Labor Market Information – An Introduction

New Sources of Labor Market Information for Better Matching, November 4, 2019

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Jobs, Labor & Migration Course

Working definition

Labor market information (LMI) includes any quantitative or qualitative information and intelligence on the labor market that can assist labor market agents in making informed plans, choices, and decisions related to business requirements, career planning and preparation, education and training offerings, job search, hiring, and governmental policy and workforce investment strategies.

Stylized labor market
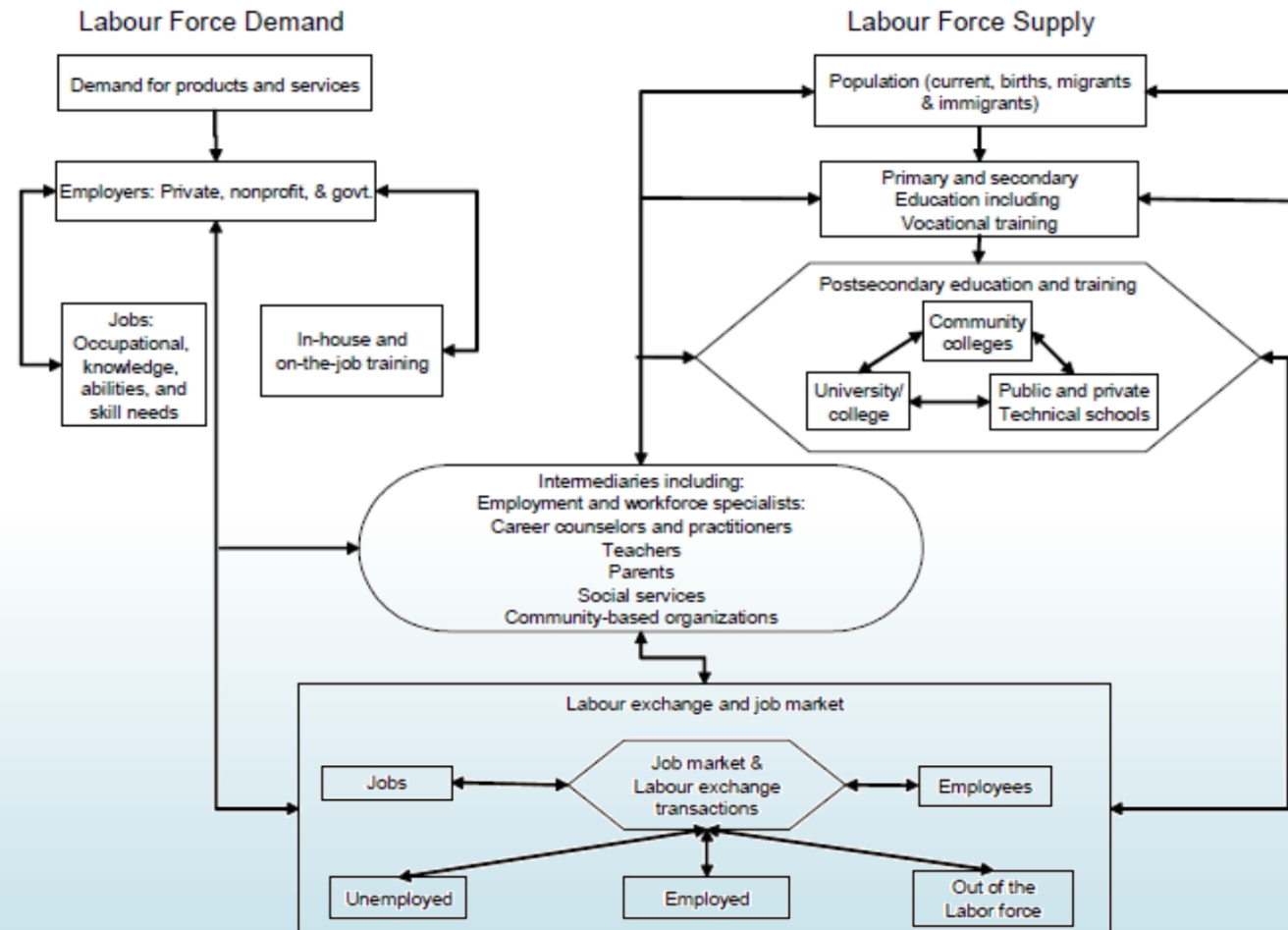
> **Information is a fundamental requirement for a functioning labor market.**

