BANQUE DE FRANCE
EUROSYSTÈME

Research Newsletter

EDITED BY THE DIRECTORATE GENERAL ECONOMICS AND INTERNATIONAL RELATIONS OF THE BANQUE DE FRANCE

First half of 2015

Seminars first half of 2015

DGEI Seminar, Marc-Andréas Muendler (UC San Diego and Université Dauphine), "The dynamics of comparative advantage", January 9

Prix BDF/TSE – "Prize in monetary economics and finance", January 19

DGEI Seminar, Sophie Guilloux-Nefussi (Banque de France), "Globalization, market structure and the flattering of the Phillips curve", January 20

DGEI Seminar, Béla Szorfi (BCE); "The impact of the crisis on euro area labour markets", January 23

DGEI Seminar, Jorge Ponce Moreno (Banco Central del Uruguay), "Financial stability committees: An institutional response to new challenges", January 23

DGEI Seminar, Seppo Orjasniemi (Bank of Finland), "Presentation of the DSGE forecasting platform used at Bank of Finland", January 26

DGEI Seminar, Juha Kilponen (Bank of Finland), "Kiss me deadly: From Finnish Great Depression to Great Recession", January 26

ACPR Seminar, Dominique Dron (*ingénieure générale des Mines, membre du Conseil général de l'Économie*), "*Quels apports des régulations écosystémiques à l'analyse des systèmes financiers ?*", January 26

Lecture Masaaki Shirakawa (Former Governor Bank of Japan), "Deflation experience in Japan and relevance for the Eurozone", January 29

DGEI Seminar, Walter Steingress (Banque de France), "Entry barriers to international trade: Product versus firm fixed costs", February 4

DGEI Seminar, Édouard Challe (Banque de France, CNRS, CREST), "Precautionary saving and aggregate demand", February 18

BDF/TSE, Braz Camargo (Sao Paulo School of Economics – FGV), "Price discovery and interventions in frozen markets", February 19

DGEI Seminar, Pierrick Clerc (Banque de France), "Credible wage bargaining and the joint dynamics of unemployment and inflation", February 20

DGEI Seminar, Jérôme Dugast (Banque de France), "Are liquidity measures relevant to measure investors' welfare?", February 25

DGEI Seminar, Vincent Vicard (Banque de France), "Demand learning and exporter dynamics", March 4

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The Banque de France and patronage

Henri Pagès,
Scientific Adviser

As a recent external evaluation report[1] about European bodies points out, "research is becoming increasingly important as the foundation for the influence of individuals in the group". On the occasion of the Foundation's 20th anniversary, it seems fitting to look at how the Banque de France, through its research and sponsorship policy, has managed to strengthen its position by encouraging "cross-fertilisation" between the Bank's teams and the academic community.

To facilitate the trade-off between institutional priorities and scientific quality, or between internal and external research, the Bank has had recourse to two forms of sponsorship. Through pure sponsorship it has promoted research without conducting it itself and has selflessly encouraged the publication of independently conducted research on relevant topics. Through directed sponsorship it has promoted cooperation between higher education, research and its own teams to harvest the fruit of enhanced synergy. These two levers of sponsorship have fallen within the remits respectively of the Banque de France Foundation for research in monetary, financial and banking economics, created in 1995, and of partnerships set up with several academic centres of excellence from 2008.

The difference is less clear-cut than it might seem. Conferences, seminars and invitations are transversal to both the Foundation and the partnerships. The former has improved its interactivity by periodically organising new meetings and conferences and continues to play a catalyst role in terms of cooperation through its exchange programme with the research community (Visiting Scholars Program). For their part, the partners have undertaken activities to support projects. For example, the Toulouse School of Economics has instituted two prizes for senior and junior researchers in monetary and financial economics. The project tenders, the thesis prize and the young researcher in economics prize on the part of the Foundation, and the series of thematic seminars, tutoring, and Banque de France-TSE prizes on the part of the partnerships, stand out more as "branded products".

