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FOCUS

Unconventional Monetary Policies

Monetary policy in exceptional times

The last five years have been a major challenge for the theory and practice of monetary policy. The Lehman Brothers collapse, on September 15, 2008, was followed by a dramatic increase in risk premia and a generalized panic on financial markets that spread from the United States to other parts of the world. As a result the assets fell substantially and the global economy was threatened by a credit crunch. The central banks reacted to the increase in risk premia by lowering their main interest rates. However, since the beginning of the subprime crisis the transmission of central bank rates to other interest rates, which is a key channel of conventional monetary policy, has been severely impaired. Moreover, the target policy rates in some countries have approached a level close to zero: 0-0.25% in the United States, 0-0.1% in Japan, 0.5% in the United Kingdom and 0.75% in the euro-zone.

Faced with these constraints, important central banks all systematically implemented unconventional monetary policies that can be categorized into three groups:

- Expectation management strategy. Central bank commitment to keep policy rates at low levels can

affect the expectations of the future interest rates and therefore reduce the long-term interest rates.

- Changes in the composition of the central bank balance sheet by purchasing unconventional (risky) assets (credit easing).
- Expansion of monetary base by providing banks with excess reserves at the central bank (quantitative easing).

While management is expected to communicate on monetary policy intentions, credit easing and quantitative easing require important changes in central bank balance-sheet management. In normal times, central bank assets in developed countries are typically composed of short-term safe assets and short-term loans to financial institutions. Since 2007 this traditional asset structure was modified by the following operations: i) exceptional longer-term liquidity provisions, ii) collateral rules easing and iii) risky asset purchases. Furthermore, the increase in central bank unconventional assets holdings resulted in overall balance sheet increase (quantitative easing).

Transformation of the role of the central bank

By implementing unconventional monetary policies the central banks endorsed new roles that were vividly criticized by some researchers and policy-makers and strongly encouraged by others. Central banks exceeded the conventional role of the lender of last resort function as they provided almost unlimited inexpensive funds to financial institutions and practically substituted themselves for the interbank market. They also enlarged eligible collateral and directly purchased unconventional risky assets. The Fed for instance exposed its balance sheet to important amounts of mortgage-backed securities and asset-backed securities, the ECB distributed unlimited three-year loans to banks and the Bank of Japan and the Bank of England purchased commercial papers and corporate bonds.

Furthermore, the purchases of longer-term government debt, conducted by four central banks mentioned above to different extent, diminished sovereign risk held by private agents. Additional consequence of longer-term government bonds purchases is that they helped governments to increase the borrowing without having to face higher interest rates. This is especially true in the United States, the United Kingdom and Japan where the long-term interest rates remain at a very low level (respectively around 1.7%, 1,7% and 0,8%) even though the governments increased substantially their debt. The central bank role in financing governments is a controversial one, and the monetary authorities never stated it as their objective.

Unconventional balance-sheet management and new central bank roles during the crisis may have important consequences on the behavior of market participants that are yet difficult to evaluate. The unlimited liquidity provision for instance can have perverse effects on the money market. Indeed, the important functions of interbank transactions such as information aggregation, price discovery and peer monitoring are reduced if unlimited liquidity is available from the central bank. In this case central bank interventions can create greater uncertainty in the interbank market rather than enhance liquidity exchange as intended. Moreover, such unlimited funding can contribute to maintain "alive" insolvent banks which would not start lending to the companies and households even with additional liquidity. This argument was often made with respect to the Bank of Japan (2001-2006), accused of artificially maintaining "zombie" banks and in this way postponing the recovery (Szczerbowicz, 2012b).

Another important issue is linked to the credit risk that the central banks accepted on their balance sheet. As the central banks' profits are transferred in fine to the Treasury, the taxpayers are directly impacted by the monetary policy decisions. The central banks protected themselves by imposing important cuts on accepted collateral and purchased assets. As long as the economy recovers as planned, they will make profit on these assets. If however another shock hits the economy and the existing problems are not solved, the central bank could bear losses and face the dilemma whether to ask the government for rescue (recapitalization, lending of sovereign bonds) or just monetize the loss.

Finally, the critics mention the inflation threat as a consequence of unconventional measures. However, the impact of unconventional monetary policies on inflation is more complex. First, from an empirical and a theoretical point of view it is not certain that such an effect would appear. Second, if inflation is a potential

danger, it can also have a beneficiary effect in a deflationary environment.