Theoretical and practical rationale

❖ **LMI is a fundamental requirement for efficient labor markets**

- Theoretically, a fundamental assumption of competitive labor markets is access to full information
- In turn, lack of access to quality LMI creates inefficiencies in job search and matching, and career planning
- Emerging empirical research shows LMI can improve the speed & quality of matches (cf. Belot et al., 2019)

❖ **LMI is a public good: use by one agent does not diminish its value and access for another**

- This reduces incentives for private production and argues strongly for governmental investment
- Nearly all countries recognize the need for government intervention in developing and disseminating LMI
- Increasingly, partnerships with development partners and the private sector play an important role

❖ **Globalization and digitization increase the importance of LMI**

- LMI can help a nation compete effectively in the international marketplace
- LMI can help students and job seekers identify job opportunities in an ever faster changing labor market

LMI users

Government officials

- Gauge health of economy
- Make policy and program decisions
- Determine impact of policies
- …

Individuals

- Manage career planning and development
- Determine skills required
- Get info on projected growth or decline by occupation
- …

Labor market intermediaries

- Provide information to employers
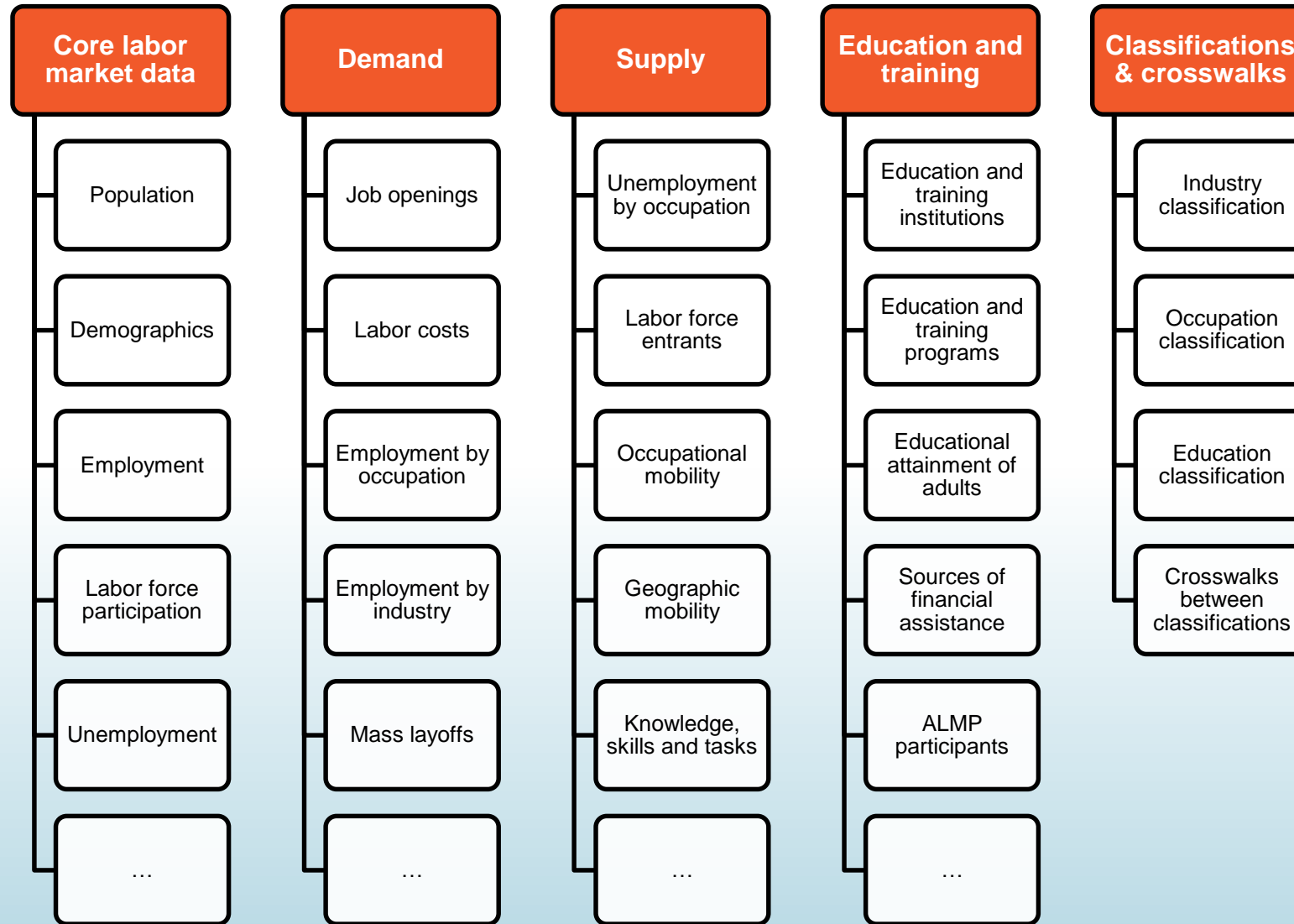- Provide information to job seekers
- Plan services for clients
- …