These two approaches have different implications in terms of prestige, governance and risk. The Foundation has the advantage of being particularly visible. Organising a patronage event through the Foundation, such as the Joint French Macro Workshop, which is organised for the benefit of young macroeconomists in collaboration with several top French institutions in this field, will immediately confer a level of visibility and openness to the action that is less immediate under the aegis of the partnerships alone. However, the principle of competition between the best projects, which is at the root of the Foundation's international reputation, also limits its capacity to support French research in the manner of the NSF in the United States and the ESRC in the United Kingdom, which operate within a national framework.

Less visibility is also sometimes an advantage in terms of cooperation. Brainstorming meetings on research topics, aimed at pre-empting tomorrow's issues, and bringing together Bank directorates and academic partners to look at foreseeable themes of international meetings up to one year in advance, are useful for guiding research programmes, to the extent that more insight is expected from a network than a single person.

The governance of the Foundation works differently to that of the partnerships: strict but largely open to civil society and public authorities in the case of the Foundation, flexible but focused on their specificities in the case of the partnerships. The management of sponsorship programmes at the Bank reflects this dichotomy, with three annual meetings of the Foundation Board and a review of partnerships by the Executive Committee.

The actions of the Foundation are secure in the long-term, as its capital is protected, but are currently affected by adverse market conditions. While the actions of the partners are regularly submitted for review in the light of the goals set by the governing bodies, the latter have recently strongly reaffirmed their commitment to a policy of increased cooperation with academics. The Foundation is itself a symbol and a guarantor of that commitment. A broad project has formed around the Foundation and the periodically renewed partnerships, which is "essential and consistent with the mission of the Banque de France", as the Governor concluded in his speech at the Foundation's 20th anniversary celebration.

1 Bolton (P.), Cecchetti (S.) and Reichlin (L.), https://www.banque-france.fr/en/economics-statistics/research/external-evaluation-of-research-at-the-banque-de-france.html, October 2014, cf. "The Banque de France and research and patronage", *Bulletin de la Banque de France*, Issue 202, Nov-Dec. 2015, pp. 53-58.

BDF/TSE, Matthias Keyrig (UT – Austin), "The cyclical nature of the productivity distribution", March 10

BDF/TSE, Kenza Benhima (HEC Lausanne), "Corporate cash and employment", March 17

DGEI Seminar, Rémy Lecat (Banque de France), "GDP per capita in advanced countries over the 20th century", March 18

BDF/TSE, Matthieu Chavaz (Bank of England), "Diversification and liquidity", March 19

DGEI Seminar, Benoît Mojon (Banque de France), "Forward guidance and heterogeneous beliefs", March 20

BDF/TSE, Philippe Mueller (LSE), "International illiquidity", March 24

SEMSI – France-Japan Foundation, Kozo Ueda (Waseda University), "Policy regime change against chronic deflation? Policy option under a long-term liquidity trap", March 26

DGEI Seminar, Marco Lombardi (BIS), "Oil and debt", March 27

BDF/TSE, Marco Bonomo (Getulio Vargas), "Persistent monetary non-neutrality in an estimated model with menu costs and partially costly information", March 31

DGEI Seminar, Ralph Koijen (London Business School), "An equilibrium model of institutional demand and asset prices", March 31

BDF/TSE, Alla Gil (Gil & Associates), "Stress testing and scenario analysis: A dynamic approach part of the planning process", March 31

DGEI Seminar, François Koulischer (Banque de France), "Asymmetric shocks in a currency union: The role of central bank collateral policy", April 1st

BDF/TSE, Jean-Charles Rochet (University of Zurich and SFI), "Bank capital and aggregate credit", April 2

DGEI Seminar, Enisse Kharroubi (BIS), "Financial booms, growth and the sectorial allocation of labor", April 3

ACPR Seminar, Christophe Pérignon (HEC Paris), "The political economy of financial innovation: Evidence from local governments", April 7

BDF/TSE, Olivier Loisel (ENSAE), "The implementation of stabilization policy", April 7

BDF/TSE, Vincent Sterck (UCL), "The dark corners of the labour market", April 14

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Monetary policy without interest rates: Evidence from France's golden age (1948 to 1973). Using a narrative approach

Following the global crisis, recent central bank interventions have raised new interest in quantitative tools as instruments of monetary or macroprudential policy. However, despite their widespread use in history, these tools remain largely absent from the standard literature on the effects of monetary policy. Interest rates are usually viewed as the primary instrument of monetary policy and they are supposed to reflect the policy stance. Thus, it is difficult to compare the effectiveness of quantitative controls with the standard results concerning conventional monetary policy.

