

## Understand the Theory, Implement the Policy

The global financial crisis brought a series of transitions which includes significant changes in the policy and operations of central banks and other related policy institutions. The İMB recognizes that international cooperation among central banks, academia and related policy institutions have become more important than ever. In such a dynamic global environment, experience sharing activities and merging theory with practice has enabled officials to understand the anomalies of the system and help them solve problems. To this end, the İMB regularly hosts renowned academics and practitioners to discuss recent topics and methods especially in the scope of central banking.

During the second half of 2014, Ayşegül Şahin and Stefano Eusepi from the Federal Reserve Bank of New York (NY Fed), Vincenzo Quadrini from the University of Southern California and Peter Rupert from the University of California Santa Barbara (UCSB) visited the İMB for research meetings and policy discussions. In addition, Daron Acemoğlu from Massachusetts Institute of Technology (MIT), Yıldırım Yıldırım from Syracuse University, James Feigenbaum from Utah State University, Robert Tetlow from the Board of Governors of the Federal Reserve System, Előd Takáts from the Bank for International Settlements (BIS), Barbara Petrongolo from the London School of Economics and Gönül Çolak from Xiamen University delivered seminars on various topics.

*Daron Acemoğlu* from MIT gave a lecture on the topic of “The Role of Input-Output and Financial Network Interactions in the Macroeconomy” on November 27th, 2014 at the İMB. The seminar hosted senior and mid-level policy makers along with academicians.

In his opening remarks, the Deputy Governor of the Central Bank of the Republic of Turkey (CBRT), Mehmet Yörükoğlu, explained the importance of the “too interconnected to fail” concept along with “too big to fail” to understand current global financial crisis. He emphasized that highly interconnected financial networks amplified and accelerated repercussions and the contagiousness of the crisis in global financial markets. Moreover, he stated the importance of having insights about what makes sound financial networks, what the linkages are among networks and the contagiousness of financial crises and whether it is possible to define an optimal financial structure.

After the opening remarks, Acemoğlu started his presentation by discussing the importance of complex interactions among firms that form different stages of the overall production process.

### ABOUT US

The Istanbul School of Central Banking (İMB), founded by the Central Bank of the Republic of Turkey (CBRT), provides a setting for thought provoking discussions and analyses on global economic and financial challenges with a specific interest in central banking topics. The School organizes research activities and training programs and engages in technical cooperation with central banks to promote collaboration on central banking.

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He later discussed interplays between banks and other financial institutions and interactions among innovators in modern economies. He argued that networks provide a natural framework for the study of how economic shocks are transmitted from one unit to another, from one industry, firm, bank, region or innovator to another. He went on to explain input-output linkages, financial linkages and innovation networks by using theoretical models.

His findings demonstrate that networks are useful vehicles for the study of propagation of shocks at the macro or the microeconomic levels across various different units. Acemoğlu concluded that the nature of these network linkages matters for productivity, volatility, and technology in economies. He also claimed that linkages among geographic areas, labor markets, firms, and countries can be analyzed and these subjects are open for new theoretical and empirical studies.

*Peter Rupert* from UCSB gave a seminar titled “The Great Recession and Growth Prospects in the US” in which he argued that while the economic data provided mixed signals about the growth prospects, attention should be given to performance of the economy in the long-run.

He emphasized that with the recession there has been a leveling off in the adjusted real GDP of the US but the economy swiftly attained the pre-crisis growth trend of real GDP. With the eruption of the crisis, the net worth of businesses and several assets have collapsed, and since then households have been deleveraging. Rupert argued, this time, recovery has taken longer compared to the recessions after the 1970s. Recently, households’ checkable deposits have been rebalancing and their net worth (assets-liabilities) have been increasing. On the business side, the net worth of businesses are above historical averages and cash holdings of firms are increasing.

