Jobs Diagnostic
Methodological Approach & Enquiry

Jobs and Migration
Core Course
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Jobs Approach

Jobs Diagnostic → Jobs Strategy → Jobs Policies and Projects
Jobs Strategies target key constraints identified in Job Diagnostics

Policies are organized around WDR MILES framework

**Job Creation**
- More
  - Net job creation by existing firms
  - Entry and growth of new enterprises

**Job Quality**
- Pillars:
  - Macro and Regulatory
  - Sectoral and Regional
  - Labor & Skills policies

**Job Access**
- Inclusive
  - Incentives
  - Information
  - Skills
  - Labor mobility
  - ... focus on women, youth, bottom 40

- Better
  - Labor productivity and earnings
  - Access to social insurance
  - Working Conditions

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Internalizing Jobs Externalities

Social Value of a Job > Value Added

Social Externalities

Labor Shadow Value

Market Price of Labor > Shadow Price (Social Opportunity Cost)

SRR >> PRR Social Private

RE-ASSESS MACRO/REGULATORY & LABOR POLICIES

CROWD-IN PRIVATE INVESTMENTS CONDITIONAL ON JOB CREATION OR BETTER QUALITY JOBS

• Fiscal/monetary policy
• Trade policy
• Labor regulations
• Labor taxation
• ALMPs

• Interventions to correct Jobs Linked Externalities (JLEs; subsidies/tax incentives)
• VC Development
• Aggregator programs
• SME Development
• Entrepreneurship
• Economic Inclusion
From Jobs Diagnosis and Strategies to Policies and Projects

- Explicit focus on jobs outcomes
- Better design of supply-side (training and intermediation) interventions
- Integration with demand-side interventions to increase the number of good jobs (formal or informal)
- Internalize Jobs Externalities in investment lending
Our Motivation

- Economic Growth
- Poverty / Inequality
- Social Stability

JOBS
Traditional Diagnosis: Capital Focus

Growth diagnostic (HRV)

Costs of Capital

Underlying Returns to firms’ capital

Appropriation of returns

FSAP
Financial Assessment

Trade/Export Infrastructure Skills

ICA/Doing Business
Evidence from Jobs Diagnostics suggests simply maximizing growth is not enough.

Employment Growth (y-axis) and Real GDP Growth (x-axis) for 5 year growth episodes in 169 countries from 1991-2015.
The problem is usually not the QUANTITY of jobs...
...the problem is JOB QUALITY

- Self Employment, 65%
- Informal Wage Employment, 20%
- Formal Wage Employment, 15%
especially in LICs and LMICs

JOB QUALITY is a problem

Why is so much labor in bad jobs?

Three labor market paradigms

• Neoclassical theory
  – Workers earn Marginal Product of Labor
  – Workers move between jobs until MPL is equated

• Classical theory (Ricardo, Marx)
  – Reserve army of labor
  – Workers get a subsistence wage and capitalists get the rest of the product (exploitation)

• Structural dualism (Lewis)
  – Separation of traditional and modern sectors in developing economies

Which of these prevails is an empirical question
“Structural dualism” is back in fashion

Arthur Lewis 1954

• Shifting labor from traditional to modern sector as key to development

• Multiple barriers negate relevance of the neoclassical paradigm in some cases; coordination gaps, mkt failures, market rigidities.

• Large gaps persist in the marginal productivity of labor between modern and traditional sectors
  – The prevailing modern sector wage rate does not reflect the opportunity cost of labor

Robalino and Walker (2018)
Jobs Diagnosis Approach

- **Macro trends**
  - Is the economy creating enough *better* jobs?

- **Labor Trends and Transitions**
  - Are people getting better jobs? (Who?) (Where?)

- **Business Trends**
  - Who creates jobs in the economy and how?
How People Benefit from Job Opportunities in a Growing Economy

More people join the labor force & find work
- Self-employment, start-ups, firm entry and growth
- Transitions: into employment, school to work from care-giving to labor force

People get better at doing their existing job:
- Returns to labor assets improve (incl thru’ farming, self-employment)
- Labor productivity rises within occupations;

Labor moves from less to more productive jobs (economic transformation)
- Structural change:
- Migration / Urbanization
- Formalization: people move from capital-thin self-employment, to capital deep waged employment in firms
- Selection between businesses

Higher productivity:
- raises earnings and
- creates demand for more goods and services.

Externalities from good jobs support development
What is a Job Diagnostic?

Structured enquiry into jobs outcomes in relation to economic growth in order to guide *jobs strategies*

- It covers:
  1. Economy-wide macro analysis (Labor market demographics, GDP and employment)
  2. Firm-level analysis (the “demand” for labor)
  3. Household-level analysis (using Labor Force Surveys to analyze the supply of labor)

- Start with an overview of economic growth and jobs outcomes
- And a profile of where people work and who creates jobs
- Use structured enquiry based on:
  - “theory of change” that development happens through *economic transformations*
  - economic theory (industrial organization theories, search and match labor theories) of what we should expect to see of firms and workers in healthy product and labor markets.
When is it important to do a Job Diagnostic?

