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Principles of Labor Market Information

Easily accessible high-quality labor market information (LMI) is a key ingredient to the success of a modern economy. The importance of LMI to the efficient functioning of product and input markets has increased with the expanding globalization of economic activity. Labor market information can improve both the short- and long-term matches of labor supply and demand, ensuring that individuals acquire the skill sets required by employers for today’s dynamic labor market. This article offers a description of what makes up LMI, who produces and uses it, how it is disseminated, and some future directions for LMI.

What is LMI

Labor market information includes all quantitative and qualitative facts related to labor markets. Summary statistics are included, as are demographics; employment; unemployment, and vacancy rates; industry data; occupational statistics; summary reports on outcomes; and forecasts of future trends (see Table 1).

A common thread running through all LMI is that it must be timely, accurate, consistent, and relevant to labor-market activity. Development of these data also requires adequate funding, reliable data-gathering systems, and proper statistical methodologies.

In addition to quantitative data, LMI should include qualitative information based on expert judgments of local LMI analysts and other informed sources. Combined with evidence from quantitative data, these can support well-informed decisions. In fact, expert judgment and contacts within local communities often provide the most timely LMI. For example, mass layoff survey data are often incomplete. But, combined with phone calls to the human resource directors involved, the data

yield a picture of short-term labor market trends. Such an assessment could not be performed from analysis of quantitative data alone.

Analysis and interpretation turn raw data on labor market activity into usable intelligence for decision making.

Who Produces LMI

Government plays a critical role in building and maintaining an optimal LMI system. While theory suggests that markets themselves might generate information sufficient for effective decision-making, the complexities of the market make it nearly impossible for all or even most relevant information to be generated and made available through normal market channels.

As a result, a government role in LMI has been pursued and accepted in most developed industrialized countries. Public provision can be rationalized since LMI has characteristics of a public good. Its nonexclusion in consumption reduces incentives for private production,

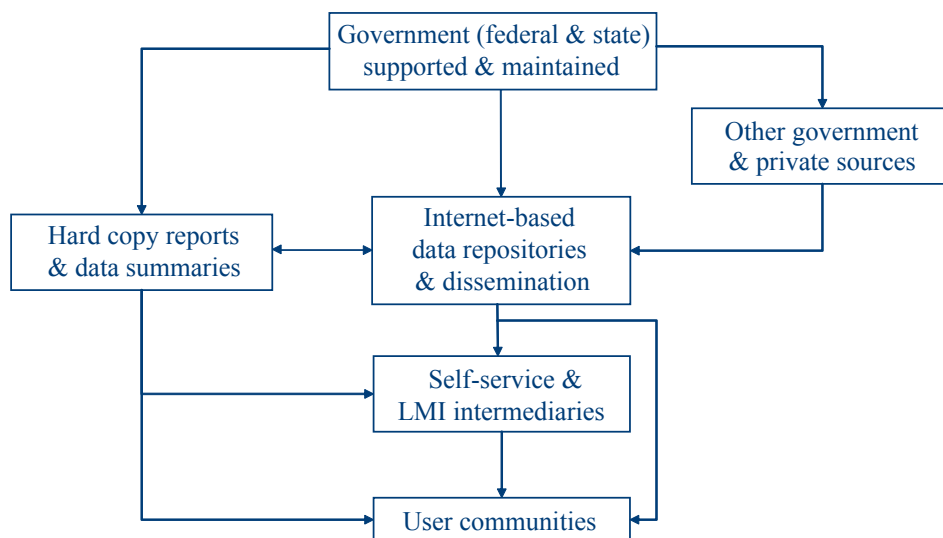
leading to an undersupply of LMI. Public investment in LMI can improve labor market performance by better matching workers’ skills with employment opportunities, which can yield spillover benefits from economic growth.

In the United States, the bulk of LMI is gathered by the U.S. Department of Labor (specifically, the Bureau of Labor Statistics and the Employment and Training Administration) in partnership with state employment agencies. The U.S. Census Bureau also collects data which provides useful LMI, and private sources contribute data as well.