Rupert remarked that the weak recovery in the US economy has received strong policy responses, and the Fed balance sheet has swollen extensively. In recent years, US inflation has been below the Fed’s long-run objective. In the labor markets, although the unemployment rate is declining, the labor force participation rate is also declining, and the employment to population ratio is far lower than its pre-crisis period levels. Unemployment spells between unemployment-to-employment transitions have still been increasing and the wage growth has been subdued. With improvements in some of the economic indicators the



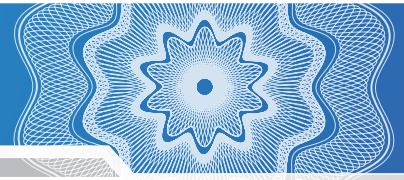
*Rupert explained that aside from the sharp drop in US GDP at the time of crisis, the US economy is growing with almost the same pace as it did the past. However, understanding how effective the responses of the Fed were in recovering from the crisis will require some more academic and intellectual work. He also remarked that the crisis might have caused a correction in the US economy.*

Fed first announced it would slowly retreat from its policy to encourage economic growth, and then started to implement that strategy.

Rupert concluded that although there are mixed signals about the US economy, on net, the signs are positive. He also instructively exhibited the fact that the US has reached its real GDP growth rate trend after a sharp decline from the financial crisis.

*Stefano Eusepi*, who visited the İMB during September as part of the visitor program, presented the models used by the NY Fed and their implications for the crisis and the post-crisis period. Eusepi emphasized the importance of empirical models based on theory in order to understand the macroeconomic outcomes and conduct policy experiments. Eusepi gave an analysis of the Great Recession period and the sluggish recovery afterwards. He discussed the impact of total

factor productivity, financial, investment, demand and monetary policy shocks on output growth, aggregate hours, labor share, core inflation, interest rates and spread. According to the results of the model simulation, monetary policy beyond its normal historical reaction was found to have a key role in offsetting the negative shocks. In addition, the model has been shown to perform well in forecasting the sluggish recovery in the post-crisis period.



During her visit, *Ayşegül Şahin*, Vice President of the Research and Statistics Group of the NY Fed, presented unemployment rates in the US which emerged as an important determinant of the Fed's policy decisions in the post-crisis period. She drew attention to the difference between short and long term unemployment rates in terms of their levels at the beginning of her presentation. She showed that short-term unemployment reached its pre-crisis levels; however, the long term unemployment rate still remains elevated. Based on this observation she discussed whether total unemployment rate is exaggerating the extent of underutilization in the labor market. The answer to this question is important because if long-term unemployed are, in practice, out of the labor force they will exert little pressure on earnings. Therefore, inflationary pressures might start building up sooner than suggested by the overall unemployment

rate which will affect the policy steps of the Fed. She first presented the demographic decomposition of the two types of the unemployment rate into different groups and showed that there were no significant differences between them. In addition, she explained that the job finding rates and labor market attachment of the long-term unemployed are found to be not vastly different from the short-term unemployed. The more striking differences in terms of labor market outcomes emerge between the long-term unemployed and the nonparticipants. Şahin further explained that the wage analysis using cross-state data shows no evidence for an extra upward pressure on wages coming from the long term unemployed. She summed up, stating that based on all the evidence, the long-term unemployed are different from the nonparticipants and they are relevant for assessing slack in the labor market.



## From Courses and Seminars in the Second Half of 2014

The İMB had a very fruitful second half in 2014 with one course and five seminars. Overall, 152 participants from central banks and related policy institutions attended the İMB course and seminars. A total of 107 participants from 41 countries other than Turkey had an opportunity to meet during the course and seminars.

The *"Bayesian Econometric Methods and Forecasting"* seminar was delivered by Gianni Amisano, Marek Jarocinski and Matteo Ciccarelli from the Monetary Policy Research Division of the European Central Bank on August 25-29 in Istanbul. The program examined the main Bayesian modelling techniques that are commonly in the interest of central banks in macroeconomic and financial policy analysis and also gave a special emphasis on the forecasting methods. This seminar welcomed 29 representatives from 21 countries.

