INTERNATIONAL MONETARY FUND

IMF Institute for Capacity Development (ICD)

Joint Vienna Institute (JVI)

Course on Vulnerability Diagnostics (JV 17.10)

Vienna, Austria

April 17-28, 2017

Program[1]

Monday, April 17		
8:30 a.m. – 9:00 a.m.		**Administrative Briefing** Mr. Yuriy Makovetskyy (JVI)
9:00 a.m. – 10:00 a.m.		**Opening Session/Initial Test**
10:15 a.m. – 12:15 p.m.	L–0	**Vulnerabilities and Crises** *Mr. Maksym Ivanyna (JVI)* 1. Theoretical overview 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. Bertrand Candelon (consultant)*
	L–1	1. Defining tail risks 2. VaR measures of tail risks 3. Logit/Probit models 4. The signal approach: threshold methods
	W–1	Predicting Currency Crises via Probit/Logit Regressions
Tuesday, April 18		
9:00 a.m. – 12:15 p.m.	**Unit 2**	**Fiscal Vulnerabilities I: Assessing Debt Sustainability** *Mr. Ivanyna*
	L–2	1. Debt sustainability, debt crisis, and growth 2. Deterministic DSA in closed and open economies
	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**

[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.*

		Ms. Rui Xu (ICD)
	L–3	1. Taxonomy of financial risks 2. Measurement of financial risks
	W–3	Measurement of risks and introduction to stress testing
Wednesday, April 19		
9:00 a.m. – 12:15 p.m.	**Unit 4**	**External Vulnerabilities I: Bond Yields and Sovereign Default Risk** *Mr. Ivanyna*
	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** *Ms. Xu*
	L–5	1. Overview of stress testing 2. Single-factor sensitivity analysis 3. Identifying stress-testing scenarios: Case study
	W–5	Bank Stress Test
Thursday, April 20		
9:00 a.m. – 12:15p.m.	**Unit 6**	**Fiscal Vulnerability II: Short-term risks** *Mr. Ivanyna*
	L–6	1. Risk-based DSA 2. Interest rate growth differential and public debt 3. Refined analysis of growth and interest rate shocks
	W–6	Risk-based DSA, refined analysis of growth and interest rate shocks
2:00 p.m. – 5:15 p.m.	**Unit 7**	**External Vulnerabilities II: Current Account Imbalances** *Ms. Xu*
	L–7	1. Current account imbalances 2. External balance assessment (EBA)
	W–7	External Balance Assessment (EBA)
Friday, April 21		
9:00 a.m. – 12:15 p.m.	**Unit 8**	**Financial Vulnerabilities III: Financial Cycles, Business Cycles and Systemic Risk** *Mr. Candelon*

	L–8	1. Business cycles and financial cycles 2. Systemic risk
	W–8	Financial cycles and banking distress
2:00 p.m. – 5:15p.m.	**Unit 9**	**Fiscal Vulnerability III: Stochastic DSA** *Mr. Ivanyna*
	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, April 24		
9:00 a.m. – 12:15p.m.	**Unit 10**	**External Vulnerability III: Reserve Adequacy** *Ms. Xu*
	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. – 5:15p.m	**Unit 11**	**Financial Vulnerability IV: Spillovers and Contagion** *Mr. Candelon*
	L–11	1. Indicators of spillovers 2. Network analysis 3. Systemic risk measurement: VaR, CoVaR
	W-11	VaR, CoVaR, and ΔCoVaR
Tuesday, April 25		
9:00 a.m. – 12:15 p.m.	**Unit 12**	**Fiscal Vulnerabilities IV: Long-term Risks** *Mr. Ivanyna*
	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. – 3:30 p.m.	**GL**	**Guest Lecture: April 2017 World Economic Outlook** *Mr. Bertrand Gruss (IMF) and Mr. Weicheng Lian (IMF)*
3:45 p.m. – 5:15 p.m.	**GW**	**Preparation for Participants' Presentations**

Wednesday, April 26		
9:00 a.m. – 12:15p.m.	**Unit 13**	**The IMF's Vulnerability Exercises** *Mr. Candelon*
	L–13	1. Overview of the VEE 2. Key indicators and methodologies 3. Putting it all together
	W-13	Constructing a Vulnerability Index
2:00 p.m. – 5:15 p.m.	**GW**	**Preparation for Participants' Presentations**
Thursday, April 27		
9:00 a.m. – 10:30 p.m.	**L-14**	**Advanced Topics in Early Warning Systems** *Mr. Candelon*
		1. Evaluating EWS 2. Dynamic discreet choice EWS 3. Crisis mutation EWS
10:45 a.m. – 12:15 p.m.	**GW**	**Preparation for Participants' Presentations**
2:00 p.m. – 3:30 p.m.	**GW**	**Preparation for Participants' Presentations**
3:45p.m.-5.15p.m.	**GW**	**Case Studies: Participant Presentations**
Friday, April 28		
9:30 a.m. – 11:00 a.m.		**Final Test and Course Evaluation**
11:00 a.m. – 12:00 p.m.		Closing Session and Presentation of Certificates