INTERNATIONAL MONETARY FUND

IMF Institute for Capacity Development (ICD)/ Joint Vienna Institute (JVI)

Course on Vulnerability Diagnostics (JV16.33)

Vienna, Austria

December 5-16, 2016

Program[1]

Monday, December 5

9:00 a.m.– 9:20 a.m.		**Administrative Briefing** Ms. Tatiana Bredniakova Joint Vienna Institute (JVI)
9:20 a.m. – 9:30 a.m.		**Opening Session** Mr. Martin Schindler, Deputy Director, JVI; Mr. Gianni De Nicolò, Senior Economist, IMF ICD; Ms. Asel Isakova, Economist, JVI; Mr. Burkhard Drees, IMF Consultant.
9:30 a.m. – 10:00 a.m.		**Initial Test**
10:00 a.m. – 10:15 a.m.		Coffee Break
10:15 a.m. – 11:45 a.m.	L–0	**Vulnerabilities and Crises** *Mr. De Nicolò* 1. Macroeconomic stability and crises 2. Vulnerabilities and crises 3. Structure of the course
2:00 p.m. – 5:15 p.m.	**Unit 1**	**Forecasting Methods for Tail Risks** *Mr. De Nicolò*
	L–1	1. Defining and measuring tail risks 2. Logit models 3. A signal approach: ROC analysis
	W–1	External Vulnerabilities and Currency Crises

[1] *Unless otherwise stated, coffee breaks will be held from 10:30 a.m.–10:45 a.m. and from 3:30 p.m.–3:45 p.m.*

Tuesday, December 6

9:00 a.m. – 12:15 p.m.	**Unit 2**	**Fiscal Vulnerabilities I: Assessing Debt Sustainability** *Ms. Isakova*
	L–2	1. Debt sustainability, debt crisis, and growth 2. Deterministic DSA in closed and open economies 3. Risk-based DSA
	W–2	Assessing debt sustainability: debt-stabilizing primary balance, IMF's approach to DSA
2:00 p.m. – 5:15 p.m.	**Unit 3**	**Financial Vulnerabilities I: Taxonomy and Measurement of Financial Risks** *Mr. Drees*
	L–3	1. Taxonomy of financial risks 2. Measurement of financial risks
	W–3	Measurement of risks and introduction to stress testing

Wednesday, December 7

9:00 a.m. – 12:15 p.m.	**Unit 4**	**External Vulnerabilities I: Bond Yields and Sovereign Default Risk** *Ms. Isakova*
	L–4	1. From fiscal distress to external crisis 2. Theory of sovereign default risk 3. Assessing risks in practice
	W–4	Explaining Sovereign Bond Interest Rates
2:00 p.m. – 5:15 p.m.	**Unit 5**	**Financial Vulnerabilities II: Detecting Financial Fragility** *Mr. Drees*
	L–5	1. Overview of stress testing 2. Single-factor sensitivity analysis 2. Identifying stress testing scenarios: a case study.
	W–5	Bank stress test

Thursday, December 8		
9:00 a.m. – 12:15 p.m.	**Unit 6**	**Fiscal Vulnerability II: Short-term risks** *Ms. Isakova*
	L–6	1. Interest rate growth differential and public debt 2. Refined analysis of growth and interest rate shocks
	W–6	Refined analysis of growth and interest rate shocks
2:00 p.m. – 5:15 p.m.	**Unit 7**	**External Vulnerabilities II: Current Account Imbalances** *Mr. Drees*
	L–7	1. Current account imbalances 2. External balance assessment (EBA)
	W–7	External Balance Assessment (EBA)

Friday, December 9		
9:00 a.m. – 12:15 p.m.	**Unit 8**	**Financial Vulnerabilities III: Systemic Risk and Financial Cycles** *Mr. De Nicolò*
	L–8	1. Systemic risk 2. Financial Cycles 3. Measurement of Cycles
	W–8	Financial cycles and banking distress
2:00 p.m. – 5:15 p.m.	**Unit 9**	**Fiscal Vulnerability III: Stochastic DSA** *Ms. Isakova*
	L–9	1. Stochastic DSA vs. deterministic DSA 2. Main steps of stochastic DSA: estimating relationship between DSA inputs, fiscal reaction function, simulations
	W–9	Stochastic DSA

Monday, December 12

9:00 a.m. – 12:15 p.m.	**Unit 10**	**External Vulnerability III: Reserve Adequacy** *Mr. Drees*
	L–10	1. FX Reserves: definition, composition and trends 2. Analytics of reserve holdings 3. Normative assessments of reserve holdings
	W–10	International Reserves Adequacy
2:00 p.m. – 5:15 p.m.	**Unit 11**	**Financial Vulnerability IV: Spillovers and Contagion** *Mr. De Nicolò*
	L–11	1. Assessing systemic linkages: network analysis 2. Systemic risk measurement:VaR, CoVaR and ΔCoVaR
	W–11	VaR, CoVaR and ΔCoVaR

Tuesday, December 13

9:00 a.m. – 12:15 p.m.	**Unit 12**	**Fiscal Vulnerabilities IV: Long-term risks** *Ms. Isakova*
	L–12	1. Debt level and fiscal space 2. Fiscal gaps: full account of government assets and liabilities 3. Medium- and long-term fiscal adjustment needs
	W–12	Debt level thresholds; arithmetic of fiscal gaps and long-term adjustment needs
2:00 p.m. – 5:15 p.m.	**Group Workshop**	**Case Studies: Preparation for Participant Presentations**

Wednesday, December 14		
9:00 a.m. – 12:15 p.m.	**Unit 13**	**The IMF Vulnerability Exercises** *Mr. De Nicolò*
	L–13	1. Structure 2. Overview of key methodologies 3. Putting it all together
	W–13	Constructing a Vulnerability Index
2:00 p.m. – 5:15 p.m.	**Group Workshop**	**Case Studies: Preparation for Participant Presentations**
Thursday, December 15		
9:00 a.m. – 12:15 p.m.	**Group Workshop**	**Case Studies: Preparation for Participant Presentations** *Facilitated by counselors*
2:00 p.m. – 3:15 p.m.	**Group Workshop**	**Case Studies: Preparation for Participant Presentations** *Facilitated by counselors*
3:30 p.m. – 5.15 p.m.	O–1	**Case Studies: Participant Presentations**
Friday, December 16		
9:00 a.m. – 10:45 a.m.		**Final Test and Review**
10:45 a.m. – 12:00 p.m.		**Course Evaluation and Presentation of Certificates**