The *"Inflation Targeting after the Crisis: Foundations, Results and Policy Challenges"* seminar was delivered by the Klaus Schmidt-Hebbel, the former chief economist of the OECD, from the Catholic University of Chile, and economists Salih Fendođlu, Hande Küçük and M. Utku Özmen from the CBRT. The seminar was held on September 8-12 and brought together 25 representatives from 17 countries. The seminar presented an analysis of the conduct of monetary policy under inflation targeting (IT) and focused on recent experiences and the relevant academic literature. During the program, the pros and cons of IT regimes with the pre-conditions for successful implementation were discussed. The last part of the seminar introduced the practical issues and the results of implementing an IT framework in an emerging economy by using Turkey's experience.

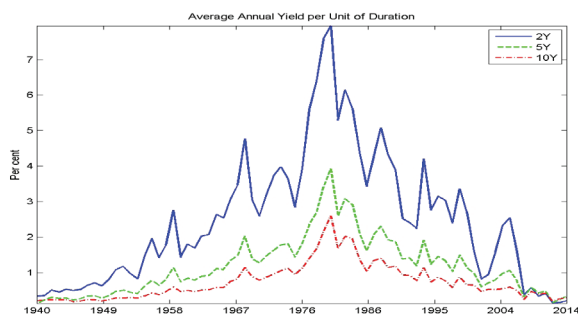


The “*Financial Stability, Financial Crises and Monetary Policy*” seminar was held on September 15-19 in Istanbul and hosted 25 representatives from 19 countries. José De Gregorio, the former governor of the Central Bank of Chile, from the University of Chile and economists Mahir Binici and Salih Fendoğlu from the CBRT delivered the seminar and shared their experiences with the participants. The seminar reviewed the central features of modern macroeconomic theory, recent financial system developments, the regulatory framework and the structure of the financial sector from the perspective of financial and price stability and presented Turkey’s experience regarding macroprudential and monetary policies for macro-financial stability.

The “*Foreign Exchange Reserve and Risk Management*” seminar, hosting 24 participants from 19 institutions, was held on September 29 – October 1 in Istanbul.

This seminar discussed current trends in foreign exchange reserve management with a focus on risk management. Speakers from the World Bank, the Bank for International Settlements, CBRT, Imperial College and Özyeğin University shared their experiences on a range of issues related to foreign exchange reserves.

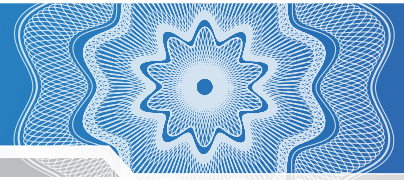
The “*Short-term Forecasting at Central Banks*” seminar was delivered by economists Mahmut Günay, Fethi Ögünç and M. Utku Özmen from the CBRT on November 10-14 in Istanbul and welcomed 22 representatives from 16 countries. The seminar introduced the use of practical tools for short-term forecasting of inflation and GDP, summarized the relevant theory and provided hands-on practical sessions using real data. A representative from the Central Bank of Hungary shared the short-term forecasting experience in their Bank with the participants during the seminar.



Source: : BIS

Remark from the “*Foreign Exchange Reserve and Risk Management*” seminar: During his presentation, Jean-Pierre Matt from the BIS emphasized that 5- and 10-year US Treasury yields, divided by duration (yield per duration ratio), have in recent years exceeded the levels of the corresponding two-year ratio. He noted that this was a virtually unprecedented phenomena over the last 75 years (1940 - 2014). Moreover, Mr Matt claimed that two- to five-year and two- to ten-year yield spreads were also close to all-time highs.