Good Growth / Bad Jobs Outcomes
Aggregate Demand and GDP are rising faster than the working age population, but:

- Employment is not rising (low elasticity of employment growth). And there may be outmigration
- Productivity in main occupations is not rising
- Wages are not rising in line with employment and productivity
- People are not moving to take advantage of better jobs (due to misallocation of factors: formal, spatial, sectoral)
- Dualism - There is labor market segmentation (the law of one price does not hold) even though firms hire
- Employment is not rising for specific groups; youth, women, the bottom 40%, minorities
Jobs in Growth

Economic Growth

- More Jobs
  - Productivity Enhancing Transitions
- Better Jobs
  - Structural Change Productivity *Across*
  - Technical Change Productivity *Within*

Accumulate

- Human Capital

Increase Skilled Workforce

- Human Development

Invest

- Working Age Population

Innovate

- Labor Force Participation Employment

Diffusion of Technology

- Capital deepening

More Jobs

- Labor mobility
Jobs and Structural Change

Structural dualism holds (Lewis model)
- Low productivity coexists with high
- Law of one price does not hold

Neoclassical Model holds
- Incentives to innovate
- Incentives to invest

Poor Quality Jobs
- Slow growth
- Capital thin
- Low savings
- Low productivity
- Low hours worked
- Poor working conditions

Modern Sector
- Rapid growth
- Capital deep
- Economies of scale
- Drives savings
- Higher productivity
- Better hours
- Better working conditions
- Skills training, on-the-job learning

Better Jobs

Labor mobility

Capital accumulation
Innovation
Productivity Growth
Generates Savings
Key Questions to Ask - Macro

- Is growth fast enough to create enough jobs for young entrants?
- Are jobs outcomes, and poverty improving?
- What is driving real GDP per capita? How does this compare with other countries?
  - Is labor accumulation rising?
    - Working age,
    - Participation,
    - Employment rate
  - Is employment rising with output?
  - Is (labor) productivity rising?
    - Within sectors
    - From reallocation
    - Across locations
    - Across formal and informal sectors
  - Is labor moving to more productive sectors (locations, occupations, firms)?
    - Is employment urbanizing? (uses LFS)
    - Is employment formalizing? (uses LFS)
- Are gaps in productivity narrowing

Key dimensions
- Aggregate Demand
- Productive Capacity
- Investment
- Demography
- Participation
- Employment
- Productivity
- Structural Change
- Urbanization
- Formality
- Country Characteristics
Growth from a Worker’s perspective:

Labor Mobility
Labor Income
Cohesion

Transition into work:
- School to work
- Out of unemployment
- Into workforce

More Jobs
Better Jobs

Higher Individual and Household Welfare

Social Cohesion

Productivity gains in self-employment
Move between Occupations or Sectors
‘Formalization’ move to higher quality jobs
Selection: move to a better firm
Urbanization Migration

Better Jobs

Higher Expected Earnings over Time
Better Physical and Psychological Wellbeing
Social Identity
Social Networks
Sense of Fairness

Enhancing Transitions

Productivity gains in self-employment
Move between Occupations or Sectors
‘Formalization’ move to higher quality jobs
Selection: move to a better firm
Urbanization Migration
Workers respond to the demand for Labor

- Labor Force Participation
  - Type of occupation
- Labor Market Information
- Labor Market Regulation
- Expansion/contraction of current or creation of new establishments

Search efforts

-Social norms
- Skills Mismatch

Working Age Population

- Skills Mismatch
- Lack of Information

Search efforts

- Social norms
- Skills Mismatch

Firms

- Aggregate Demand
- New firms

Employment and Earnings

- Bargaining Wages and Type of Contract
- Investment Climate
- Bargaining Power

Entrepreneurs

- Social Insurance and Labor taxation
- Aggregate Demand

Entrepeneurs

- Entrepreneurship
- Employment

Employment and Earnings

- VACANCIES
- JOB SEEKERS

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Key questions on LM Supply Side (Workers)

- Who finds jobs and who does not?
- Do people change jobs?
  - Across which dimensions and why?
- Are people fully employed? Underemployed? Do they have multiple jobs?
- Do jobs match the skills people have?
- Does education pay?
- Which factors affect employment & earnings?
- Are workers protected? Are their rights enforced?
- Do taxes and social insurance incentivize employment?

Key Dimensions

- Gender
- Age
- Education
- Rural/urban
- Region
- Sector
- Occupation
- Contract Type
- Public/private employment
- Income/consumption levels
- Country relevant groups
The Demand Labor in the Formal Sector

- **Demand for Products rises or Prices rise (fall)**
- **New Firms Enter**
- **Efficient Firms Invest, and Grow, Inefficient Firms Shrink or Exit**
- **Productivity and Output Increase**
- **Job creation**
- **Wages**
  - Increase with productivity
- **Jobs**
  - Move to more productive sectors
  - Move to more productive firms
- **Competition spurs firms to react**
- **Selection**
- **Spillovers**

Factors influencing the demand for labor:
- Trade opens new external markets
- Foreign Direct Investment
- Fiscal policies
- Monetary & ER policy

New Firms Enter to meet increased demand, leading to increased productivity and output. Efficient firms invest and grow, while inefficient firms shrink or exit. This leads to job creation and increased wages, as wages increase with productivity.
Key Questions to Ask – LM Demand side (Firms)

- Are new firms entering?
- Do firms grow?
  - Which ones?
- Do micro firms survive and grow (or exit)?
- Are more productive sectors expanding?
- Are unproductive firms exiting?
- Is labor allocated to more productive firms?
- Are firms innovating?
- Are more competitive sectors more productive?
- Do productive firms pay more to their workers?

