13ᵗʰ ESCB Emerging Markets Workshop

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On November 5 and 6, 2015, the Oesterreichische Nationalbank (OeNB) hosted the 13ᵗʰ ESCB workshop on emerging markets. Since its inception in the early 2000s, this workshop series has served as a forum for researchers working on macroeconomic and financial issues related to emerging economies – a forum which allows them to present and discuss analytical work undertaken in the ESCB on these topics. From a large number of high-quality submissions, a two-day program was compiled, covering diverse topics such as monetary and fiscal policy, macrofinancial stability and economic growth. Given the high policy relevance of the papers presented at the workshop, lively discussions ensued in all sessions, providing useful insights and guidance for researchers and policymakers alike.

In her introductory statement, *Doris Ritzberger-Grünwald,* Director of the OeNB's Economic Analysis and Research Department, emphasized the increasing relevance of emerging markets for the global economy in general and for Austria in particular. Emerging and developing countries now account for more than 57% of global GDP in terms of purchasing power parities, which symbolizes a shift in the balance of economic power from advanced to emerging economies. For Austria, deepening economic integration with emerging economies in Central, Eastern and Southeastern Europe (CESEE) has historically paid off in terms of GDP growth and job creation. However, intensifying integration and the rise of emerging economies on the global scene has also led to new challenges for both advanced and emerging economies. The recent euro area recession has once more brought up the question to what extent economic shocks in developed countries trigger downturns in emerging markets.

Keynote lecture I: "Back to normal. Which normal for Latin America?"

Enrique Alberola, Chief Representative of the Americas Office of the Bank for International Settlements (BIS), talked about the structural shift of Latin American economies toward a more resilient and sustainable growth path. The overall economic expansion that lasted over several decades was strongly driven by internal and external factors, namely the commodity boom, wide access to external financing and increases in structural demand coupled with expansionary policies. However, five consecutive years of decreasing growth and a continuous decline in growth expectations coupled with deteriorating external positions have led to a more pessimistic picture for the region as a whole. Alberola provided several possible reasons for recent crises in Latin America. For instance, he identified loose financial conditions in advanced economies as a key driver behind recent asset price booms and sharp increases in credit. In addition, international investors' sentiment has proved to be another important determinant of economic instability in the region. Recent capital flow data display stark differences between balance of payments figures and EPFR data, and need to be monitored closely. Since commodity prices and capital flows tend to be of prime importance for several countries in Latin America, Alberola has attempted to tackle shortcomings of existing measures of the output gap in a recent research paper: together with his coauthors he has constructed a commodity- and capital flow-adjusted measure of the output gap. From 2003 onward, this augmented measure yields lower estimates of the output gap, suggesting that existing methods tend to underestimate the current output gap. Alberola also mentioned that most countries in the region now

possess stronger lines of defense than in the past and stressed the challenge of a generally lower level of economic growth and its impact on financial stability.

The discussion that followed centered on whether a rise of the middle class increases the demand for public services, which in turn could lead to more pressure on public balances. Moreover, while the presentation of Alberola showed that a few Latin American countries including Brazil are currently especially vulnerable, there are also counterexamples like Mexico, where reform-oriented policies in the last years have led to a higher resilience with regard to macrofinancial shocks.

Session I: Monetary policy and capital flows (part I)

The first session on monetary policy and capital flows tackled two main questions. First, *Riikka Nuutilainen* (BOFIT) talked about the relationship between reserve requirements and the bank lending channel in China. The study she presented was the result of joint work with *Zuzana Fungáčová* (BOFIT, currently European Central Bank) and *Laurent Weill* (BOFIT). In the study, panel fixed-effect estimations are used to model the change in banks' loan supply as a function of a monetary policy indicator, GDP growth and a set of bank-specific characteristics for the time period between 2004 and 2013. To approximate the monetary policy stance of the People's Bank of China, the reserve requirements ratio is included in the model. The main findings are that a tightening of reserve requirements leads to a significant decline in loan growth, underpinning the effectiveness of reserve requirements as a monetary policy instrument. Other determinants like bank-specific characteristics tend to play a minor role in explaining changes in loan growth. *Dubravko Mihaljek* (BIS), who acted as the discussant for this session, emphasized that the issue with credit in China is not so much its growth but its allocation; perhaps, too little credit is granted to productive and innovative firms and SMEs in general.