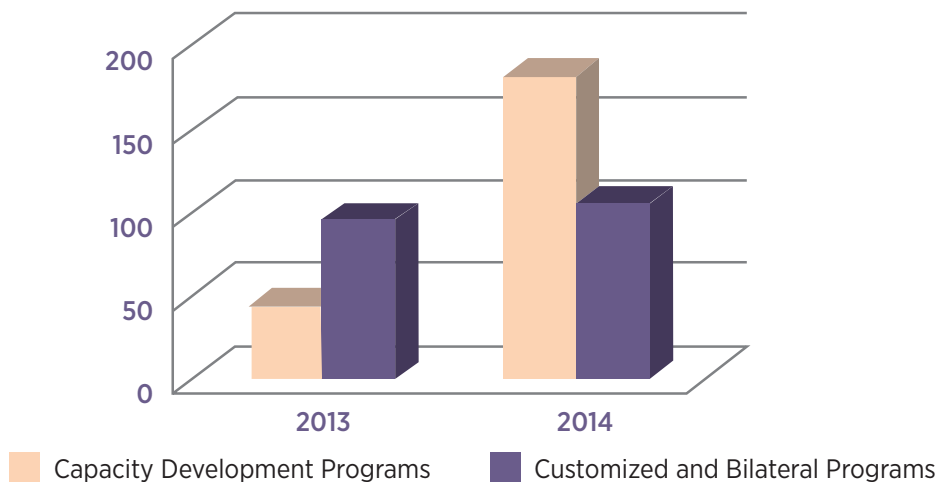
The “*Financial Crises and Credit Frictions in Open Economies*” course was delivered by Enrique G. Mendoza from University of Pennsylvania, who has held positions at the International Monetary Fund and the Board of Governors of the Federal Reserve System. The course was held on December 15-19 and hosted 31 officials from 18 countries. The course introduced workhorse quantitative macroeconomic models of financial crises and credit frictions in small open economies (SOEs). This program blended several elements of quantitative SOE real business cycle (RBC) models, asset pricing models, and models with incomplete asset markets and credit constraints. The program also focused on explaining cross-country stylized facts of business cycles and terms of trade fluctuations with sudden stops and credit boom-bust cycles in advanced and emerging economies.



## The İMB in Numbers

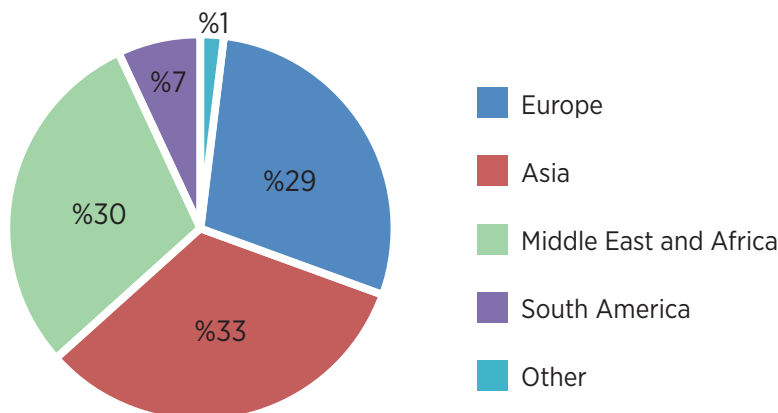
The İMB organized 17 catalog-based programs (seminars, courses and workshops) and 28 customized and bilateral technical cooperation programs since the School's official opening on 30 April 2013.

### Participation in the İMB Capacity Development & Customized and Bilateral Technical Cooperation Programs in 2013-2014 by Type



Around 300 experts and officials from Asia, Europe, the Middle East and Africa and South America participated in the İMB capacity development and technical cooperation programs in 2014.

### Participation in the İMB Capacity Development Programs in 2014 by Region

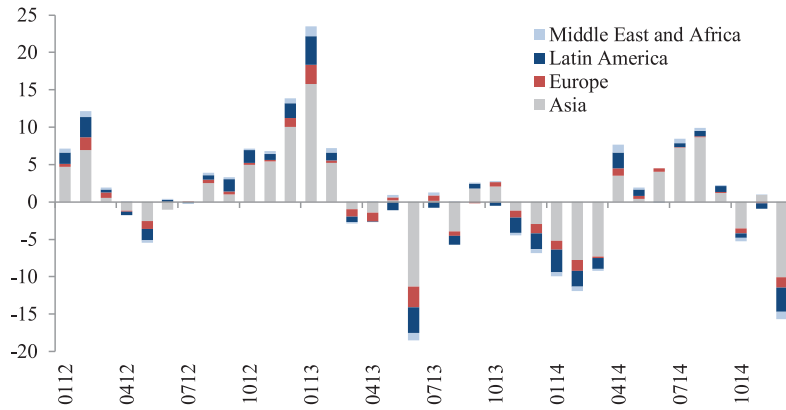


The customized bilateral programs mainly focused on forecasting methods at central banks, research and policy making, risk management, cash management, financial education, balance of payments statistics, payment systems, branch operations, banknote design, cash security