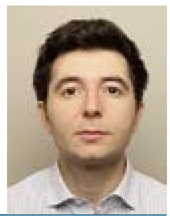
According to Eric Monnet, the French post-war monetary policy from 1948 to 1973 was a paradigmatic example of the use of temporary quantitative credit controls that nearly eliminated the role of interest rates. He provides a detailed analysis of the way credit controls and other quantitative tools were used in France, and proposes a new method to assess their macroeconomic effects.

Firstly, he demonstrates that an effective way to assess the stance of monetary policy when interest rates are not the primary instrument is to follow a narrative approach that examines archival evidence directly concerning policymakers' intentions and decisions. There was no reliable quantitative indicator of the French monetary policy stance from 1948 to 1973, as the central bank had to constantly change its instruments to adapt to both financial innovation and the circumvention of previous sets of instruments by the banks.

Secondly, Eric Monnet combines the narrative approach with a vector autoregressive model (VAR) to show that quantitative controls on credit and money had a strong influence on nominal and real variables, but not on interest rates. There was a complete separation between quantities (money and credit) and prices (interest rates). In USA, the narrative approach and the conventional measure provided similar results, whereas, in France, interest rates did not impact inflation and production but quantitative controls did.

Monnet (E.) (2014), "Monetary policy without interest rates: Evidence from France's golden age (1948 to 1973). Using a narrative approach",* American Economic Journal: Macroeconomics, *vol. 6(4), pp. 137-169, October.

Eric Monnet has been an economist at the DCPM-DIACONJ since 2013 and associate lecturer at the École d'économie de Paris and EHESS. His research work focuses on the history of monetary policies, the international monetary system and financial markets in Europe in the 20th century. He is the author of a thesis on French monetary policy from 1945 to 1973, which received the thesis prize from the Economic History Association (2013) and the International Economic History Association (2015).



Forecasting the business cycle

In this article, Laurent Ferrara and Dick van Dijk (Erasmus University) propose an introduction to the special issue of the International Journal of Forecasting*, on forecasting the business cycle. In the wake of the banking and financial crisis, almost all industrialised countries experienced a severe economic recession in 2008 and 2009. This recession is often referred to as the "Great Recession" in economic literature. For example, economies like Japan and the United Kingdom suffered annualised contractions in GDP of 5%-10% for periods up to seven consecutive quarters. Only a few countries were spared and most of them were emerging economies such as China.*

Laurent Ferrara and Dick van Dijk highlight a number of characteristics of the "Great Recession", including: (i) the high degree of synchronisation across the main industrialised countries during the recession, (ii) the exceptional magnitude of the cycles, not seen since the Great Depression and quite unexpected after many years of "Great Moderation", (iii) the specific accelerating role of financial market variables in the business cycle, which are very difficult to incorporate into macroeconomic models, and (iv) evidence of non-linear relationships between key macroeconomic variables.

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DGEI Seminar, Guillaume Horny (Banque de France), "Measuring financial fragmentation in the Euro area corporate bond market", April 15

DGEI Seminar, Sabien Dobbelaere (VU University, Amsterdam), "Micro-evidence on rent sharing from different perspectives", April 16

BDF/TSE, Nicolas Vincent (HEC Montréal), "On the importance of sales for aggregate price flexibility", April 20

Foundation Seminar, Michael Bordo (Rutgers University), "Fiscal and financial crises", April 28

BDF/TSE, Elisa Faraglia (Cambridge), "Government debt management: The long and the short of it", April 28