Second, *Markus Eller* (OeNB) presented the main findings of his paper, coauthored with *Helene Schuberth* and *Florian Huber* (both OeNB), investigating the global drivers of capital flows. In light of the high volatility of capital flows seen in recent years, the authors propose a dynamic factor model with stochastic volatility that incorporates several stylized features of the time series. Assuming that capital flows across the globe can be explained through different unobservable factors, Eller and his coauthors used a straightforward decomposition to shed some light on the importance of macroeconomic, financial and trade factors in explaining variation in capital flows and whether the importance of the different determinants changes over time. The main findings of the paper are that capital flows are strongly driven by global financial factors that reflect international monetary policy, long-term interest rates, equity prices and credit, and there is ample evidence that the explanatory power of global financial factors has increased since the 2008–09 global financial crisis. The discussant raised several important points, most notably that capital flows could also be driven by commodity prices, which have not been included in the proposed model, however.

The general discussion highlighted how difficult it is to improve international policy coordination, especially in situations where business cycles diverge across countries. The pivotal role of the U.S. economy for global macroeconomic factors was also highlighted.

Session II: Monetary policy and capital flows (part II)

In the first talk of the session, *Ignacio Hernando* (Banco de España) discussed the impact of unconventional monetary policy measures adopted by the Fed and their impact on Latin America. His presentation was based on joint work with *Fructuoso Borrallo* and *Javier Vallés* (both Banco de España). The three economists used an event study approach to provide some insights into the dynamic effects of the U.S. Federal Reserve System's unconventional monetary policy on sovereign bond yields, exchange rates, capital flows and equity prices. The main findings were that the announcement of the first large-scale asset purchase program significantly reduced government bond yields by around 22 basis points. Moreover, Latin American exchange rates depreciated significantly vis-à-vis the U.S. dollar around the tapering period. *Martin Suster* (Národná banka Slovenska), the discussant, emphasized the relevance of the research question and mentioned that the findings were not driven by trade or geographical location but by domestic economic conditions of the Latin American economies.

Julio Ramos-Tallada (Banque de France) talked about the relationship between banking risk, monetary policy shocks and the credit channel in Brazil. He used a large dataset of financial statements of banks available for the period from 1995 to 2012 to investigate the main determinants of the bank lending channel in Brazil. A micro-based identification approach for monetary policy shocks is used to disentangle demand from supply shifts in credit. Under this identification scheme, lending supply and short-term interest rates as a proxy for monetary policy tend to be negatively correlated over the full sample. Interestingly, another key finding suggests that the relationship between credit supply and monetary policy is not related to bank characteristics. The discussant emphasized the need to evaluate the relationship between the bank lending channel and other monetary policy transmission channels.

In the general discussion it was mentioned that the Fed was increasingly adopting a forward-looking stance with respect to global economic developments. Moreover, in recent years the effectiveness of monetary policy transmission across the globe has been challenged by issues related to the zero lower bound of nominal interest rates.

Session III: Fiscal and financial stability (part I)

In the first afternoon session, the focus shifted from monetary policy issues to fiscal and financial stability. *Markus Jorra* (Deutsche Bundesbank) addressed the question of how Argentina's (partial) sovereign default in 2014 influenced GDP growth, FDI inflows and bilateral trade. He proposed a novel approach that uses a synthetic control estimator, where a hypothetical no-default scenario is constructed and compared with the actual outcome of different macroeconomic quantities. Jorra's empirical analysis presents little evidence for causal effects of sovereign defaults. More specifically, the effects on GDP and industrial production appear to be rather muted, suggesting that the 2014 sovereign default was more or less cost-free. The discussant, *Mariya Hake* (OeNB), mentioned that the muted effects on GDP and industrial production stem from the fact that the selective default could be seen as a special case.

Flavia Corneli (Banca d'Italia) investigated the medium- and long-run implications of financial integration without financial development. Within a neoclassical

growth model, Corneli showed that in the medium term, financial integration reduces capital accumulation in developing economies due to a high risk premium of production activities. By contrast, the long-run effect revealed that within emerging economies, integration brings higher capital than a so-called autarky steady state. For advanced economies, the model shows that the effect is reversed. In the medium term, integration yields higher growth rates of capital while the long-run effect points toward a reduction in capital growth relative to the autarky solution. The discussant mentioned that the paper should be better integrated with existing literature that draws different conclusions regarding the relationship between financial integration and financial development.

