# **GROWTH AND JOBS DIAGNOSTIC ANALYSIS**

February 24-28, 2014

Joint Vienna Institute | Vienna, Austria

# DAY 1: Monday, February 24

#### 9:00 – 9:15 INTRODUCTION FROM JVI

9:15 – 10:45 INTRODUCTION TO COURSE (Keller & Crespo)

Income Inequality: "The defining challenge of our time." (President Obama, Dec. 2013)

This session will overview of the importance of jobs for shared prosperity and inclusive growth, highlight the key jobs challenges policy makers are trying to address, and link these to the structure of the course: from macro underpinnings of jobs outcomes, to growth and derived demand for labor, to micro-level understanding of demand for jobs and skills, to issues and features of supply of labor, to approaches for growth and jobs diagnostics analysis and cutting edge development tools.

#### GROWTH JOBS AND WAGES: SYNDROMES FROM GLOBAL EXPERIENCES:

Growth doesn't necessarily create jobs. And not all jobs remunerate at decent wages. Experience around the world suggests that the relationship between growth and labor incomes, though positive on average and broadly constant in the past, is now becoming less predictable. "Jobless Growth" as a concept has been around for a while, but is now widespread in advanced economies following the global crisis. Productivity gains from innovation may lead to shared prosperity, or may deepen inequality in incomes; much depends on the flexibility of product and factor markets in an economy, and on labor demand and supply conditions. This session will present real world country "jobs and growth syndromes", whilst discussing the fundamental factors that ultimately determine whether growth leads to shared prosperity.

### 10:45 - 11:15 **COFFEE BREAK**

#### 11:15 – 12:30 **GROWTH THEORIES, GROWTH ACCOUNTING & JOBS** (Merotto)

The Macroeconomics of Growth and Jobs: This session will give an overview of macroeconomic growth models and their treatment of labor. It will then focus on the useful growth decompositions that can help the analyst in growth and jobs analysis: from growth accounting methods and to growth decompositions by expenditure,

production and income, and factor shares methods. It will also highlight core approaches to analyze labor supply, productivity and per capita income growth.

12:30 - 2:00 LUNCH

2:00 – 3:15 STRUCTURAL CHANGE, JOBS AND LABOR PRODUCTIVITY TRENDS ACROSS COUNTRIES (Garrido)

**THEORY/APPLICATION:** Achieving higher and shared growth almost always involves structural transformation, from low productivity activities to higher productivity activities. This session will introduce participants to the emerging approaches to understanding country capabilities in production, and the possibilities for moving toward higher value, employment creating activities. It will overview the changes in labor employment and labor productivity as a result of structural change, and highlight the determinants of such change based on empirical literature. Finally, it will focus on the data and methodologies useful for analyzing structural change at the macro level.

3:15 - 3:45 **COFFEE** 

3:45 – 5:00 MACRO-LEVEL GROWTH AND EMPLOYMENT TOOLS (Keller)

**HANDS ON EXERCISES:** This session will provide participants the chance to utilize a range of important macro level growth tools in practice, using pre-loaded data from around the world. Included in the exercises: growth accounting, growth decompositions, employment decomposition, and Shapley decomposition tool.

# DAY 2: Tuesday, February 25

9:00 – 10:15 GROWTH DIAGNOSTIC FRAMEWORK AND JOBS EXTENSION (Keller)

THEORY/ANALYTICAL APPROACH: The Growth Diagnostic framework (Hausmann, Rodrik and Velasco, 2005) emerged in response to the inadequacy of standard tools for identifying priorities for growth in a given country, and it has become an important approach in growth analysis. Combining elements from the theory of Second Best with a neo-classical model for the long run growth rate of per capita income, the approach sets to determine the reasons for low levels of investment among private entrepreneurs. The Inclusive Growth diagnostic framework expands on that to identifying constraints to productive employment and across sectors of the economy. This module will review the main elements of the growth diagnostic approach, and highlight how the methodology has been s adapted to analyze the constraints to productive employment.