Employers

- Determine appropriate wages and benefits
- Assess the quantity & quality of the labor pool
- Assess economic conditions to determine future plans

Education / training providers

- Determine programs, curricula, and career services
- Determine demand by occupation
- Identify training sources
- …

LMI types

Core labor market data	Demand	Supply	Education and training	Classifications & crosswalks
Population	Job openings	Unemployment by occupation	Education and training institutions	Industry classification
Demographics	Labor costs	Labor force entrants	Education and training programs	Occupation classification
Employment	Employment by occupation	Occupational mobility	Educational attainment of adults	Education classification
Labor force participation	Employment by industry	Geographic mobility	Sources of financial assistance	Crosswalks between classifications
Unemployment	Mass layoffs	Knowledge, skills and tasks	ALMP participants	
…	…	…	…	

LMI sources

Surveys	Administrative data bases	*New* sources of LMI
• Household surveys • Enterprise surveys • Surveys of education providers • …	• Unemployment insurance records • Employment services' records • Education providers' records • …	• Jobs listings • Online searches • Job candidates' resumes • …

Example of new sources of LMI

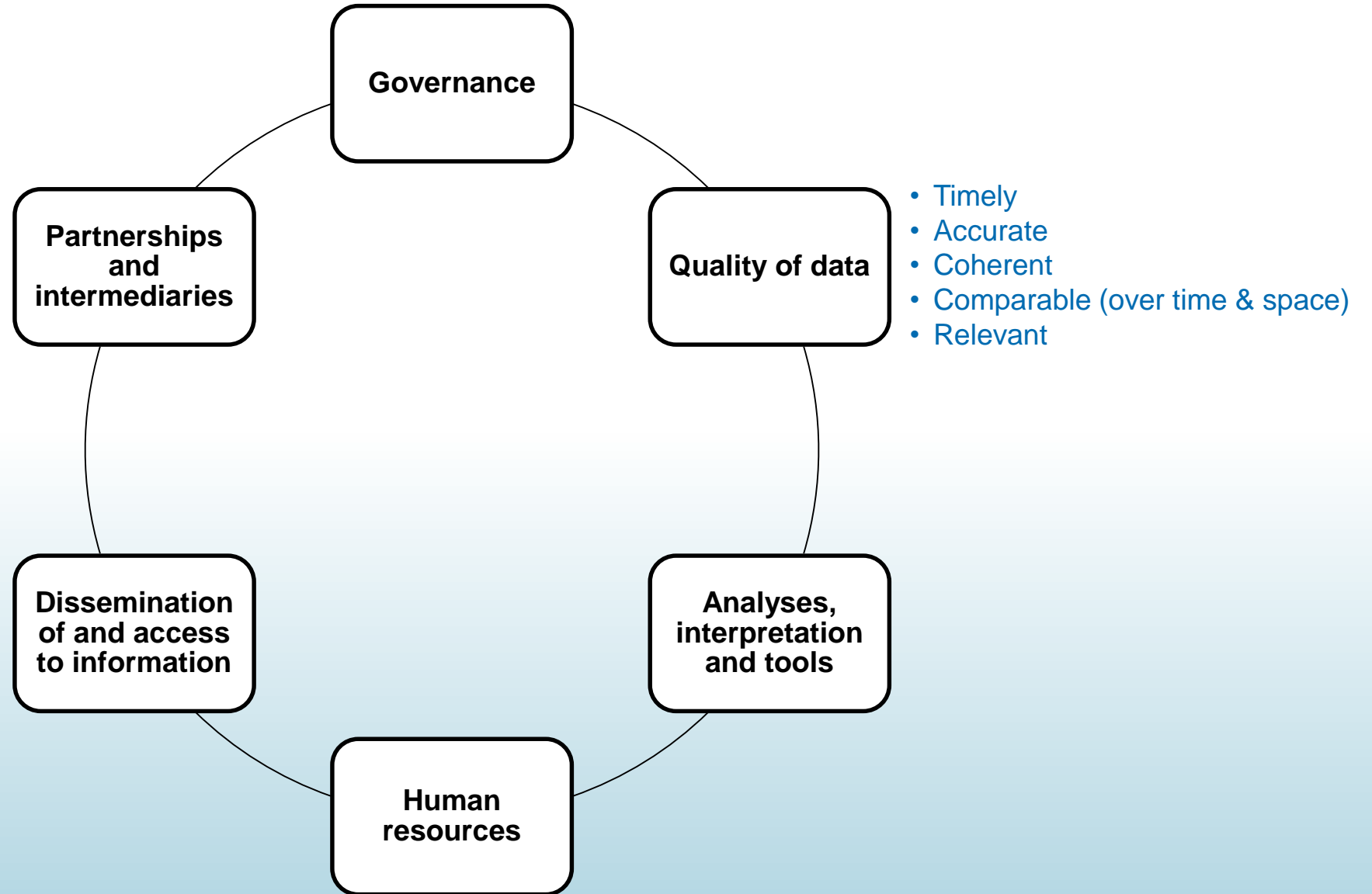Google search index for "unemployment" — Unemployment rate
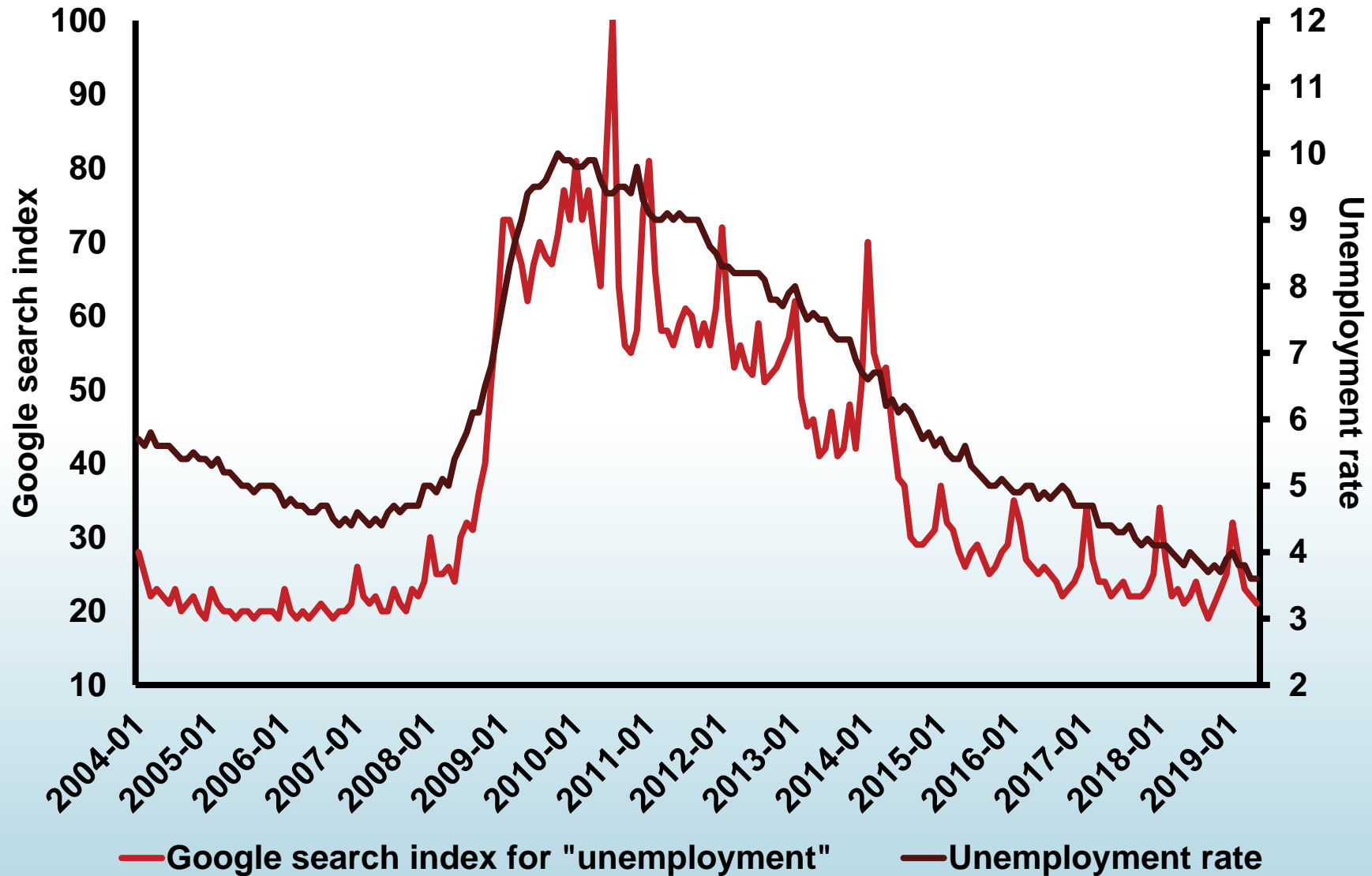
Old vs. new sources of LMI – Overview