In this session, the general discussion centered on the measures adopted to investigate the economic consequences of a sovereign default. For instance, financial variables like refinancing costs could have changed significantly in response to a sovereign default. In addition, the specific definition of financial market integration, i.e. that sovereigns are able to issue risk-free bonds, was also questioned.

Session IV: Fiscal and financial stability (part II)

The final session of the first day was mainly concerned with the determinants of bank lending activities in emerging market economies, most notably the Central and Eastern European (CEE) region. *Ádám Banai* (Magyar Nemzeti Bank) presented a paper, coauthored with *Judit Temesvary* (Hamilton College and Cornell University), which investigates the main driving forces behind foreign bank lending activities in CEE. In light of the particularly pronounced heterogeneity of lending activities across the region during the crisis, a better understanding of cross-country differences is helpful for policymakers. Within a panel model, the authors analyze the lending activities of 25 banking groups in the CEE region, operating in 11 different economies. They find several important determinants of foreign lending activities. For instance, nonperforming loan ratios exhibit a significantly negative effect on lending activity. In addition, the attitude toward risk-taking on the part of the parent group and the risk level of a given host country prove to be important for explaining lending activities. Moreover, external indebtedness, funding capabilities of the parent group and the capitalization of subsidiaries all tend to influence lending in a statistical significant fashion. *Katharina Steiner* (OeNB) discussed this session. She mentioned that the seemingly ad-hoc selection of various indicators should be better rationalized.

The second paper of the session, presented by *Arben Mustafa* (Central Bank of the Republic of Kosovo), dealt with the relationship between banking sector competition and banks' net interest margins in the CEE countries. In his paper, Mustafa analyzes the impact of three popular measures of banking sector competition on interest margins. The main conclusions are that banking sector competition exerts a statistically significant negative effect on interest margins, with all three measures of competition yielding similar results. In addition, the analysis suggests that the ability of less efficient banks to translate inefficiencies into higher interest margins vanishes in more competitive markets. The discussant suggested looking at the role of funding costs and loan pricing as a possible extension of the analysis.

Ramona Jimborean (Banque de France) shed some light on the possible drivers of private nonfinancial sector (NFS) borrowing in emerging market economies. The relevance of the research question is underlined by the fact that many crises in

emerging markets have been preceded by rapid leverage growth. To gain a better understanding of the driving forces behind NFS borrowing, Jimborean investigated external and domestic determinants on three different measures of private NFS borrowing. Her analysis suggests that credit demand is positively related to borrowing from domestic banks and from all sectors and negatively related to the nominal exchange rate. Moreover, contractionary domestic monetary policy reduces private NFS borrowing from domestic banks. In addition, global funding conditions, global GDP growth and U.S. monetary policy also influence some of the measures considered. The discussant provided several suggestions: most importantly, endogeneity issues between interest margins, indicators of competition and non-interest income might be solved by lagging the explanatory variables.

Keynote lecture II: "Structural external imbalances as a constraint on convergence in the European economy"

In his keynote speech, *Michael Landesmann,* Director of Research at the Vienna Institute for International Economic Studies (wiiw), focused mainly on the CESEE region and explained that external imbalances are not per se a problem in the context of economic convergence – which is an important element of the EU integration process – but that they may threaten convergence when they become unsustainable. He referred to these structural imbalances as the Achilles' heel of catching-up. Persistently low exporting capacities, de-industrialization trends in the aftermath of the transformation, lacking focus on the tradeable sector and agglomeration tendencies have contributed to what has now become manifest in a long-run structural problem. He emphasized that the role of the real exchange rate in this context is not always well understood. Often, real appreciation is the consequence of previous good trade performance rather than a factor driving future trade performance. Taking a forward-looking stance, Landesmann identified the following areas as important determinants of competitiveness: moving toward products with higher income elasticity, building sufficient export capacity and diversifying the export structure to reduce vulnerabilities.

In the discussion, he highlighted the Central European countries – Poland, the Czech Republic, Slovakia, Hungary and Slovenia – as good examples of re-industrialization. He also emphasized that tradeable services need manufacturing exports as a carrier and mentioned the conflict between industrial support and EU competition policy, which implies an insufficient implementation of industrial policy, too much focus on incumbent players and too little effort directed at nurturing the entry of new players in each country.