### 10:45 – 12:00 WHO CREATES JOBS? THEORY AND ANALYSIS OF FIRM GROWTH (Merotto)

FROM THEORY TO ANALYSIS: Who Creates Jobs? What does micro economic theory and empirical research tell us about how businesses invest, grow, and hire? This session will provide a brief overview from theoretical and empirical literature on firm growth dynamics (investment, hiring and productivity enhancing innovation), and how different product and factor market and institutional distortions can affect the path of employment and wages with growth. The session will identify the key variables and analyses that the practitioner needs to enquire about from enterprise data —variables which are built into the design of the BuDDy tool in the next session.

### 12:00 - 1:30 LUNCH

### 1:30 – 2:45 THE NEW BUDDY TOOL FOR BUSINESS AND JOBS DIAGNOSTICS AND DYNAMICS (Merotto)

HOW TO USE THE BuDDy ANALYTICAL TOOL IN JOBS DIAGNOSTICS: This session will build on the theoretical overview by demonstrating this new World Bank data tool for demand-side jobs diagnostics. The session will start by identifying the data sources for the BuDDy tool (business censuses and national accounts surveys), and the key variables which are typically used for diagnostics. Through hands-on use of a sample of data from a country, participants will become familiar with the tool's structure and data capabilities. This will be followed by a demonstration of country applications of the BuDDy in helping analyze patterns, relationships between and changes over time in employment, real wages and productivity.

#### 2:45 - 3:15 **COFFEE**

# 3:15 – 4:30 **HANDS ON BUDDY** (Merotto)

HANDS ON EXERCISES: This session will be split in three tasks. First participants will learn excel-based commands to calculate, categorize, and label raw data sets for use in the analytic tool. Second, participants will be asked to derive statistical tables and charts presenting basic statistics on growth, employment and labor productivity across products, enterprise age and size categories, and geography *using* the BuDDy tool. The third assignment will be to derive analytic results; e.g. estimating structural transformation, and deriving dispersion of productivity across firms at the product level. Participants will be asked to draw their own conclusions on their findings.

# DAY 3: Wednesday, February 26

### 9:00 – 10:15 HUMAN CAPITAL AND JOBS: (Crespo)

**THEORY:** This session will provide an overview of the role of human capital as an input factor in production, in the spread of technology, and in individual earnings. It will highlight key econometric estimations which analysts use to evaluate returns to skills at the micro and macro level, which are used to identify potential skills shortages, differences in wage premia throughout the population, and productivity differentials and dynamics (Hands on exercise in the afternoon)

#### 10:15 - 10:45 **COFFEE**

# 10:45 – 12:00 DEMOGRAPHIC AND HK FORECASTING FOR JOBS ANALYSIS (Crespo)

**ANALYTICAL TOOL:** Introduction to demographic forecasts and their relation to jobs analysis. Overview of importance of education-structured demographic projections to understand potential jobs challenges (such as working age population shortages, specific skills shortages, etc). This session will instruct participants in using population pyramids to evaluate labor and skills dynamics.

# 12:00 - 1:30 LUNCH

1:30 – 2:45 CASE STUDY: BELARUS (Vincelette)

ANALYTICAL APPROACHES: Overview of growth and jobs diagnostic analysis in Belarus

#### 2:45 – 3:45 **IDENTIFYING SYMPTOMS FROM HOUSEHOLD DATA (Garrido):**

HANDS ON EXERCISE USING ADEPT LABOR: Building on the theory session in the morning, this session will demonstrate outputs from the World Bank's AdEPt Labor tool for a given country. This tool generates standard tables from household survey and labor force survey data, which give analysts a quick overview of labor market conditions across the population. The session will take participants through the tables and how to interpret them with regard to identifying possible symptoms, and how to analyze them.