Key Dimensions (composition and changes over time):
- Size
- Age
- Sector
- Location
- Ownership
Jobs Diagnostic Facts & Findings: Macro
A country’s demography fundamentally frames its jobs challenges

Youthful Africa

South Asia Entering Demographic Transition

Population by five-year age groups, Sub-Saharan Africa (excl high income), 2015

Population by five-year age groups, South Asia, 2015

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Social Protection & Jobs
Productivity Growth is associated with GDP Growth and GDP Growth creates jobs on average.

But productivity growth is accompanied by less job creation.

Economic transformation is fastest in low income countries, where reallocation of labor from low to higher productivity sectors explains most of the total productivity growth on average.

It happens fastest in LICs, and growth is faster, when agricultural productivity is growing.
Agriculture sheds jobs as productivity rises but not when productivity falls.

This is true for high, low and negative overall GDP growth.
Economic transformation in LICs typically involves more labor movement into services than into industry

Example Zambia
And in many growth episodes economic transformation out of agriculture is associated with declining/stagnant average labor productivity in receiving sectors.

**Example South Africa**

**Total Employment by Sector South Africa 2000-2014**

**Value Added per Worker by Sector South Africa 2000-2014**
Urbanization is correlated with per capita GDP. Growth in the share of the urban population is fastest in low income countries, where it is fastest outside of the largest city.
Uses most recent Labor data for 141 countries (fewer countries where data exclude the use of the survey, but typically over 130)
Labor Force Participation rates are highest in low income countries (LICs), lower for middle income countries (MICs) and then higher again for Higher Income Countries (HICs)

149 countries included covering the years 1999-2016
Labor Force Participation rates are highest in low income countries (LICs), lower for middle income countries (MICs) and then higher again for Higher Income Countries (HICs).

This result is driven by females and youth.
Employment patterns vary greatly over GDP per capita – more developed countries have higher shares of wage work.

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Richer countries have more rural waged employment
And more waged employment for women
Poorer countries feature high **underemployment** not **unemployment**

...but also more excessive work hours
Informal employment is lower in MICs than LICs but is persistently high across countries covered.
Public sector employment accounts for a relatively large share of formal employment in Low Income Countries.
So Who finds a Good Job? Labor Market Status evolves differently over the Life Cycle for Men and Women.

**Work status:**
- Out of Labor Force
- Unemployed
- Unpaid (family) workers
- Self-employed
- Employer
- Informal Wage Employee
- Formal Wage Employee
Education also affects the Evolution of Labor Market Status with Age

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- Out of Labor Force
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Jobs Outcomes improve with Education and Urbanization

Nepal LFS 2008 - Working age population (15-64) with a non-missing and nonzero wage. Mean wages are reported as weighted.
Employment in Services increases as Countries develop
Jobs Diagnostic Facts & Findings: LM Demand (Firms)

This section uses representative business census and survey data for a selection of LICs and MICs undertaking Jobs Diagnostics.
Firm Level analysis in JD refers only to the formal non-agricultural

- Formal private sector (PS) employs only a small portion of the working age population
- BUT PS drives both productivity and employment growth
- It is responsible for most value added and growth
- Jobs in the PS provide better wages, more stability and opportunities for skill development and human capital formation
Most firms are micro. Large firms employ more people

Micro firms comprise between 50 and 95 percent of all firms, but over 40 percent of employment in the formal private sector is in large firms. There is also large concentration of workers in few very large firms (the top 1% of largest firms hold more than one third of the jobs in the formal private sector.)
Micro firms can persist over time and are unlikely to expand employment.
Large firms do not necessarily have higher labor productivity than small firms

Lack of robust correlation between firm’s size and firm’s productivity undermines the existence of economies of scale or a selection process where more productive firms grow.
Large firms are likely to pay higher wages
New and young firms are a primary source of net job creation.

Young firms typically hold 10 to 50 percent of jobs.
Employment growth of young firms is faster and slows as firms age.
Churning is high; entrants are very important for job creation
The more productive the firm, higher the wages

Productivity as Determinant of Wage

- Regressions in each country are estimated independently.
- All coefficients are significant at least at 90%.
- Specification controls for size, age, ownership, sector (2-digit), location, and year.
- Omitted category: quartile 1 (lowest productivity).
- Source: Jobs Diagnostic Team (SPJ).
Specific evidence shows that labor is allocated to more productive firms but productivity gains is accompanied by job losses.

The *between* term (green), positive in all countries, shows that firms with above average productivity are expanding their employment share in the economy. The *cross* term (grey), negative for all countries, shows that increasing productivity decreased labor share.
Thank you!