Effectiveness of unconventional measures

There is a rapidly growing literature that empirically evaluates the effectiveness of unconventional monetary policies. Unconventional asset purchases, and long-term government bonds in particular, were found to be effective in lowering long-term interest rates in the United States (Hamilton and Wu, 2011; Szczerbowicz, 2011) and in the United Kingdom (Joyce, 2010). Szczerbowicz (2012a) evaluated the impact of all ECB unconventional monetary policies on the euro-area sovereign spreads and found that the sovereign bond purchasing programs proved to be the most effective in reducing these spreads. The strong impact in the euro-area periphery suggests that the central bank intervention in sovereign market is particularly effective when the sovereign risk is important.

The effects of exceptional liquidity provisions are more controversial. On the one hand, they relieved liquidity-constrained banks and prevented the credit crunch. This was particularly the case of the ECB three-year loans granted to banks (3y LTRO). The banks borrowed more than €1 trillion which covered their immediate funding needs and prevented them from selling assets and cutting some types of lending (Aglietta et al. 2012). On the other hand, their impact on the interbank lending is uncertain and contested by several studies (Taylors and Williams, 2009, Angelini et al., 2011).

The empirical results provide some positive evidence on the effectiveness of unconventional monetary policies on market interest rates and in particular on longer-term interest rates. However, the ultimate objective of unconventional policies was an increase in lending to companies and households and these unconventional measures were not accompanied by a rise in higher monetary aggregates. The pass-through of lower interest rates induced by unconventional policies to lending rates to companies and households would be a key element to evaluate overall effectiveness of these measures.

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ON THE RESEARCH AGENDA

How House Prices Influence Unemployment: Cross-Country Evidence

Many commentators have noted a close link between house price busts and jobless recoveries. The negative relationship between house prices and unemployment can however accommodate very different interpretations: house prices move positively and unemployment negatively with the business cycle, so whatever drives the cycle could explain their comovement. Moreover, house prices can decrease when unemployment goes up because of reduced consumption on all goods,

and on housing services in particular. However, in this paper we investigate the opposite causal effect: the effects of house price movements on unemployment.

As in the paper on current accounts "House prices drive current accounts: evidence from property tax changes", property taxes are used as an instrument for house pricing. First results point out that house prices have a causal effect on unemployment, notably through the channel of investment. We find that a decrease of 10% in house prices yields to a 2% increase in the unemployment rate, which has a very large effect on the economy (it would for example account for almost the entirety of the recent increase in unemployment in the United States). Our data is a country-year dataset spanning 34 countries and the period 1970-2010. The use of country-level data for this type of study is essential as house prices do not vary much at the country-level (except in the US, this variation is for instance used in Chaney and al. (2012)).

Part of the story behind this causation is one of allocative effects. Interestingly, rising (declining) house prices do not only lead to hiring (firing) construction workers, it also leads to more employment fluctuation in more collateral-sensitive industries. We follow here the methodology developed by Rajan and Zingales (1998). We also investigated the effects of falling aggregate demand triggered by declines in house prices leading to consumer debt overhang.

Finally, the increase in unemployment caused by house price busts requires more public revenues at a time when private capital flows out of the country. This can explain a strong correlation between private and public flows, which has been a feature of the last European crisis (in Spain and in Greece), and may call for more public scrutiny of the evolution of house prices in the management of sudden stops.

François Geerolf & [Thomas Grjebine](#)

Chaney, T., Sraer, D. & Thesmar, D., (2012), **The Collateral Channel: How Real Estate Shocks affect Corporate Investment**, *American Economic Review*.

Rajan, R. Zingales, L., (1998), **Financial dependence and Growth**, *American Economic Review*.

The BRICs

This book helps understand the major problems the BRICs (Brazil, Russia, India, China) are facing. On the domestic side, they have to increase the income and improve the living conditions of their population, and to reduce the fault lines that divide their societies. On the other side, they have to take part in the overhaul of the global economy toward sustainable growth, based on innovation and less resource-intensive modes of production and consumption. What are the effects of their emergence on the organization of industrial production in the world? What are the implications of their growth on the global energy balance and on the environment?

The book presents the history of the BRICs and their emergence at the beginning of the XXIth century. For China and India, this is a come-back to the forefront of the world after a long eclipse (Chapter I). Already, since the early- or mid- XXth century, these countries had undertaken painful efforts to modernize their economy. Capitalizing on the attainments and drawing lessons from past failures in the 1990s, they launched the great transformation of their economies (Chapter II). Thanks to their new economic strategy, they have built on their strengths and seized the opportunities offered by the globalization process. Demography has undoubtedly been a major asset, as in Brazil, India and China, the working age population boomed and, in the four countries, labor productivity increased. (Chapter III). Based on their comparative advantages in manufacturing, in services or/and in natural resources, they have carved out a leading position in international trade and their supply and demand has now a crucial influence on most global markets (Chapter IV). This successful integration into international trade would not have been possible without their openness to foreign investment (Chapter V). The four BRICs have so far confirmed the predictions concerning their potential growth but they will face many obstacles on the long way towards catching up the advanced economies (Chapter VI). They have become major

players in the global economy (in trade, finance, investment, innovation, migrations), but they have still to clarify the role they intend to play in global governance (Chapter VII).