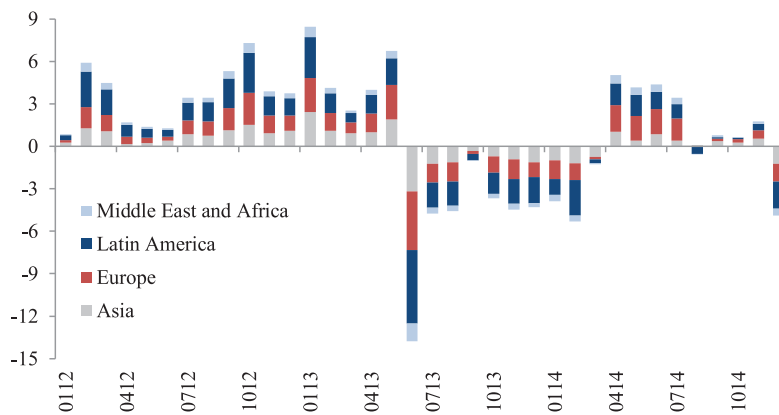
elements, counterfeiting prevention, financial consumer protection and human resources management. A total of 105 central bank experts and officials participated in these customized bilateral programs which were arranged at home and abroad in 2014.

## Emerging Markets Snapshot

Equity Fund Flows to Emerging Markets by Regions (monthly, US\$ billion)



Bond Fund Flows to Emerging Markets by Regions (monthly, US\$ billion)



Source: EPFR

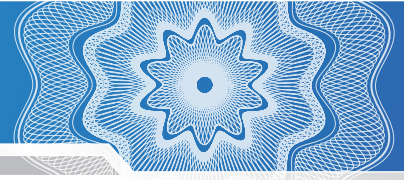
## DID YOU KNOW?

Labourers' and craftsmen's real wages and skill premium, 1930s-2000s

Number of subsistence baskets that a daily wage buys, population-weighted global averages

	Labourers	Craftsmen	Skill premium
1930s	13.4	27.3	104%
1940s	13.8	21.6	57%
1950s	16.8	26.3	57%
1960s	20.1	30.2	50%
1970s	26.4	38.9	47%
1980s	30.9	43.8	42%
1990s	35.3	54.6	55%
2000s	43.0	59.2	38%

Source: : OECD (2014) "How was life? Global Well-being since 1820" Clio-Infra, www.clio-infra.eu



## Events from the İMB Catalog 2015

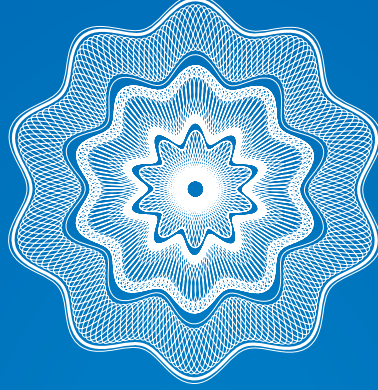
The İMB organizes its activities under five main categories: courses, seminars, workshops, customized and bilateral programs, and visiting programs. The İMB will organize one **course**, seven **seminars** and three **workshops** in 2015.

The 2015 İMB catalog has been published. For details please visit the İMB website: [imb.tcmb.gov.tr](http://imb.tcmb.gov.tr)

Courses	Dates
Introduction to Monetary Policy Modelling	December 7-11

Seminars	Dates
Balance of Payments and External Statistics	April 27-29
Financial Stability, Financial Crises and Monetary Policy	May 4-8
Global Financial Integration and Capital Flows	June 10-12
Payment Systems and Instruments	September 2-4
Prudential Supervision and Macroprudential Regulations	September 14-18
Foreign Exchange Reserve and Risk Management	September 30-October 2
Short-term Forecasting at Central Banks	November 9-13

Workshops	Dates
Human Resources at Central Banks	April 8-10
Monetary Policy in Emerging Economies	May 28-31
14 <sup>th</sup> Regional Payment Systems Workshop	May 13-16



# İMB BULLETIN

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