DGEI Seminar, Hubert Kempf (ENS-Cachan and PSE), "Competition among regulators and the efficiency of banking regulation", May 4

BDF/TSE, Rémy Praz (Copenhagen Business School), "Equilibrium asset pricing with both liquid and illiquid markets", May 5

ACPR Seminar, Carole Bernard (ESC Grenoble), "Risk management of policyholder behavior in equity-linked life insurance", May 5

DGEI Seminar, Alain Monfort (CREST and Banque de France), "Revisiting identification and estimation in structural VARMA models", May 11

BDF/TSE, Anh Le (UNC Chapel Hill), "Interest rate volatility and no-arbitrage affine term structure models", May 12

BDF/TSE, Guillaume Plantin (Sciences Po), "Marking to market versus taking to market", May 20

BDF/TSE, Charles Henri Weymüller (DG Trésor), "Banks as safety multipliers", May 26

BDF/FERDI Seminar, Lisa Chauvet (IRD, Université Paris-Dauphine, Banque de France, Ferdi), "Financial inclusion and firms performance" and Florian Léon (Université d'Auvergne, Ferdi), "Does the expansion of regional cross-border banks affect competition in Africa ? Indirect evidence", May 26

BDF/TSE, Loriano Mancini (Swiss Finance Institute and EPFL), "The Euro interbank repo market", May 26

DGEI Seminar, Alessandra Pizzo (Université de Paris 1 – CES and Banque de France), "Accounting for labor gap", May 27

BDF/TSE, Gian Luca Clementi (NYU and NBER), "Entry, exit, firm dynamics, and aggregate fluctuation", May 27

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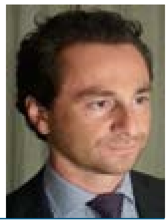
The articles in this special issue present and discuss new methods for forecasting the business cycle that take account of these stylised facts. More specifically, the predictability of business cycles is analysed from three different perspectives. First, a strand of literature is devoted to anticipating business cycle turning points. To do so, it is essential to first identify a chronology of turning points, in the same way as the NBER does for the US economy. Researchers can then put forward econometric methods, often based on non-linear regime-switching models, to determine ex post then anticipate in real time cycle peaks and troughs. Second, research can focus on the conditional expectation of the main macroeconomic aggregates over a short-term horizon. In this context, one of the current challenges for research is how to use in effective manner the information contained in a great number of variables, often with different frequencies. Lastly, several articles focus on the law of distribution around the predictor, which makes it possible to assess the risks around the central projection.

Ferrara (L.) and van Dijk (D.) (2014), "Forecasting the business cycle",* International Journal of Forecasting*, 30, 3, pp. 517-519.

Laurent Ferrara is head of the International Macroeconomics Division. His research focuses on the international economy, macroeconomic forecasting, non-linear modelling and business cycle analysis. He has published articles in the *Journal of Macroeconomics, International Journal of Forecasting, Oxford Bulletin in Economics and Statistics, Economic Modelling and Economics Letters*. Il est également éditeur associé de l'*International Journal of Forecasting*.



On the size of the government spending multiplier in the euro area

During the Great Recession, one of the main debated issues was the evaluation of fiscal multipliers. However, there is not a single figure behind this concept, and much uncertainty surrounds its measurement. Patrick Fève and Jean-Guillaume Sahuc argue that omitting the interactions of key ingredients at the estimation stage, through cross-equation restrictions, paves the way for potentially large upward or downward biases.

The value of the fiscal multiplier depends on many factors such as the underlying model, the nature and duration of the fiscal change, the state of the economy, etc. This leaves the decision maker in trouble.

Patrick Fève and Jean-Guillaume Sahuc provide an explanation for the wide range of estimated government spending multipliers within a dynamic stochastic general equilibrium (DSGE) model of the euro area. They argue that omitting the interactions of key ingredients at the estimation stage implies potentially large biases. To illustrate this, they examine the simultaneous combination of three mechanisms: (i) Edgeworth complementarity between private consumption and government spending (according to Edgeworth, C is a complementary to G if an increase in the supply of G raises the marginal utility of C, under the assumption C constant), (ii) endogeneity of government policy and (iii) general habits in consumption.

