is a list of the seminars that were organized up to September. See the seminars' webpage for a list of past and upcoming seminars.

January 14th, 2013 - Gianluca Benigno (London School of Economics) **Optimal Policy for Macro-Financial Stability** 

February 5th, 2013 - Fiorella De Fiore (European Central Bank) **Optimal Credit Spreads and the Zero Bound on Interest Rates** 

February 14th, 2013 - Marco Del Negro (Federal Reserve Bank of New York) DSGE Model-Based Forecasting

March 4th, 2013 - David A. Matsa (Northwestern University) Boarding a Sinking Ship? An Investigation of Job Applications to Distressed Firms

April 10th, 2013 - Hans Degryse (Tilburg University) On the Non-Exclusivity of Loan Contracts: An Empirical Investigation

May 20th, 2013 - Nicola Pavoni (Bocconi University) On the Dual Approach to Recursive Optimization

May 27th, 2013 - Borghan N. Narajabad (Rice University) **Optimal Leverage Limits** 

June 17th, 2013 - Ramon Marimon (European University Institute) **Risky Investments with Limited Commitment** 

July 22nd, 2013 - Martin S. Eichenbaum (Northwestern University) Unemployment and Business Cycles

September 23rd, 2013 - Jordí Gali (Universitat Pompeu Fabra) Understanding the Gains from Wage Flexibility: The Exchange Rate Connection

DEE regularly organizes Ph.D-level one week courses taught by experts on several topics in economics. Banco de Portugal staff, researchers from other central banks, and from Portuguese and foreign universities are invited to attend.

### These are the courses that were hosted up to September:

May 6th-10th, 2013 - Cristina Arellano (Federal Reserve Bank of Minneapolis) **Sovereign Debt Crises** 

May 13th-15th, 2013 - Ricardo Lagos (New York University) The Search-Theoretic Approach to Liquidity

## Spillovers autumn2013

## From the Economic Bulletin and Financial Stability Report...

Each issue of the Economic Bulletin and of the Financial Stability Report carries articles whose titles and abstracts are listed below.

## Economic Bulletin Spring 2013

### **Output Effects of Fiscal Policy in Portugal: A Structural VAR Approach**

by Manuel Coutinho Pereira, Lara Wemans The SVAR approach is applied to a dataset for Portugal (95:Q1 to 11:Q4) for studying the effects of fiscal shocks in a rather disaggregated way. The estimated multipliers have in general a conventional sign, being large for compensation of employees and direct taxes, small for social transfers and non-significant for indirect taxes.

### **Trade and Wage Inequality**

### by Luca David Opromolla

We present recent developments in the trade literature regarding the impact of export and import barriers on within-industry wage inequality. These theories could prove useful to revisit the change in wage inequality in Portugal after the entrance into the EU and to explain more recent patterns.

### **Competition in the Portuguese Economy: Esti**mated Price-cost Margins Under Imperfect Labour Markets

### by João Amador, Ana Cristina Soares

This article jointly estimates product and labour market imperfection, following Roeger(1995). We found that using firm-level data for 2005-2009, perfect competition is widely rejected for Portuguese product and labour markets. Moreover, imperfections in these markets are positively correlated.

### Foreign Investment and Institutional Reform: **Portugal in European Perspective**

### by Paulo Júlio, Ricardo Pinheiro Alves, José Tavares

The article examines drivers of FDI in Europe to evaluate potential institutional reforms in Portugal. Reforms promoting a leaner bureaucracy, fewer investment restrictions, lower political risk and corruption, and a better legal environment may significantly affect Portugal's inward FDI.

### **Business Cycle Accounting for Portugal** by Nikolay Iskrev

The article analyzes the sources of business cycle fluctuations in Portugal using the business cycle accounting approach developed by Chari et al. (2007). The results show that distortions affecting total factor productivity play a key role in explaining the behaviour of output from 1998 through 2012.

## **Economic Bulletin Summer 2013**

## **Oil Price Shocks and Their Effects on Economic** Activity and Prices: An Application for Portugal

### by Francisco Craveiro Dias

We estimate the effects of oil shocks on Portuguese GDP, employment and inflation. The results envisage a long run effect of -0.7 pp on GDP level. Effect on employment is similar, though smaller. Inflation increases in the first two years, though the long run effect on the price level is temporary.

### Short-term Forecasting of Indirect Tax Revenues: An Application for Portugal

by Paulo Soares Esteves, Cláudia Rodrigues Braz This article aims to produce short-term forecasts at an infra-annual frequency for the general government deficit, on a national accounts basis, in Portugal. It focuses on indirect tax revenues and uses "short-term forecasting" techniques. The results vary in line with the considered taxes.

### The World Tourism Exports Cycle

### by Pedro M.D.C.B. Gouveia, Raúl Filipe C. Guerreiro, Paulo M.M. Rodrigues

This study analyses and compares the tourism exports cycles for all regions of the world with the cycle of the European Union. The synchronization between the cycles is analysed and lagged concordance indices identified, which can play an important role in forecasting and to support



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FINANCIAL STABILITY REPORT

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### decision making.

## **Predicting Aggregate Returns Using Valuation Ratios Out-of-sample**

by Ana Sequeira

Valuation ratios provide in-sample relevant signals for future returns. We assess the ability of these indicators to predict aggregate returns in real-time (US stock and housing markets) and find statistical evidence that supports the extension of the in-sample results to an out-of-sample context.

## Financial Stability Report May 2013

### Is there a Risk-taking Channel of Monetary **Policy in Portugal?**

### by Diana Bonfim and Carla Soares

This article analyses the risk-taking channel of monetary policy, testing whether banks grant more risky loans when interest rates are lower. We find that banks grant more risky corporate loans in such periods, even though these loans do not turn out to have a higher ex-post likelihood of default.