#### 3:45 - 4:15 **COFFEE**

#### 4:15 – 5:30 HANDS ON EXERCISE: COMPUTING RATES OF RETURN TO EDUCATION (Crespo)

**HANDS ON EXERCISE:** Participants will calculate Mincerian rates of return to education across the population, and interpret results in a hands on exercise.

# DAY 4: Thursday, February 27

## 9:00 – 10:30 CGE MODELING FOR GROWTH PATHS AND JOBS POTENTIAL (Garrido)

ANALYTICAL APPROACH: A critique of Growth diagnostics has been that they are "path neutral" and static, whereas – as we have seen on days 1 and 3, economic growth and development entails structural change over time. Faced with a set of demographic projections and productivity levels, the policy maker responsible for identifying policy and investment solutions to create jobs, will need to consider how to steer the path of economic growth to generate shared prosperity. CGE models can help to investigate growth paths. The World Bank's MAMS model has been used to assess the jobs and wage income potential and poverty impact of alternative growth paths. This session will briefly describe the analytic approach, and present the insights that MAMS has provided in a number of World Bank growth studies.

10:30 - 10:45 Coffee

10:40 – 12:00 THE PRODUCT SPACE AND ITS LINKS TO JOBS (Keller)

**THEORY/ANALYTICAL APPROACH:** Beginning with an interactive game with participants on capabilities, this session will provide an overview of the Product Space methodology (Hausmann, Hildalgo, et al) to understand country capabilities, utilizing external trade data, and how this information can be linked to jobs analysis.

12:00 - 1:30 LUNCH

1:30 – 2:45 Case Study: Moldova (Merotto)

**ANALYTICAL APPROACHES:** Overview of growth and jobs analysis applied in the Moldova Country Economic Memorandum, demonstrating how demand and supply side issues were analyzed.

2:45 – 3:15 **COFFEE** 

# 3:15 – 4:30 ANALYZING SHARED PROSPERITY THROUGH JOBS (Lopez-Calva)

#### **ANALYTICAL APPROACH:**

With the new World Bank goal of ensuring rapid growth of income for the bottom 40% of the population, this presentation will overview some analytical methods for evaluating how jobs and labor earnings contribute to shared prosperity in ECA

# DAY 5: Friday, February 28

9:00 – 10:15 **DETERMINING POLICY CONSTRAINTS TO LABOR PRODUCTIVITY GROWTH WITH ICA DATA: (Garrido)** 

**ANALYTICAL APPROACH:** Policy makers confront a range of potential policy actions for improving growth and job, but determining which is likely to have the greatest payoff is challenging. To aid in policy, this session will highlight one econometric approach for evaluating the determinants of firm productivity, utilizing World Bank Investment Climate Surveys, which can be used to prioritize policy actions.

10:15 - 10:45 **COFFEE** 

10:45 – 12:00 DETERMINING POLICY CONSTRAINTS TO LABOR INCOMES FROM HOUSEHOLD DATA (Crespo)

**ANALYTICAL APPROACH**. While the first session highlighted a key methodology for prioritizing actions to improve firm productivity (and thereby labor demand), this session concentrates on the supply side of labor, and investigates key methodological approaches that are available for the analyst to prioritize changes to human capital accumulation, labor supply, labor mobility, and the like that could best improve overall jobs outcomes.

12:00 - 1:30 LUNCH

1:30 – 3:00 QUIZ – INTERRETTING SYMPTOMS / IDENTIFYING SYNDROMES (All Presenters)

**CONDUCTING A** *JOBS DIAGNOSTIC* **IN PRACTICE**: In this practical session, participants will be given data results for demography, economic growth decompositions, BuDDy findings, returns to education, and conclusions from Adept Labor tables. Working in teams, participants will draw inferences from the jobs diagnostic framework to conclude what the main areas should be to identify policy solutions. Each team will present their findings to the other teams for discussion.

3:00 – 3:30 WRAP UP, COURSE EVALUATION, Q&A