Edgeworth complementarity (in the case of Edgeworth complementarity, the utility induced by the use of a good increases following the use of another good) and counter-cyclicality of government expenditures work in opposite directions. While the highest degree of Edgeworth complementarity leads to increase the response of both private consumption and output to a government spending shock, a countercyclical policy acts as an automatic stabilizer. If fiscal policy is wrongly assumed to be exogenous, then the true degree of Edgeworth complementarity to match the same correlation pattern of the data, could be under-estimated. Moreover, Edgeworth complementarity and habit persistence in consumption work can also react in opposite directions. A high degree of habit formation tends to reduce the crowding-out effect of public spending on private consumption whereas a moderate degree of Edgeworth complementarity is needed to replicate the characteristics of the data. If an important dimension of habit formation is wrongly omitted at the estimation stage, the degree of Edgeworth complementarity will be over-estimated to compensate the lack of habit formation, leading to an over-estimation of the multiplier.

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BDF/TSE, Xavier Vives (IESE Business School), "The beauty contest and short-term trading", June 2

DGEI Seminar, Michele Modugno (Federal Reserve Board), "The low frequency effects of macroeconomic news on Government bond yields", June 3

BDF/TSE, Guillaume Rocheteau (University of California, Irvine), "Working through the distribution: Money in the short and long run", June 9

DGEI Seminar, Christina Jude (Banque de France), "The long landing scenario: Rebalancing from overinvestment and excessive credit growth, and implications for potential growth in China", June 10

Foundation Seminar, Luc Guerrieri (Board of Governors of the Federal Reserve System), "Collateral constraints and macroeconomic asymmetries", June 11

BDF/TSE, Eric Renault (Brown University), "Affine option pricing model in discrete time", June 16

BDF/PSE chair, Tom Sargent (NYU – Prix Nobel d'économie 2011), "Fiscal discrimination in three wars", June 17

BDF/TSE, Alexandros P. Vardoulakis (Federal Reserve Board), "Secondary market liquidity and the optimal capital structure", June 18

DGEI Seminar, Oleg Itskhoki (Princeton), "International shocks and domestic prices: How large are strategic complementarities?", June 18

DGEI Seminar, Stefania Garetto (Boston University), "Multinational banks", June 19

BDF/TSE, Daniel Paravisini (LES, CEPR, BREAD), "Comparative advantage and specialization in bank lending", June 23

Seminars second half of 2015

G20 Seminar "*Méthodes d'évaluation de l'impact macroéconomique des réformes structurelles*", June 1

Banque de France – Deutsche Bundesbank Conference "*L'impact des mesures non-conventionnelles – L'hétérogénéité en zone euro*", June 1-2

"Dynare Conference", June 8-12

"MACFINROBODS First annual dissemination Conference", June 15-16

BDF/Bank of Spain Conference "*Réformes structurelles et coût de la crise*", June 18-19

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Estimates of the impact of an increase in government spending differ greatly, depending on which relevant mechanism is wrongly excluded from the empirical analysis. These findings are corroborated when we assume that the zero lower bound on the nominal interest rate binds, because the multiplier can be easily divided by two when omitting our key features. The downward and upward biases are generally not negligible, especially if the model is used to evaluate fiscal programmes in the euro area.

Fève (P.) and Sahuc (J.-G). (2015), "On the size of the government spending multiplier in the euro area", Oxford Economic Papers, 67, pp. 531-552.

Jean-Guillaume Sahuc is head of the Financial Economics Research Division. His research on quantitative macroeconomics and macroeconometrics has been published in journals such as the *American Economic Journal: Macroeconomics, The Economic Journal*, the *Journal of Money*, *Credit and Banking*, the *Journal of Macroeconomics*, and the *International Journal of Central Banking*.

Estimating gender differences in access to jobs

Women are underrepresented in highly-paid occupations, and this explains a large part of the gender wage gap. Sébastien Roux, Laurent Gobillon and Dominique Meurs propose a formal way to quantify the difference in access to each position according to gender along the job ladder and whether women have less access to highly-paid jobs than to low-paid jobs, i.e. whether they face a "glass ceiling".

