INTERNATIONAL MONETARY FUND

Joint Vienna Institute / IMF Institute – European and Middle Eastern Division

Course on Model-Based Monetary Policy Analysis and Forecasting (JV17.28)

Vienna, Austria

October 9 – 20, 2017

PROGRAM[1]

Monday, October 9

9:00 a.m. – 9:30 a.m.			**Administrative Briefing** Ms. Marina Scherbakova Program Officer, Joint Vienna Institute
9:30 a.m. – 10:00 a.m.			**Opening Session** Mr. Tom Richardson, Director, Joint Vienna Institute (JVI); Mr. Rafael Portillo, JVI; Mr. Alexei Miksjuk JVI; Mr. Carlos De Resende, IMF Institute for Capacity Development; Mr. Werner Schule, Consultant
10:00 a.m. – 10:30 a.m.			**Test** Session conducted by counselors
11:00 a.m. – 12:30 p.m.	L-1		**Monetary Policy Frameworks and Transmission Channels** Lecture by Mr. Carlos de Resende • Frameworks for monetary policy • Overview of transmission channels, empirical evidence
2:00 p.m. – 3:30 p.m.	L-2		**Forecasting and Policy Analysis System (FPAS)** Lecture by Mr. Rafael Portillo • FPAS components: databases, monitoring and reporting, short- and medium-term forecasting, communication and decision making • The role of the quarterly projection model
4:00 p.m. – 5:30 p.m.	L-3		**Consistency of Policy Objectives and Macro Trends** Lecture by Mr. Werner Schule • Convergence, PPP, and the Balassa-Samuelson effect • Uncovered Interest Rate Parity (UIP) • Interpreting economic trends

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[1] Coffee breaks are generally from 10.30 a.m. to 11.00 a.m. and 3.30 to 4.00 p.m., unless otherwise indicated.

| 9:00 a.m. – 10:30 p.m. | L-4 | **Introduction to a Small New Keynesian Model for Policy Analysis** |

Lecture by Mr. Carlos de Resende
- Model structure
- Long run trends and steady state
- A brief overview of calibration

| 11:00 a.m. – 12:30 p.m. | L-5 | **CPI Components and their Relative Prices** |

Lecture by Mr. Rafael Portillo
- Core, food, and energy: inflation components and relative prices
- shocks to CPI components, first and second-round effects, policy responses
- Transitory and permanent shocks in relative prices

| 2:00 p.m. – 3:30 p.m. | W-1 | **Workshop: Introduction to the Software and Model Codes** |

- Suite of codes
- Generic impulse response functions

| 4:00 p.m. – 5:30 p.m. | W-2 | **Workshop: Data Transformation, Interpretation and Model Calibration** |

- Data preparation, univariate filtration
- Initial conditions, implications for the inflation outlook
- Preliminary calibration

Wednesday, October 11

| 9.00 a.m. – 10:30 a.m. | L-6 | **Alternative Exchange Rate Regimes** |

Lecture by Mr. Werner Schule
- Exchange rate management
- The exchange rate as an operational target
- FX interventions

| 11:00 a.m. – 12:30 p.m. | W-3 | **Workshop: Model Properties Under Different Policy Regimes** |

- Transmission of shocks in the model

| 2.00 p.m. – 3:30 p.m. | L-7 | **Estimating Long-Run Trends and Gaps** |

Lecture by Mr. Carlos de Resende
- Identifying trends
- Univariate filtration methods
- The multivariate (Kalman) filter

4:00 p.m. – 5:30 p.m.	W-4	**Workshop: Analysis of Trends and Model Calibration**
		• Comparing univariate and multivariate filters

Thursday, October 12

9:00 a.m. – 10:30 a.m.	W-4	**Workshop: Analysis of Trends and Model Calibration, continued.**
		• Tuning the multivariate filter
		• Model filtration and recalibration