- The Bureau of Labor Statistics (BLS) is the principal fact-finding agency for the federal government in the broad field of labor economics and statistics. It collects data on employment, unemployment, mass layoffs, job gains and losses, prices and living conditions, compensation and working conditions, productivity, and more.

- The Employment and Training Administration (ETA) administers federal government job training and worker dislocation programs, federal grants to states for public employment service programs, and unemployment insurance benefits. These services are primarily provided through state and local workforce development systems. In addition, it funds a variety of workforce

Figure 1 Labor Market Information Flows



training programs and labor exchange services which are administered at the state and local level. ETA also funds a variety of research, demonstration, and evaluation projects which gather vital labor market information.

- State employment agencies work with the BLS to collect and analyze data on state and local labor market issues.
- The U.S. Census Bureau, besides collecting general population and economic data, collects labor market information via the Current Population Survey which it administers for the BLS.

Who Uses LMI and Why

An effective LMI system is demand-driven. Figure 1 displays LMI flows between originators and users of information. Consumers of LMI make up a diverse community, and each has specific needs that LMI originators must address. These consumers and their needs include the following types:

- Job seekers making both short- and long-term career development decisions, e.g., whether to attend college or community college or enlisting some other skills training;
- Employers making decisions pertaining to recruiting, business expansion, relocation, employee skill development, and employee compensation;
- Education and training institutions planning, implementing, and evaluating programs, curricula, and career guidance to meet the needs of both job seekers and employers; and
- Government officials making policy regarding funding, design, and operation of public programs.

In addition, LMI is used by labor market intermediaries, including public employment offices, private employment agencies, counseling services in educational and training institutions, economic development planners, human resources specialists, and consultants.

Many analyses created from LMI are relatively simple yet valuable: descriptions of trends over time;

Table 1 Elements of Labor Market Information

Category	Variables
Macro labor force	Population and demographics, employment and unemployment, labor force participation and characteristics, insured unemployed
Labor demand	Job vacancies, occupational wage rates, occupational employment estimates and projections, industry employment estimates and projections, industry staffing patterns, occupational distribution across industries, mass layoff data, business establishment counts and size, industry average earnings, business births and deaths
Occupational supply	Occupational employment and unemployment, participants and completers of education and training programs, new entrants to the labor force, occupational transfers, geographic migration, labor force separations, primary activity of persons out of the labor force, educational outcomes
Occupational characteristics	Job skills, abilities, knowledge, activities, content; job education and training requirements; interests; work styles Narrative descriptions of occupations, licensing and certification requirements
Education and training information	Education and training institutions, education and training programs, program descriptions, course descriptions, educational attainment of adults, financial assistance sources for education and job skill training—particularly public sources
Classification systems and crosswalks	Industry, occupation, education program, military classifications, crosswalks between classification systems

comparisons across geographic regions, industries, occupations, and skills; narrative analysis tailored to specific applications; and graphical representations of information. More sophisticated formal analyses convert masses of data into useful labor market intelligence. A particular area beneficial to job seekers, employers, educators, and policymakers is forecasting occupational demand and levels and trends in local area unemployment. In the United States, both of these estimates are produced under the direction of the Bureau of Labor Statistics in cooperation with state LMI experts.

How LMI is Disseminated

Led by a dramatic improvement in access to LMI because of its availability on the Internet, dissemination systems have been reformatted to serve the customized needs of different user communities. As Figure 1 shows, an optimal LMI system should present information in alternative ways to serve a wide variety of customer needs. These methods include traditional print delivery products as well as Web-based applications. Today, much LMI is made available to consumers on the Internet in

formats that permit structured queries and downloads to spreadsheets.

Labor market analysts play an integral role in disseminating LMI. Because funding may be limited, consumers of LMI may be tempted to rely on Internet-based delivery systems to the exclusion of LMI professionals. However, analysts, particularly local professional labor market analysts, play a key role in turning labor market data into labor market intelligence. They interpret information, support data development, serve as sources of qualitative LMI, and perhaps most importantly provide user support, particularly to local employer communities.