Andrea Goldstein & Françoise Lemoine

Does Input-Liberalization Affect Firms' Choice of Technology ?

Foreign technology transfers play a key role in the economic growth of developing countries. In this research the effects of input-trade liberalization on firms' decision to upgrade technology embodied in imported capital goods are investigated. A theoretical model of endogenous technology adoption and heterogeneous firms is developed. Assuming that imported intermediate goods and high-technology are complementary and the existence of technology adoption fixed costs, the model predicts a positive effect of input tariff reductions on firms' choice of technology to source capital goods from abroad. This effect is heterogeneous across firms depending on their initial productivity level. Using firm-level data from India, we demonstrate that the probability of importing capital goods is higher for firms producing in industries that have experienced greater cuts on tariff on intermediate goods. Our findings also suggest that only those firms in the middle range of the productivity distribution have benefited from input liberalization. These empirical results are robust to alternative specifications that control for other reforms, industry, firm characteristics, alternative measures of technology.

Maria Bas & Antoine Berthou

Have the ECB Unconventional Monetary Policies Lowered Market Borrowing Costs for Banks and Governments?

This paper evaluates the impact of all ECB unconventional monetary policies implemented between 2007 and 2012 on bank and government borrowing costs via event-based regressions. The borrowing conditions for banks are represented by money market spreads and covered bond spreads while the sovereign bond spreads reflect government borrowing costs. The results show that only the most spectacular ECB unconventional monetary policies, namely sovereign bond purchases (SMP and OMT), covered bond purchases (CBPP 1 and 2) and 3-year refinancing operations (3y LTRO) diminished significantly borrowing costs for banks and government.

Money market spreads were most relieved after the 3-year loans were distributed to banks (3y LTRO) and after the ECB started buying longer-term bank debt (CBPP 1 and 2) but remained unaffected by smaller liquidity measures which suggests that credit risk was the banks' principal concern. The covered bond markets reacted the most to the long-term sovereign bond purchasing program (SMP) but also to the short-term sovereign bond purchasing program (OMT), covered bond purchases (CBPP 1 and 2) and the 3-year LTRO. Covered bonds, as a source of banks long-term refinancing, were in line with expectations reactive to measures addressed to banks (CBPP, 3y LTRO). However, the strong reaction to sovereign bond purchases (SMP and OMT) suggests that this measure had an impact on broader class of long-term assets as it diminished the risk of sovereign default.

Finally, both OMT and SMP had an important impact on the cost of government borrowing in countries directly threatened by loosing access to financial markets: the effects range from 35 basis points (Italy) to 476 basis points (Greece). As a comparison, we show that the U.S. and U.K. sovereign spreads also fell following the sovereign bond purchases announced by the Fed and the Bank of England but the magnitude of the effect was much smaller: respectively 5 and 9 basis points. The strong impact in the euro area suggests that the central bank intervention in sovereign market is particularly effective when the sovereign risk is important.

Urszula Szczerbowicz

Unconventional monetary policies in the United States (2007-2010) in the light of the Japanese experience (1999-2006)

This paper compares unconventional monetary policies implemented in the United States (2007-2010) with the first big-scale unconventional experience in Japan (1999-2006). Both central banks implemented three types of unconventional monetary policy: expectation management, monetary base expansion and purchases of risky assets. We argue however that the U.S. unconventional balance-sheet management was "asset-driven" whereas the Japanese more "liabilities-driven". While the BOJ intended to increase the excess reserves to banks so that they expand their lending, the Fed intervened directly in financial markets they wanted to support. Different balance sheets management reflect different underlying economic problems in the U.S. and Japan (bad security vs bad loan issue) and different expected results (lowering specific asset prices vs fighting deflation). Accordingly, the Fed's exit strategy is more challenging than the BOJ's exit and requires additional tools. We investigate the impact of non-standard measures on the private banks' balance sheets, and in particular on lending to other banks, companies and households. The interbank lending slowed down in both countries but in the U.S. to much bigger extent. On the contrary, the lending to companies diminished more in Japan as there was double deleveraging process in firms and financial institutions.

Furthermore, the empirical evidence for the effectiveness of unconventional monetary policies in Japan and in the U.S is discussed. It appears that in Japan "expectation management strategy" contributed to lowering long-term yield, whereas in the U.S. the sovereign bond purchases proved more effective. The different effect of non-orthodox tools in Japan and in the U.S. can be attributed to overall strategies of the central banks: the Fed purchased aggressively risky assets while the BOJ intended to provide large amounts of excess reserves to banks without taking too much risk.