In this framework, each position is characterised by a specific wage offer to applicants. Some male and female workers apply for the best-paid job. Men and women are characterised by different chances of getting this specific job. The manager of the best-paid job selects a worker among applicants accordingly. The manager of the second best-paid job hires an individual among the remaining workers, and so on. We define an access function as the probability ratio of a female and a male worker getting a job of a given rank.

This access function captures not only labour demand effects, such as gender discrimination in the hiring process for some job positions, but also labour supply effects, such as gender differences in preferences for job positions depending on time constraints.

We estimate this access function on full-time executives aged 40-45 working in French private and public firms and show that women have less access to jobs than men at all ranks in the wage distribution. We find that at the bottom of the wage distribution (5th percentile), the probability of a female worker getting a job is 9% lower than that of a male. The difference in probability is far higher at the top of the wage distribution (95th percentile) and climbs to 50%. Females thus have significantly less access to highly-paid jobs than to low-paid jobs.

We also conduct our analysis for specific industries, as they are more homogeneous labour markets. We consider more specifically banking and insurance, as they are labour intensive, with a large share of women, and they have contrasting wage policies in France. Banks use a rigid job classification inherited from the early 1980s when they belonged to the public sector. By contrast, insurance companies propose much more individualised careers. Women are found to have far better access to highly-paid jobs than men in the banking industry than in the insurance industry. Results on pooled industries, insurance and banking are qualitatively in line with the usual interpretation of the gender quantile wage gap increasing with the rank.

Roux (S.), Gobillon (L.) and Meurs (D.) (2015), "Estimating gender differences in access to jobs", Journal of Labor Economics, 33, pp. 317-363.

Sébastien Roux is an economic researcher in the Microeconomic Analysis Division. He graduated from Polytechnique and ENSAE, and holds a doctorate in economics from Université Paris-1 Sorbonne, and is an administrator at Insee. Before joining the Banque de France, he was Deputy Director at the Dares. His research work focuses on labour market analysis and applied microeconometrics. He has published articles in *Econometrica, Economic Journal, Journal of Labor Economics, Regional Science and Urban Economics* and *Annales d'économie et de Statistique*.

"*Modélisation de la structure par terme des taux d'intérêt dans un contexte de taux très bas*", June 19

8th French joint workshop on macroeconomics, Foundation Banque de France, June 22

"Workshop on recent developments in exchange rate economics", June 29

"Conference on endogenous financial networks and equilibrium dynamics: Addressing challenges of financial stability and monetary policy", July 9-10

20 years anniversary Foundation Conference, September 14

Banque de France – Association d'économie financière Conference, September 28

"Hydra workshop on dynamic macroeconomics", October 2-3

"BdF-BoE International macroeconomics workshop", October 19

"BdF-FRB-CEPR Conference on international capital flows", November 16

AMSE/BDF Conference, "Labour markets: Contributions?", December 3-4

"Economic History and Economic Policy Conference", December 14-15

Banque de France – France Stratégie Conference "French competitiveness: new challenges, new measures", December 16

"*Fixation des prix et inflation*" Conference, December 17-18

Find this events on our site.

Banque de France Working Papers

First half of 2015

562 "Towards recoupling? Assessing the global impact of a Chinese hard landing through trade and commodity price channels", Gauvin (L.) and Rebillard (C.)

561 "Financial integration and growth correlation in Sub-Saharan Africa?", Acalin (J.), Cabrillac (B.), Diop (S.), Dufrénot (G.), and Jacolin (L.)

560 "From micro to macro: Demand, supply, and heterogeneity in the trade elasticity", Bas (M.), Mayer (T.) and Thoenig (M.)

559 "Growth effect of FDI in developing economies: The role of institutional quality" Jude (C.) and Levieuge (G.)