Session V: Economic growth and international economics

In the following session, the question raised by the previous keynote lecture – whether the exchange rate can be used as a policy variable or whether it is rather an outcome – was taken up by *Maurizio Michael Habib* (European Central Bank, ECB) based on joint work with *Elitza Mileva* (Fordham University and World Bank) and *Livio Stracca* (ECB). Using a difference-in-difference model and information on global capital flows, official exchange rate regimes and foreign exchange reserves as instruments for the real exchange rate, Habib found evidence that real exchange rate depreciation may influence economic growth positively. He also found evidence for an asymmetric effect between appreciation and depreciation, a

larger effect for developing countries and currency peggers, and non-linearities depending on the foreign currency position. The discussant, *Paul Pichler* (OeNB), stressed the unclear differentiation between depreciation and undervaluation.

The second speaker, *Simona Manu* (ECB) presented her paper, coauthored with *David Lodge* and *Ioannis Grintzalis* (both also ECB), on the influence of the global financial cycle and domestic credit gap on output fluctuations. According to the authors' results, the global financial cycle is an important factor in shaping the cyclical stance of emerging economies, exerting a negative influence up until 2006 and then again since 2012. The discussant stressed the value of this approach as it seems to be comparatively robust against end-of-sample instability and data revisions and he advocated using different output gap measures based on the policy objective (monetary, fiscal, macroprudential). His criticism that the measurement of the credit gap as a simple deviation from long-term growth is too simplistic was rejected by Manu, who argued that this simplicity is useful given the high volatility of credit growth in emerging economies.

Risto Herrala (Bank of Finland) presented an empirical analysis coauthored with *Rima Turk Ariss* (Lebanese American University) investigating the effects of political instability on credit availability and financing conditions. Based on survey data from 860 firms in the Middle East and North Africa (MENA) region the authors found weak direct effects from political instability on capital accumulation, but evidence for indirect effects through credit limits. In the discussion, participants debated the role of international banks and other external sources of financing, as well as whether constraints arise from the supply side or rather the demand side.

The general discussion centered on possible threats to further capital liberalization and the often too one-sided lessons that were drawn from previous liberalization episodes (i.e. the accumulation of too many reserves by emerging economies following the crises in Latin America in the 1990s). The importance of distinguishing "good" from "bad" credit booms was emphasized and the extent to which policymakers should lean against the wind was discussed.

Keynote lecture III: "If China decelerates, rebalances and liberalizes, what happens to the rest of us?"

Iikka Korhonen, Director of the Bank of Finland Institute for Economies in Transition (BOFIT), delivered the third keynote lecture. According to Korhonen, the Chinese economy is currently characterized by three broad trends: Economic growth is trending downward (2015: around 7%, 2016–17: 6% expected), the structure of growth is changing (moving from investment- to consumption-driven growth), and the liberalization of financial markets is progressing (both in terms of domestic financial intermediation and cross-border capital movements), regardless of recent market turbulence. The implications of these developments are (among others): Producers of raw materials as well as of machinery and equipment will continue to suffer from less demand and/or lower prices, the renminbi will be increasingly widely used in international transactions, and capital flows from and to China will rise.

In the ensuing discussion, Korhonen pointed out that he expected Chinese reserves (currently amounting to USD 3.4 trillion) to continue to decline in a more liberalized environment. Looking at the medium term, economic growth in

China may settle at 4% to 5% per annum, influenced by demographic factors among others.

Session VI: Further selected topics related to emerging market economies

The first speaker of the final session of the workshop, *Peter Tóth* (Národná banka Slovenska), talked about nowcasting GDP growth in selected Central, Eastern and Southeastern European countries. In his presentation, which was based on a paper coauthored with Martin Feldkircher, Florian Huber, Julia Wörz, Josef Schreiner (all OeNB) and Marcel Tirpák (ECB), he again emphasized the importance of taking into account the heterogeneity of the CESEE countries when specifying appropriate nowcasting models. His findings suggest that small-scale dynamic factor models and models based on a bridge equation tend to outperform simple benchmark models for all countries considered. In the final session, *Christian Buelens* (National Bank of Belgium) acted as a discussant. Buelens emphasized the sensitivity of the findings with respect to the estimation and verification period.

Mehmet Fatih Ulu (Central Bank of the Republic of Turkey) finally tackled the question how access to new foreign intermediate goods is related to product innovation within a structural modeling framework. His main results, based on data for India, show that the import of intermediate goods increases the revenues for each product created and, through knowledge spillovers, the probability that domestic firms introduce new products is increased significantly. The discussant highlighted the relevance of the calibration exercise but stressed that calibration should not be interpreted as a test for causality.