Finally, risks connected to unconventional policies are analyzed. While inflation does not seem to be the immediate danger, the important credit risk on the Fed's balance sheet brings up concerns about overstepping into fiscal policy and threatens the Fed's independence. On the other hand, the reluctance of the BOJ to employ credit and quantitative easing more aggressively undermined its effectiveness in countering deleveraging pressures and deflation.

Urszula Szczerbowicz

WORKING PAPERS

Exchange Rate Volatility, Financial Constraints and Trade: Empirical Evidence from Chinese Firms

N°2012-35 December 2012

This paper studies how firm-level export performance is affected by RER volatility and investigates whether this effect depends on existing financial constraints. Our empirical analysis relies on export data for more than 100,000 Chinese exporters over the period 2000-2006. We confirm a trade-deterring effect of RER volatility. We find that firms tend to export less and fewer products to destinations with higher exchange rate volatility and that this effect is magnified for financially vulnerable firms. As expected, financial development does seem to dampen this negative impact, especially on the intensive margin of export.

Jérôme Héricourt, Sandra Poncet

Multinational Retailers and Home Country Exports

N°2012-34 December 2012

This paper questions whether the overseas expansion of a country's retailers fosters overall bilateral exports towards these host markets. To address this question, we consider an empirical trade model, where the foreign sales of multinational retailers reduce the fixed and variable trade costs of their conational firms towards the same destination markets. We test our model with data on bilateral exports on a large panel of countries and the foreign sales of world's largest one hundred retail companies over the 2001-2010 decade. We find a strong positive effect of the overseas presence of retailers of a given country on its exports to those markets. This outcome is far from being trivial, as most products sold in retailers foreign outlets are locally-produced. It testifies that the overseas presence of a country's retail companies contributes to the reduction of trade costs towards these markets for other firms of the origin country. Our result is robust to different specifications, the use of different sets of instrumental variables and econometric approaches.

Angela Cheptea, Charlotte Emlinger, Karine Latouche

Food Prices and Inflation Targeting in Emerging Economies

N°2012-33 November 2012

The two episodes of food price surges in 2007 and 2011 have raised the question of how monetary authorities should react to such external relative price shocks. These inflation shocks have been particularly challenging for developing and emerging economies' central banks who have adopted inflation targeting strategies during the last decade. We develop a new-Keynesian small open-economy model that distinguishes three price indexes: an overall consumer prices index, the exact index of core inflation based on sticky prices, and a proxy for the core inflation index based on non-food prices. We show that nonfood inflation is a good proxy for core inflation in high-income countries, but not for middle-income and low-income countries. Although, in these countries we find that associating non-food inflation and core inflation may be promoting badly-designed policies, and consequently central banks should target headline inflation rather than non-food inflation. This result holds because non-tradable food goods represent a significant share in total consumption. Indeed, the poorer the country, the higher the share of purely domestic food goods in consumption and the more detrimental lack of attention to the evolution in food prices.

Marc Pourroy, Benjamin Carton, Dramane Coulibaly

Fiscal Consolidations and Banking Stability

N°2012-32 November 2012

We empirically investigate the effects of fiscal policy on bank balance sheets, focusing on episodes of fiscal consolidation. To this aim, we employ a very rich data set of individual banks' balance sheets, combined with a newly compiled data set on fiscal consolidations. We find that standard capital adequacy ratios such as the Tier-1 ratio tend to improve following episodes of fiscal consolidation. Our results suggest that this improvement results from a portfolio re-balancing from private to public debt securities which reduces the risk-weighted value of assets. In fact, if fiscal adjustment efforts are perceived as structural policy changes that improve the sustainability of public finances and, therefore, reduces credit risk, the banks' demand for government securities increases relative to other assets.

Jacopo Cimadomo, Sebastian Hauptmeier, Tom Zimmermann

The Contribution of the Yen Appreciation since 2007 to the Japanese Economic Debacle

N°2012-31 November 2012

The Japanese yen in 2012 remains 25 percent above its value in 2007. Exports, industrial production, and stock prices crashed after 2007 and have yet to regain their pre-crash values. This paper investigates the contribution of the yen appreciation to this economic disaster. Evidence from Johansen maximum likelihood and dynamic ordinary least squares (DOLS) estimation indicates that a 25 percent appreciation reduces long run exports by 8 – 18 percent. Panel DOLS evidence reveals that the appreciation especially depressed exports in the automobile sector. Regression evidence implies that the yen appreciation caused yen export prices to fall 29 percent

in the automobile sector and 22 percent in the electrical and electronics sector. Finally, evidence from estimating exchange rate exposures indicates that the yen appreciation has reduced profitability significantly in the automobile and electronics sectors. Japanese firms could mitigate some of these harmful effects by focusing on innovating rather than competing based on price in commoditized industries.