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The role of labour market institutions in shaping global supply chains

International trade is increasingly dominated by global supply chains, through which the various production stages – required to produce a good – are located throughout the world. Trade in intermediate inputs has risen steadily in recent decades to become a key feature of the current international trade structure. Multinational firms play a significant role in this process of globalisation of production, accounting for a third of total world trade. What determines the extent of multinational activity in the global economy? How do multinational firms adjust their sourcing strategies to the particularities of the national institutions of the countries they source from?

According to Juan Carluccio and Maria Bas, the labour market institutions are a key variable. They ask how the international organisation of firms is affected by bargaining in the labour market. With detailed data on the import decisions of French multinationals, they show that firms are more likely to outsource the production of intermediate inputs to external suppliers when importing from countries with high worker bargaining power. This effect is stronger for firms operating in capital-intensive industries.

These empirical results are consistent with a theoretical model that combines findings drawn from the literature on wage bargaining under incomplete contracts and the theory of the firm. The underlying theoretical mechanism is the following. The fragmentation of the value chain through outsourcing weakens the workers' bargaining position, because it limits the amount of revenues that are negotiated with local workers, resulting in lower wages. Since the outsourcing strategy reduces the share of surplus that is appropriated by the workers, it enhances the firm's incentives to invest. Given that investment creates relatively more value in capital-intensive industries, increases in worker bargaining power are more likely to be conducive to outsourcing in those industries.

The findings by Juan Carluccio and Maria Bas suggest that global firms choose their organisational structure strategically when sourcing intermediate inputs from markets where worker bargaining power is high. Stronger labour market frictions act as a deterrent to the entry of foreign multinationals (holding other things equal).

Bas (M.) and Carluccio (J.) (2015), "The impact of worker bargaining power on the organization of global firms",* Journal of International Economics*, 96(1), pp. 162-181.

Juan Carluccio is an economist with the Microeconomic Analysis Division. He is also a Senior Lecturer at the University of Surrey. His PhD thesis received a distinction from the Association française de sciences économiques (AFSE) in 2010. He has published at the *Journal of International Economics*, *The Review of Economics and Statistics* and *The Economic Journal*.

Do large real exchange rate appreciations matter for growth?

While exchange rate appreciations are generally perceived as having a negative effect on growth by worsening international competitiveness, Matthieu Bussière, Claude Lopez and Cédric Tille argue that this effect depends on the nature of the shock that triggered the appreciation in the first place.

Recently, the noticeable exchange rate movements triggered by diverging monetary policies across advanced economies have reignited the debate and raised concerns about the risk of "currency wars". However, the impact of exchange rate changes on growth is less straightforward than generally acknowledged as it may depend on the nature of the underlying shock. With a simple theoretical model, Matthieu Bussière, Claude Lopez and Cédric Tille illustrate how an exchange rate appreciation driven by a productivity shock, for instance, may differ from an appreciation emanating from large capital inflows (a "surge" in capital flows,

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558 "Staying at zero with affine processes: An application to term structure modelling", Monfort (A.), Pegoraro (F.), Renne (J.-P.), and Roussellet (G.)

557 "Innovation and top income inequality", Aghion (P.), Akcigit (U.), Bergeaud (A.), Blundell (R.) and Hémous (D.)

556 "The Implementation of stabilization policy", Loisel (O.)

555 "Profit shifting through transfer pricing: Evidence from French firm level trade data", Vicard (V.)

554 "Asymmetric shocks in a currency union: The role of central bank collateral policy", Koulischer (F.)

553 "Employment effects of foreign direct investment. New evidence from central and eastern European countries", Jude (C.) and Ioana Pop Silaghi (M.)

552 "Wealth effects on consumption across the wealth distribution: Empirical evidence", Arrondel (L.), Lamarche (P.) and Savignac (F.)

551 "Demand learning and firm dynamics: Evidence from exporters", Berman (N.), Rebeyrol (V.) and Vicard (V.)

550 "For a few dollars more: Reserves and growth in times of crises", Bussière (M.), Cheng (G.), Chinn (M.) and Lisack (N.)

549 "GDP per capita in advanced countries over the 20th century", Bergeaud (A.), Cette (G.) and Lecat (R.)