❖ **Traditional LMI (government-collected censuses, surveys, and administrative data) is representative, but time-consuming and costly to collect**

❖ **New sources tend to be cheap to collect, to be generated constantly ("real time"), and to offer rich data ("granularity"), though there are concerns about representativeness**

❖ **There are many applications of these new sources of LMI**

- The Central Bank of Ireland is using clicks on job ads to measure labor market tightness
- EU's CEDEFOP is using online job ads to analyze skills requirements
- Lots of research has been done in the US (monopsony, skills needs, job search)
- World Bank: Malaysia, Kosovo, Moldova, India, Turkey, Ukraine, Indonesia, China (and likely others)
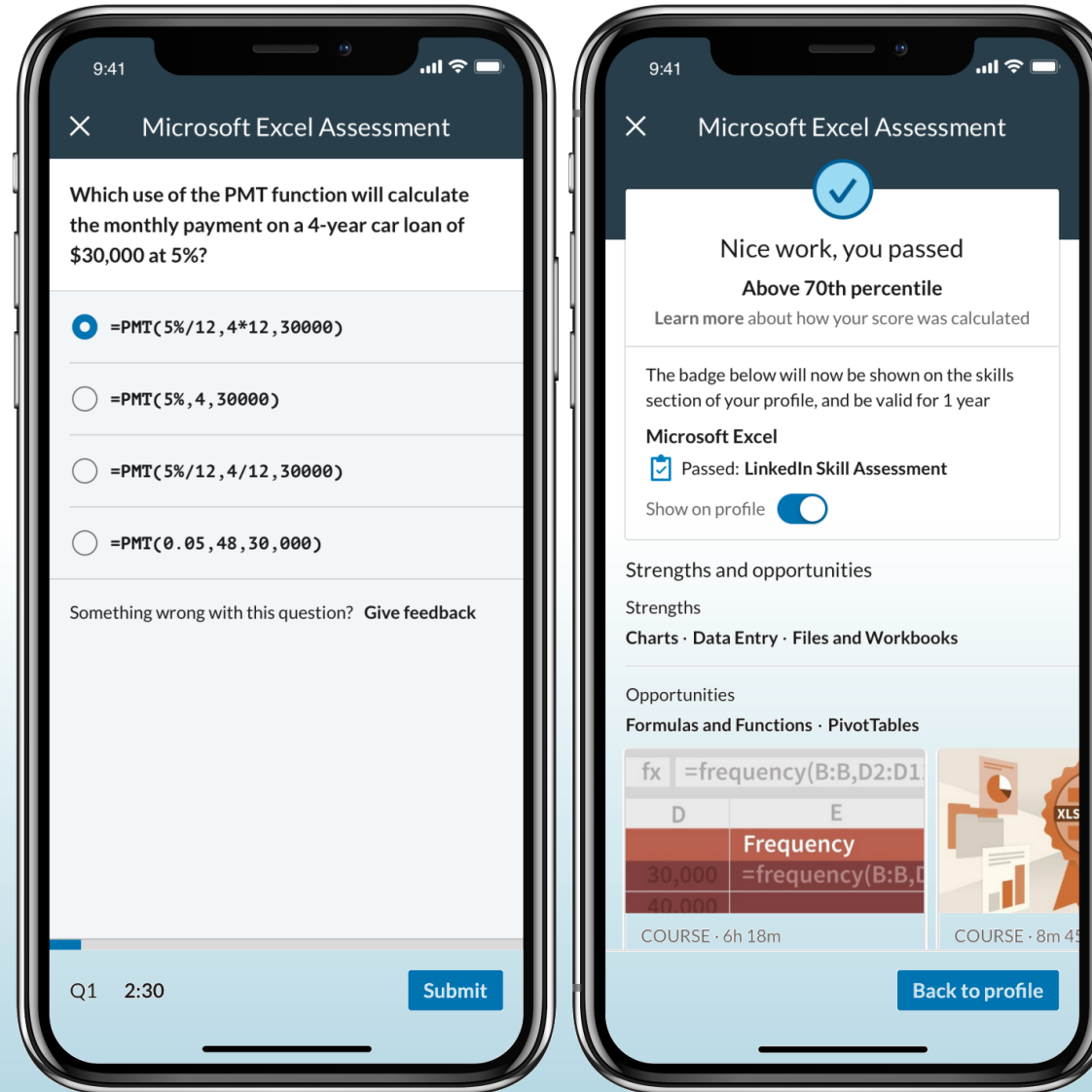- ...