Willem Thorbecke

Are the Benefits of Export Support Durable? Evidence from Tunisia

N°2012-30 November 2012

This paper evaluates the effects of the FAMEX export promotion program in Tunisia on the performance of beneficiary firms. While much of the literature assesses only the short term impact of such programs, we consider also the longer term impact. Propensity-score matching difference-in-difference and weighted least squares estimates suggest that beneficiaries initially see faster export growth and greater diversification across destination markets and products. However, three years after the intervention, neither the growth rates nor the export levels of beneficiaries are significantly different from those of non-beneficiary firms. Exports of beneficiaries remain more diversified, but the diversification does not translate into lower volatility of exports. There is also no evidence that the program produced spillover benefits for non-beneficiary firms. Taken together, these results suggest that export promotion programs may in some cases induce firms to diversify without creating other durable benefits.

Olivier Cadot, Ana M. Fernandes, [Julien Gourdon](#), Aaditya Mattoo

Les dessous de la dette publique japonaise

N°2012-29 octobre 2012

[Evelyne Dourille-Feer](#)

Invoicing Currency, Firm Size, and Hedging

N°2012-28 October 2012

We use the results of a survey conducted on a sample of 3,013 exporting firms located in 5 EMU countries to explore the link between the invoicing currency of exports, firm size, and hedging. About 90% of firms in the sample invoice exports in their (producer) currency. Large firms are more likely to use another currency. The aggregate use of the euro is thus 15 percentage points lower when firms are weighted by their size than for the average firm. This heterogeneity is robust to controlling for determinants of the invoicing choice stressed by the literature. We however show that large firms and firms pricing in another currency as the euro are also more likely to hedge against exchange rate risk. An IV estimation shows the causal impact of access to hedging on the choice of the invoicing currency. We find (large) firms having access to hedging being more likely to invoice in the importer's currency.

Julien Martin, Isabelle Méjean

Product relatedness and firm exports in China

N°2012-27 October 2012

We propose the first evaluation using micro-level data of the expected growth gains from the consistency of activities with local comparative advantage. Using firm level data from Chinese customs over 2000-2006, we investigate the relationship between the export performance of firms and how their products relate to local comparative advantage. Our key indicator measures the density of the links between a product and the local product space. It hence combines information on the intrinsic relatedness of a good to that on the local pattern of specialization. Our results indicate that exports grow faster for goods that have denser links with those currently produced in the firm's locality. The density of links between products thus seems to yield export-enhancing spillovers. We however also show that this positive effect of product relatedness on export performance is mainly limited to ordinary trade activities and domestic firms. It is also stronger for more productive firms, suggesting that spillover diffusion may be hindered by insufficient absorptive capacity.

Export upgrading and growth: the prerequisite of domestic embeddedness

N°2012-26 October 2012

Our work contributes to the literature relating output structure and economic development by showing that growth gains from upgrading are not unconditional. Relying on data from a panel of Chinese cities, we show that the level of capabilities available for domestic firms operating in ordinary trade is an important driver of economic growth. However, no direct gains emanate from the complexity of goods produced by either processing-trade activities or foreign firms. This suggests that the sources of product upgrading matter, and that domestic embeddedness is the key for capacity building and technology adoption to be growth enhancing.

Sandra Poncet, Felipe Starosta de Waldemar

Time to ship during financial crises

N°2012-25 October 2012

We show that the negative impact of financial crises on trade is magnified for destinations with longer time-to-ship. A simple model where exporters react to an increase in the probability of default of importers by increasing their export price and decreasing their export volumes to destinations in crisis is consistent with this empirical finding. For longer shipping time, those effects are indeed magnified as the probability of default increases as time passes. Some exporters also decide to stop exporting to the crisis destination, the more so the longer time-to-ship. Using aggregate data from 1950 to 2009, we find that this magnification effect is robust to alternative specifications, samples and inclusion of additional controls, including distance. The firm level predictions are also broadly consistent with French exporter data from 1995 to 2005.

Nicolas Berman, José de Sousa, Philippe Martin, Thierry Mayer

Foreign ownership wage premium: Does financial health matter?

N°2012-24 October 2012

Microeconomic studies have shown that foreign-owned firms pay a wage premium in developing countries. This paper investigates one of the possible channels that explain why foreign firms pay higher wages than their domestic counterparts in developing economies. Under imperfect financial markets, foreign affiliates have a greater access to funds to finance high-technology investments and to compensate their workers. The empirical analysis relies on firm-level data from Romania during the 1998-2006 period. The identification strategy exploits the financial sector reform in Romania during this period as a proxy of an exogenous shock of improvement of financial resources. Changes in the IMF financial reform index across manufacturing industries are related to the ownership status of the firm to investigate how the differential access to finance of foreign firms shapes wages. The findings suggest that a one-standarddeviation increase in the financial reform index increases firms' wages by 7 percent for domestic firms and 11.2 percent for foreign affiliates. These results are mainly driven by foreign firms from developed countries that might benefit from connections with foreign-owned banks. These findings are stable and robust to different sensitivity tests related to the financial reform indicator, other reforms and industry trends.