### **Investment Decisions and Financial Standing** of Portuguese Firms – Recent Evidence by Luisa Farinha and Pedro Prego

This work studied how firms' investment decisions and their financial standing relate, finding that firm's interest burden and indebtedness level have a negative relationship with investment rate, while profitability has a strong and positive effect, these results being stronger for smaller firms.

### Bank Interest Rates on New Loans to Nonfinancial Corporations - One First Look at a **New Set of Micro Data** by Carlos Santos

An empirical assessment of the relevance of some determining factors for bank loans' interest rates to NFCs in Portugal, resorting to an innovative micro information dataset. Risk, size of the loan and the customer, private or public nature, and the fact of having exporting activity are relevant.

## Spillovers autumn2013

## Meet our researchers

In every issue, we present two members of our research staff, and talk about their research agenda. The profiles and curriculum vitae of the other staff members are available here.

## Lara Cabral Wemans



Lara Wemans has been a research economist in the Public Finance and Structural Studies Division of the Economics and Research Department of Banco de Portugal since October 2011. She holds a degree in Economics and a master in Economics and Public Policy, both from ISEG – Universidade Técnica de Lisboa. She has previously worked at the Economic Research Unit of BPI and as an advisor for the Secretary of State for Rehabilitation in the Ministry of Labour and Social Solidarity.

Please, tell us about the research you are carrying on at DEE.

Recently, I have been studying the effects of fiscal policy on economic activity in Portugal. In a country that faces significant fiscal tightening and considerable fiscal sustainability challenges, the size of fiscal multipliers is a very interesting topic, as well as the subject of intense debate. Earlier this year, I have published an article with Manuel Pereira— Output effects of fiscal policy in Portugal: a structural VAR approach —that uses structural Vector Autoregressive (VARs) models and national accounts data on public finances to compare the effects of different fiscal policy options. Currently, in the vein of Romer and Romer (2010)-The macroeconomic effects of tax changes: Estimates based on a new measure of fiscal shocks. American Economic Review 100(4), 763–801 — we are working on a related project adopting a different but complementary approach named narrative. As a by-product of this project we are developing a new quarterly data series of legislated tax changes in Portugal, covering the period from 1996 to 2012.

Overall, my research interests include broader topics such as the sustainability of public finances, tax policy, the economics of law and the labour market. More generally, my work includes following the evolution of Public Finances in Portugal, namely budget execution and budgetary policy documents.



Pedro graduated in economics from Faculdade de Economia do Porto and received his Ph.D from the University of South Carolina. He is a senior researcher at Banco de Portugal, a visiting full professor of economics at Nova School of Business and Economics and, since 2012, a member of the Conselho Nacional de Ciência e Tecnologia.

Pedro Portugal

Pedro has published in top economics and labour economics journals including The American Economic Review, American Economic Journal: Macroecoeconomics, Review of Economics and Statistics, Journal of the European Economic Association, Economic Policy, and The Journal of Labour Economics.

Please, tell us about the research you are carrying on at DEE.

These days, I am very excited with the exploration of highdimensional fixed effects and high-dimensional slopes regression models (which I like to call "slippery slopes") that I developed jointly with Paulo Guimarães. These fancy econometric techniques enable the researcher to explore conventional economic themes under a fresh perspective.

With the invaluable help of my co-authors I am applying those estimation procedures to study a catholic spectrum of themes. We revisited the cyclical sensitivity of real wages in a way that accounts for worker, firm, and job-title heterogeneity. We inquired whether more productive workers match with more productive firms, estimating in the process a production function with close to 30,000 distinct labour inputs. We showed that a large fraction of measured gender discrimination is generated by the allocation of workers into occupations and firms. We uncovered unsuspected spillover benefits from working with more educated co-workers. We measured the impact of wage rigidity on job destruction. We decomposed the severe income losses of displaced workers. We disentangle the union wage premium. And, with firm level data, we are estimating the empirical distributions of total factor productivity and unit labour costs.

This engagement does not preempt, of course, my longstanding commitment to the research on the survival of firms, unemployment duration, labour demand, and pension reform.

## Upcoming events and announcements

seminars

Check our webpage for an updated list of future seminars. If you are interested in attending the seminars please contact us at conferences@bportugal.pt

Economy

courses

November 25th-29th, 2013 - Lucy White (Harvard Business School) Banking and Financial Crises

# grants for

Banco de Portugal offers cash grants to support research projects in the field of Economics, with a view to promoting interchange between the scientific and academic communities and the Bank, and to contributing towards the improvement of theoretical and applied research in Portugal. Click here to apply.

## Correspondence to the editor

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This newsletter, as well as other online information about Economic Research at Banco de Portugal is available here.

## Spillovers autumn2013

- October 21<sup>st</sup>, 2013 Lorenzo Caliendo (Yale University) The Impact of Regional and Sectoral Productivity Changes on the U.S.
- October 22<sup>nd</sup>, 2013 Joseph Kaboski (University of Notre Dame) The Macroeconomics of Microfinance
- October 29th, 2013 José-Victor Ríos-Rull (University of Minnesota)
- December 13th, 2013 Virgiliu Midrigan (New York University)
- February 17th, 2014 Francisco Buera (University of California, Los Angeles)
- February 24th, 2014 Ana Babus (Imperial College London)
- April 21st, 2014 Steven Ongena (Tilburg University)
- May 26<sup>th</sup>, 2014 Gianmarco Ottaviano (London School of Economics)
- May 28th, 2014 Pierre-Olivier Gourinchas (University of California, Berkeley)