Old vs. new sources of LMI – Job vacancies

	Traditional LMI	New LMI
WHO	Collected, analyzed, and reported by government agencies	Gathered and organized by private companies
COSTS	Usually all information available for free	Much information available for free (e.g. basic vacancies); paid licenses for others (e.g. job matching services for employers)
COVERAGE	Potentially covers virtually the entire labor market	Covers only jobs advertised online (selection?)
TIMING	Available on a monthly basis (at best) and with a significant lag	Often updated at least once a day and available almost immediately
DETAIL	Lacks detail about specialized skills in demand; may not keep pace with changing, current employer demands	Provides detail on skills/tools or technologies used, certifications preferred, and new and emerging job needs
GEOGRAPHY	Provides national data and sometimes data for states and major population areas	Detailed data by state, region, or population area
POSSIBLE QUERIES	Job information available by occupational or industry category, and in some products or tools, by title, skill or keyword search	Can search job listings by job title, occupation, industry, keyword, skills, certification, or other attribute

Implementation factors

- Timely
- Accurate
- Coherent
- Comparable (over time & space)
- Relevant

Governance

Quality of data

Partnerships and intermediaries

Analyses, interpretation and tools

Dissemination of and access to information

Human resources

Example of skills assessment tool

Dissemination of LMI

Data repositories

Provide easy access to data without necessarily organizing information for specific uses

Targeted at specialized users for research, policy making, tracking trends in the economy, etc.

General web / mobile applications

Designed to meet the needs of several different clients (e.g. job seekers and employers)

Include a variety of tailored paths through the system for different groups of users

Customized web / mobile applications

Designed for a specific service, such as career information, skills certification, or front line decision support

Must include logical processes to navigate through the information in the context of specific user needs

Hard-copy products

Remain an important way of reaching users through schools, employment services, newspapers etc.

Should be designed to complement web / mobile applications

➢ **Do not emphasize outputs but how LMI products and services can most effectively and efficiently serve clients.**

This session's case studies

This session's case studies will highlight innovative examples from around the world of both traditional and new sources of LMI and their uses

- ❖ **Kenya:** building a labor market information system
- ❖ **Malaysia:** creating occupational profiles for in-demand occupations
- ❖ **Turkey:** providing jobseekers with LMI to persevere in the job search process

Questions to course participants

What types of LMI do you use in your day to day work, if any?

Are you aware of any new or innovative sources of LMI in your country?

Can you share any innovative approaches for disseminating LMI in your country?

Thank you!

Sources and further reading:
Belot, Kircher and Muller (2019): Providing Advice to Jobseekers at Low Cost: An Experimental Study on Online Advice. Review of Economic Studies 86: 1411–1447.
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Dorrer (2016): Using Real-Time Labor Market Information to Achieve Better Labor Market Outcomes. Lumia Foundation, Washington, DC.
Johnson (2016): Can Big Data Save Labor Market Information systems? RTI, Research Triangle Park, NC.
Maher & Maher (2016): Promising Practices in Leveraging Traditional and Real-time Labor Market information. Maher & Maher, Neputune, NJ.
Woods and O'Leary (2006): Conceptual Framework for and Optimal Labour Market Information System, W.E. Upjohn Institute, Kalamazoo, MI.