Maria Bas

Tax Reform and Coordination in a Currency Union

N°2012-23 October 2012

We propose a two-country DSGE model to analyze short-term and long-term impact of a modification of consumption and labor tax rate in one country in a currency union. The model embodies the fact that firms differ in their pricing behavior after a VAT tax increase. Due to the common monetary policy, national tax policies have large spill-overs on the rest of the currency union. Furthermore, a fiscal devaluation is different from a nominal devaluation due to the common monetary policy.

Benjamin Carton

The Unequal Effects of Financial Development on Firms' Growth in India

N°2012-22 October 2012

This paper investigates the microeconomic effects of financial development on economic growth. The increased availability of credit is usually expected to improve firms' growth due to the elimination of credit constraints. We investigate this question using a survey of Indian firms in the manufacturing industry during the period 1997-2006, in a context of rapid economic growth and underlying structural changes. We examine how changes in the level credit over GDP in Indian States affected firms' value added and capital used for production. The baseline estimations show that financial development has boosted within-firm growth in India. Our findings also suggest that the impact of financial development on firms' growth is heterogeneous across firms and industries. Credit expansion has a greater effect on firms that are initially larger, more productive or profitable. The effect of financial development is less heterogeneous in sectors relying on external finance, where both medium-size and large firms have expanded more rapidly than small firms. These results are robust to various specifications that allow to control for other reforms taking place simultaneously, or for potential reverse causality.

Maria Bas, Antoine Berthou

Pegging emerging currencies in the face of dollar swings

N°2012-21 October 2012

The aim of this paper is to study ruptures of exchange-rate pegs by focusing on the fluctuations of the anchor currency. We test for the hypothesis that currencies linked to the USD are more likely to loosen their peg when the USD is appreciating, while sticking to it otherwise. To this end, we estimate smooth-transition regression models for a sample of 28 emerging currencies over the 1994-2011 period. Our findings show that while the real effective exchange rates of most of these countries tend to co-move with that of the USD in times of depreciation, this relationship is frequently reversed when the US currency appreciates over a certain threshold. Such nonlinear effects are especially at stake in Asia where growth is export-oriented.

Virginie Coudert, Cécile Couharde, Valérie Mignon

On the links between stock and commodity markets' volatility

N°2012-20 October 2012

This paper investigates the links between price returns for 25 commodities and stocks over the period from January 2001 to November 2011, by paying a particular attention to energy raw materials. Relying on the dynamic conditional correlation (DCC) GARCH methodology, we show that the correlations between commodity and stock markets evolve through time and are highly volatile, particularly since the 2007-2008 financial crisis. The latter has played a key role, emphasizing the links between commodity and stock markets, and underlining the financialization of commodity markets. At the idiosyncratic level, a speculation phenomenon is highlighted for oil, coffee and cocoa, while the safe-haven role of gold is evidenced.

Anna Creti, Marc Joëts, Valérie Mignon

European Export Performance

N°2012-19 October 2012

Competitiveness has come to the forefront of the policy debate within the European Union, focusing on price competitiveness and intra-EU imbalances. But how to measure competitiveness properly, beyond price or cost competitiveness, remains an open methodological issue; and how can we explain the resilience of producers located in the EU to the competition of emerging economies? We analyze the redistribution of world market shares at the level of the product variety, as countries no longer specialize in sectors or even products, but in varieties of the same product, sold at different prices. We decompose changes in market shares into structural effects (geographical and sectoral) and a pure performance effect. Our method is based on an econometric shift-share decomposition and we regard the EU-27 as an integrated economy, excluding intra-EU trade. Revisiting the competitiveness issue in such a perspective sheds new light on the ongoing debate. From 1995 to 2009 the EU-27 withstood the competition from emerging countries better than the US and Japan. The EU market shares in the upper price range

of the market proved quite resilient, by combining good performance and favorable structure effects, unlike the US and Japan. Finally, while most developed countries lose market shares in high-technology products to developing countries, the EU is slightly gaining, benefiting of a favorable structure effect.