11.00 a.m. – 12:30 p.m.	L-8	**Methods in Model Parameterization, Assessment of Model Properties**
		Lecture by Mr. Rafael Portillo
		• Calibration vs. estimation
		• Maximum likelihood and Bayesian estimation
		• Model properties, recursive forecasts

2:00 p.m. – 5:30 p.m.	W-5	**Workshop: Selected Issues in Model Estimation**
		• Model parameterization
		• Maximum likelihood and Bayesian estimation
		• Model properties: assessment based on recursive (multi-step ahead projection) forecast
		• Fine-tuning of the model

Friday, October 13

9:00 a.m. – 10:30 a.m.	L-9	**Nowcasting**
		Lecture by Mr. Alexei Miksjuk
		• Nowcasting in the FPAS context
		• State Space Models,
		• Dynamic Factor Models (DFM)

11:00 a.m. – 12:30 p.m.	L-10	**Near-Term Forecasting**
		Lecture by Mr. Werner Schule
		• Vector Auto Regressions (VARs)
		• Forecasting using VARs

2:00 p.m. – 3:30 p.m.	W-6	**Workshop: Nowcasting**
		• Using a DFM to nowcast GDP

4:00 p.m. – 5:30 p.m.	W-7	**Workshop: Near-Term Forecasting**
		• Using VARs to forecast inflation components

Monday, October 16

9:00 a.m. – 10:30 a.m.	L-11	**Extending the Core Model: Fiscal Policy** Lecture by Mr. Carlos de Resende • Fiscal rules and fiscal accounting • Long term trends and crowding out • Simulations
11:00 a.m. – 12:30 p.m.	W-8	**Workshop: Fiscal Extension** • Fiscal satellite module codes • Short-term fiscal multipliers • Fiscal expansion/consolidation scenarios
2:00 p.m. – 3:30 p.m.		**Preparation**
4:00 p.m. – 5:30 p.m.	O-1	**Group presentation: Initial Conditions** Analysis of initial conditions and inflation outlook

Tuesday, October 17

9:00 a.m. – 10:30 a.m.	L-12	**Baseline and Alternative Forecast Scenarios:** **Risk Analysis under Uncertainty** Lecture by Mr. Werner Schule • Building macro scenarios for policy dialogue • Baseline forecast and alternative scenarios
11:00 a.m. – 12:30 p.m.	W-9	**Workshop: Scenario Formulation and Policy Analysis** • Baseline forecast • Design of alternative scenarios
2:00 p.m. – 5:00 p.m.	W-9	**Workshop: Scenario Formulation and Policy Analysis** • Design of alternative scenarios • External environment

Wednesday, October 18

9:00 a.m. – 12:30 p.m.	W-9	**Workshop: Scenario Formulation and Policy Analysis** • Design of macroeconomic scenarios (continued)
2:00 p.m. – 5:00 p.m.	W-9	**Workshop: Scenario Formulation and Policy Analysis** • Preparation of final presentations

Thursday, October 19

9:00 a.m. – 12:30 p.m.	W-9	**Workshop: Scenario Formulation and Policy Analysis** • Preparation of final presentations (continued)
2:00 p.m. – 2:30 p.m.		**Course Evaluation**
2:30 p.m. – 5:30 p.m.	O-2	**Final Group Presentations – Country Case Studies** Forecast, scenarios, and policy analysis for Ghana, Kazakhstan and Singapore

Friday, October 20

9:00 a.m. – 9:30 a.m.		**Test** Session conducted by counselors
9:30 a.m. – 10:30 a.m.	L-13	**Monetary Policy at the Zero Lower Bound: The Czech Experience.** Guest Lecture by Tibor Hledik, Head of Forecasting Division, Monetary Department, Czech National Bank
11:00 a.m. – 12:30 p.m.		**Closing Session** Mr. Rafael Portillo, Mr. Carlos de Resende, Mr. Werner Schule, Mr. Alexei Miksjuk