548 "Bank risks, monetary shocks and the credit channel in Brazil: Identification and evidence from panel data", Ramos-Tallada (J.)

547 "The stability of short-term interest rates pass-through in the euro area during the financial market and sovereign debt crises", Avouyi-Dovi (S.), Horny (G.) and Sevestre (P.)

546 "Austerity plans and tax evasion: Theory and evidence from Greece", Pappadà (F.) and Zylberberg (Y.)

545 "Cross-border interbank contagion in the European banking sector", Gabrieli (S.), Salakhova (D.) and Vuillemey (G.)

544 "Entry barriers to international trade: Product versus firm fixed costs", Steingress (W.)

543 "Variable trade costs, composition effects, and the intensive margin of trade", Berthou (A.) and Fontagné (L.)

542 "Specialization patterns in international trade", Steingress (W.)

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which could stem from a change in monetary policy abroad for instance). More specifically, the latter could be more detrimental to growth than the former. The authors illustrate these differences by their empirical results based on a dataset of 68 advanced and emerging countries spanning over 40 years and using a "propensity score matching method". These findings highlight the necessity of understanding the underlying cause of the appreciation in order to assess its impact.

Moreover, according to the authors, the above model suggests that a policy response is not necessarily warranted, and highly depends on the nature of the underlying shock. For instance, an appreciation triggered by a productivity boom leads to an efficient response, while an appreciation driven by capital inflows does not. In the latter case, firms in the traded sectors face a loss of competitiveness that is not offset by higher productivity, leading to the costly shutdown of some firms. In addition, the relation between appreciation and growth is not symmetric. Specifically, the weak growth observed during an appreciation driven by capital inflows does not imply that a depreciation is symmetrically associated with high growth. Instead, the frictions in the model imply that exchange rate movements driven by capital flows shocks are always associated with low growth as they lead to inefficient firm destruction either in the traded sector (following an appreciation) or the non-traded sector (with a depreciation). To the extent that firm destruction is quicker than firm creation, exchange rate movements may induce negative output movements in the short run. This supports policymakers' concerns about both capital flows surges and sudden stops.

Bussière (M.), Lopez (C.), Tille (C.) (2015), "Do large real exchange rate appreciations matter for growth?",* Econ Pol, *Vol. 30, Issue 81, pp. 5-45.

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539 "Globalization, market structure and the flattening of the Phillips curve", Guilloux-Nefussi (S.)

538 "The elasticity of poverty with respect to sectoral growth in Africa", Berardi (N.) and Marzo (F.)

537 "On the size of the government spending multiplier in the Euro area", Fève (P.) and Sahuc (J.-G.)

536 "Labour force participation and tax-benefit systems: A cross-country comparative perspective", Galuščák (K.) and Kátay (G.)

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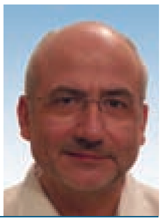
Dynare

Dynare is a software platform for solving, simulating and estimating rational expectation models, which are notably used in monetary policy analysis. It is open source, and development work has been carried out by the CEPREMAP for the past two decades and, more recently, by the Banque de France. Dynare is widely used by central banks, international financial institutions and universities.

The Dynare Summer School is an annual training course on how to use the software. Designed both for beginners and for more experienced users, it provides a basic introduction to the platform as well as covering more advanced topics. The course is mainly targeted at economists from central banks, and more generally at researchers from the academic world. The 2015 Dynare Summer School took place from June 8 to June 12, 2015 at the Banque de France. Around 40 economists took part, attending presentations on how to operate the software and on the different techniques it uses. Participants were also invited to attend dedicated workshops where they could try out practical exercises on their own laptops. The special guests at the 2015 edition was Luca Guerrieri, Assistant Director at the Federal Reserve Board. He gave a presentation on a new toolbox designed for Dynare which can solve models with constraints such as the zero lower bound (ZLB) for nominal interest rates, or indebtedness constraints. The tool should be integrated into Dynare in the near future.



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