Angela Cheptea, Lionel Fontagné, Soledad Zignago

The Few Leading the Many: Foreign Affiliates and Business Cycle Comovement

N°2012-18 August 2012

This paper uses micro-data on balance sheets, trade, and the nationality of ownership of firms in France to investigate the effect of foreign multinationals on business cycle comovement. We first show that foreign affiliates, which represent a tiny fraction of all firms, are responsible for a high share of employment, value added, and trade both at the national and at the regional levels. We also show that the distribution of foreign affiliates across regions differs with the nationality of the parent. We then show that foreign affiliates increase the comovement of activities between their region of location and their country of ownership. We find that intra-firm trade in intermediate inputs is a significant channel of influence of business cycle comovement. These findings suggest that a non-negligible part of business cycle comovement is driven by a few multinational companies, and that the international transmission of shocks is partly due to linkages between affiliates and their foreign parents.

Jörn Kleinert, Julien Martin, Farid Toubal

Native language, spoken language, translation and trade

N°2012-17 July 2012

We construct new series for common native language and common spoken language for 195 countries, which we use together with series for common official language and linguistic proximity in order to draw inferences about (1) the aggregate impact of all linguistic factors on bilateral trade, (2) whether the linguistic influences come from ethnicity and trust or ease of communication, and (3) in so far they come from ease of communication, to what extent translation and interpreters play a role. The results show that the impact of linguistic factors, all together, is at least twice as great as the usual dummy variable for common language, resting on official language, would say. In addition, ease of communication is far more important than ethnicity and trust. Further, so far as ease of communication is at work, translation and interpreters are extremely important. Finally, ethnicity and trust come into play largely because of immigrants and their influence is otherwise difficult to detect.

Jacques Melitz, Farid Toubal

Assessing the price-raising effect of non-tariff measures in Africa

N°2012-16 August 2012

In spite of widespread tariff reductions, intra-African borders remain thick. Regional trade is inhibited by inadequate transportation infrastructure, but also by various government-imposed measures. This paper combines price data from the World Bank's International Comparison Project (ICP) with the new TRAINS database on non-tariff measures (NTMs) to estimate their effect on consumer prices for selected consumption products. Results based on panel regressions on 1260 country-product pairs suggest that, after controlling for tariffs, systematic cross-country cost-of-living differences, and product-specific unobservables, SPS measures contribute to raise the price of African foodstuffs by 14%. At the product level, rice and other cereals, some types of meat (e.g. poultry), and edible oils tend to fetch high AVEs. Combining our estimates with data on household expenditure patterns from Kenya's household survey, we show that the effect is regressive, raising the cost of living by 9% for poor households.

Olivier Cadot, Julien Gourdon

International Migration and Trade Agreements: the new role of PTAs

N°2012-15 July 2012

This paper investigates empirically the role of Preferential Trade Agreements (PTAs) as determinants of migration inflows for 29 OECD countries in the period 1998-2008. By increasing

information about signatory countries, PTAs are expected to drive migration flows towards member countries. Building on the empirical literature on the determinants of migration, I estimate a modified gravity model on migration flows providing evidence of a strong positive effect of PTAs on bilateral migration flows. I also consider the content of PTAs as a further determinant of migration, finding that visa-and-asylum and labour market related provisions, when included in PTAs, stimulate bilateral migration flows. Finally, by comparing the average effects of PTAs on migration flows and on trade, I show that PTAs stimulate bilateral migration flows more than trade in final goods. PTAs might be used by government to increase inflows of immigrant workers in the case of labour shortages or population ageing.

Gianluca Orefice

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RECENT PUBLICATIONS

LA LETTRE DU CEPII, MONTHLY

Natural resources: a key challenge in regional integration of the Middle East and North Africa region

N° 325, September 2012

Greater trade integration within Middle East and North Africa region is expected to happen through the completion of the Pan-Arab Free Trade Agreement. However; recent studies suggest that when resource rich and resource poor countries give preferences to each other; as in PAFTA; the resource rich country is very likely to suffer from trade diversion. Our recent empirical research states that it has happened in PAFTA. This could explain why resource rich countries may be reluctant to deepen further this type of agreement.

Céline Carrère, Julien Gourdon, Marcelo Olarreaga

Internal VS External Devaluation

N° 324, August 2012

The current crisis revealed the threat posed by current account imbalances on the very existence of the euro area. In the absence of a federal response, national rebalancing efforts will be needed. Two adjustment strategies seem at hand: external or internal devaluation. The Latvian and Irish experiences show that internal devaluation consists in a slow process allowing only limited adjustment to the price of persistent social costs. Argentina and Iceland, who let their currency depreciate, have undergone a radical therapy: immediate adjustment and relatively quick recovery. If more effective, external devaluation does not seem available to euro area countries as exiting the monetary union would entail dramatic costs. Internal devaluation processes must be backed by a cooperative European strategy.

