

## **Misallocation and Cross-Country Differences in Income: An Introduction**

Understanding the large and persistent differences in living standards across countries is both one of the classic issues in economics as well as being among the most important. A recent literature has highlighted the role of misallocation in helping us understand these differences. The goal of these lectures is to introduce you to the key elements of this literature. The lectures can be broken down into three parts:

### **1. Background: Cross Country Differences in Income and Development Accounting**

The first hour of the first lecture will introduce you to some key facts about cross-country differences in living standards. The two following Handbook chapters provide excellent overviews. I will briefly present some of the material from these two chapters during the first half of our first lecture.

Chad Jones Handbook of Macroeconomics 2016 “The Facts of Economic Growth”

Francesco Caselli, Handbook of Economic Growth 2005 “Development Accounting” (A much shorter and somewhat more recent overview is in Klenow, Hsieh, AEJ Macro (2010): “Development Accounting”).

Two older but interesting contributions that cover some of the same material are:

Parente and Prescott, Mpls Fed Quarterly Review 1993, “Changes in the Wealth of Nations”

Duarte and Restuccia, Fed Reserve Bank of Richmond Quarterly Review 2006 “The Productivity of Nations”

### **2. Static Misallocation**

Models of firm heterogeneity are a critical element of the misallocation literature. I will briefly present the three key variations of models of firm heterogeneity: the Lucas span of control model, the Hopenhayn model and the Melitz model. The second hour of our first lecture will introduce these three frameworks. While the three frameworks have much in common in terms of the basic economic forces that they capture, they differ in specific details and it is important to have a working knowledge of all three.

The second lecture (2 hours) will then briefly summarize three of the early contributions to the misallocation literature, which focus on the static effects of misallocation. Each of these three papers draws on a different model of firm heterogeneity and so will highlight the importance of being familiar with each of the three underlying theories.

Restuccia and Rogerson, RED 2008, “Policy Distortions and Aggregate Productivity with Heterogeneous Establishments”

Guner, Ventura and Yi, Review of Economic Dynamics, 2008, “Macroeconomic Implications of Size-Dependent Policies”

Hsieh and Klenow, QJE 2009, “Misallocation and Manufacturing TFP in China and India”

Also, see Restuccia and Rogerson, JEP 2017 “On the Causes and Consequences of Misallocation” for an overview and an extensive set of references.

### **3. Dynamic Misallocation**

The final one-hour lecture will focus on models that highlight the dynamic effects of misallocation. This will be followed by a one-hour question and answer period.

The key reference for the first hour of this lecture will be:

Hsieh and Klenow, QJE 2014, “The Life Cycle of Plants in India and Mexico.”

Other papers of interest include:

Bhattacharya, Guner and Ventura, Review of Economic Dynamics, 2013. “Distortions, Endogenous Managerial Skills and Productivity Differences”

Bento and Restuccia, AEJ Macro 2017. “Misallocation, Establishment Size, and Productivity”