Service-Led Economic Development: The Case of India

Closed to further applications **Faculty Member:** Fabrizio Zilibotti

This project is eligible for remote work.

Proposal Description:

This research project focuses on the role of the service sector in the process of economic development. Services play a large and growing role in both developed and developing countries today. The traditional view is that the expansion of service sector is corollary of development; the main driver are manufacturing and agriculture. This project intends to study whether technical progress in the service sector is an important determinant of economic growth and of the improvement in the living conditions of millions of people. More generally, we would like to quantify the role of service sector growth for the structural transformation and economic development.

India is a case in point. India has experienced a significant acceleration of the growth process in the three most recent decades. Like in many other countries, the aggregate employment share in agriculture has declined. However (different, e.g., form China) there has been no major increase in the employment share of the manufacturing sector. Rather, the lion's share of the structural transformation has been the growth of the service sector. We see also a great variation across Indian districts. Is this development process sustainable? Why is Indian development so different from China?

A problem in assessing the role of the service sector in the development process is that directly measuring service productivity is notoriously difficult. There are at least three problems. First, it is hard to measure the quality of the services provided. Second, service inputs are often embedded in final goods (e.g., Apple retail). Third, there is a lot of heterogeneity in what is common classified as a service sector. Think of lawyers vs janitorial services.

Our approach is to construct and estimate a structural model using granular data across India on employment shares, skills and prices. The dual role of services as inputs and final foods plays a crucial role in the theory. Another focal point of the theory is the tradability of the different items (service are typically provided locally, while manufacturing and agricultural goods are traded across space).

The project is highly data intensive. We have already collected data but need to do more. The data sources are microdata at the workers and firms level on 400 Indian districts between 1987 and 2012. The main source is the National Sample Survey, Employment Schedule (~500.000 obs / year). We are also using data from the Annual Survey of Industries (ASI), conducted by Central Statistics Office Industrial Statistics wing of the Government of India. We will need to further collect and match data from a variety of sources.

The project will be extended to the analysis of Sub-Saharan Africa. This will require a substantial new work of data collection and data reconciliation.

The project has a collaborative nature. It involves Michael Peters and Fabrizio Zilibotti at Yale University. Fabrizio Zilibotti will coordinate the project in the Fall 2020 when Michael Peters is on leave.

Requisite Skills and Qualifications:

We invite application from students with a strong background in economics and statistics. Skills and interests in data

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collection and econometric analysis are important. Knowledge of Stata and the ability to merge datasets are essential skills (please dwell on this in the application). Other quantitative skills (e.g., programming skills) are appreciated but are not essential. We expect the students to work in team and assist each other. We also expect them to cooperate with senior research assistants based at the different institutions involved in the project.

Award: Sarah Moon

Chris Yao

Tobin Application Link: Tobin Application

Project Type: Tobin RA Project Year: 2020 Term: Fall 2020

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