French Version

Sophie Piton, Yves-Emmanuel Bara

La protection commerciale dans le monde

N° 323, July 2012

Bien que le cycle de négociations multilatérales de l'Organisation Mondiale du Commerce (OMC) ouvert à Doha il y a dix ans n'aboutisse toujours pas, les pays ne restent pas inactifs dans le domaine des politiques commerciales. Pour rendre compte de ces évolutions, le CEPII et le Centre du Commerce International (CCI, Genève) proposent, depuis 2001, une base de données harmonisée où les différents outils de protection tarifaire sont convertis en un unique équivalent ad valorem (i.e. exprimé en pourcentage de la valeur). Cette Lettre présente les résultats de la dernière version de cette base de données (MAcMap-HS6). Celle-ci fournit les protections tarifaires

appliquées par 170 pays importateurs à 220 pays exportateurs, pour plus de 5 000 produits en 2007, ce qui permet d'établir un panorama récent de la protection commerciale dans le monde. Il ressort que la libéralisation commerciale se poursuit au niveau mondial. L'agriculture, qui ne pèse toutefois qu'environ 10% du commerce mondial, reste très protégée (avec un droit de douane moyen au niveau mondial de 15,9%), loin devant le textile (9,2%) et le reste de l'industrie manufacturière (3,4%). Notons enfin que l'Europe est le continent le plus ouvert aux importations mondiales, notamment vis-à-vis des pays les plus pauvres, mais bénéficie en contrepartie d'un accès privilégié à leur marché.

Houssein Guimbard

Crise de la zone euro : quelles conséquences pour les économies africaines ?

N° 322, June 2012

La zone euro joue un rôle clef dans l'intégration du continent africain à l'économie mondiale. Bien que les relations économiques avec les nouveaux émergents se développent rapidement, beaucoup de pays africains ont conservé des liens étroits avec les vieilles puissances européennes qui absorbent une part significative de leurs exportations de matières premières et leur fournissent des investissements directs étrangers et de l'aide publique au développement. C'est aussi de ces pays que sont envoyés la majorité des fonds issus des migrations à destination de l'Afrique. Nous examinons dans quelle mesure la crise de la zone euro est susceptible d'affecter les économies africaines. Les pays d'Afrique du Nord, fortement dépendants des importations de la zone euro sont parmi les plus exposés. C'est le cas aussi des petits pays insulaires qui, de surcroît, devraient pâtir d'un fléchissement du tourisme. Les pays d'Afrique sub-saharienne risquent, eux, d'être victimes d'une baisse de l'aide publique au développement. La crise met ainsi en lumière la fragilité, pour les pays d'Afrique, du partenariat européen et devrait les inciter à renforcer encore leurs liens avec les pays émergents et à développer les relations économiques intra-régionales.

Maëlan Le Goff

La BCE au chevet de la liquidité bancaire

N° 321, May 2012

Les tensions sur le marché de la dette souveraine, le processus de nettoyage du bilan des banques et les signes de récession apparus fin 2011 ont obligé la Banque centrale européenne à mettre en œuvre une série de mesures non-conventionnelles d'ampleur de plus en plus importante. Ces mesures ont permis une accalmie provisoire sur les marchés. Au-delà de cet épisode, la crise financière qui a débuté en août 2007 a souligné la nécessité, pour la BCE, de soutenir la stabilité financière et de répondre à l'hétérogénéité croissante des situations économiques au sein de la zone euro. Cette nouvelle donne exclut toute "normalisation" de l'action de la BCE et demande une redéfinition de ses objectifs et de ses instruments.

Michel Aglietta, Benjamin Carton, Urszula Szczerbowicz

The rebalancing of China's foreign trade

N° 320, May 2012

China was a major player in the rise of global imbalances in the mid-2000s. If its overall trade surplus has decreased since 2007, its bilateral surpluses with the U.S. and Europe remain quite large. China's import demand has mainly benefited to its Asian neighbors and to raw material producing countries. However, Europe has also taken advantage of China's demand in consumption goods and increased its share in this market. The slowdown in international demand makes the rebalancing of China's domestic demand towards household consumption more necessary than ever for China's growth and is expected to benefit to European exporters¹.

Françoise Lemoine, Deniz Ünal

Euro Area real effective exchange rate misalignments

N° 319, April 2012

The resolution of the eurozone crisis requires, amongst other things, successful relative price

adjustments between member states. We estimate here the scale of the adjustments needed using fundamental equilibrium exchange rates. We suggest two scenarios of adjustments, depending on the levels of inflation tolerated in surplus countries and at the Euro Area level. If the ECB doesn't temporarily increase its inflation objective, Portugal and Greece will be unable to significantly reduce their overvaluation by the end of the decade.

Benjamin Carton, Karine Hervé

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The contents of this issue were finalised December 28, 2012

Publisher: SEBASTIEN JEAN, Director of the CEPII

Chief Editor: DOMINIQUE PIANELLI

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