Intermediaries who convey and interpret LMI for end users should also be viewed as part of the system and not simply as users of information. Counselors, educators, career information delivery systems, and assessment organizations all use information; however, it is just as important that they serve as interpreters and disseminators of information. Many public and private organizations not only provide outlets for users to access information, they also tailor products for different customer needs such as economic development, career planning, job search, and curriculum development.

A valuable dissemination goal for LMI systems is the education of users. Teaching job seekers and employers how to understand and effectively use LMI to make informed decisions can yield a high payoff. Personal and social investments for skills upgrading, education, training, career choice, and hiring decisions are expensive in terms of both money and time. Efficient use of LMI by informed consumers can increase their chances for labor market success.

One interesting approach to educating users is the online “coaching software,” which is built into an application that not only helps guide users through the system but also helps convey the process and logic of decision-making. Online coaches allow users to respond to a series of questions or options that guide the user through a system or even across different systems. A good example of this is embedded in the online one-stop system from the Employment and Training Administration (<http://www.onestopcoach.org>).

Finally, frontline staff in public employment centers are key LMI intermediaries who construct “intelligence” for job seekers and employers. They use a wide range of LMI and deliver intelligence to a variety of clients in different contexts. An innovative approach to assisting frontline staff in delivering customized LMI is presented in the Frontline Decision Support System (FDSS) developed by Eberts and O’Leary (2002) (see sidebar).

Future Directions

An important theme for LMI going forward is collaboration. Ten years ago the North American Industrial Classification System (NAICS) was introduced to provide comparability in statistics for measuring business activity across North America. It was developed jointly by the United States, Canada, and Mexico. A similar international collaborative effort to develop LMI could benefit job seekers, employers, and policymakers in all three countries. Such LMI could also be an important pillar supporting immigration reform.

Canada and the United States each have excellent new occupational classification systems: the National Occupational Classification (NOC) and O*NET, respectively (Woods and O’Leary 2006). Both systems are based on knowledge, skills, abilities, and other measurable characteristics. North America could benefit from collaborative development of a unified system for Canada, the United States, and Mexico. Advances in automated job-matching systems depend on success in this area.

Through collaboration among LMI providers, Internet access to pertinent LMI can continue to be improved for both intermediaries and self-service users. A one-stop portal for LMI would offer easier access to LMI online as well as to state and federal resources. Success in this area depends on further harmonization and improvement of crosswalks between data systems.

As labor markets become more complex and dynamic, nations and regions with the best sources of labor market intelligence will have an edge in improving labor market efficiency and global economic competitiveness. Therefore, it is imperative that governments continue to support LMI systems and that LMI be made accessible to as wide an audience as possible.

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LMI Resources

<http://www.onestopcoach.org>. U.S. labor market information useful to job seekers, employers, students, and workforce professionals.

<http://www.labourmarketinformation.ca>. Canadian labor market information for job seekers, employers, practitioners, analysts, and systems developers.

<http://www.xwalkcenter.org>. The National Crosswalk Service Center.

<http://www.lmi-net.org>. The Labor Market Information Training Institute.

Frontline Decision Support System

The FDSS pilot tested in Georgia provides customized LMI for job seekers through the employment service Internet site. Frontline staff access this information and use it to provide guidance to clients. FDSS comprises two main parts: 1) the systematic job search module, and 2) the service referral module. The former facilitates a structured search of vacancy listings. It also provides an estimate of the probability a job seeker will return to a job similar to his prior one, an estimate of reemployment earnings, and a list of occupations related to his prior one, and it screens job vacancy listings by region, occupation, and earnings requirements. The latter module identifies the sequence of activities that most often leads to successful employment for clients with similar background characteristics.

<http://www.careerinfonet.com>. Source of information for researchers, analysts, and systems developers about the U.S. labor market by occupation, industry, and region.

References

Eberts, Randall W., and Christopher J. O’Leary. 2002. “A Frontline Decision Support System for Georgia Career Centers.” Staff working paper 02-84. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <http://www.upjohninstitute.org/publications/wp/02-84.pdf>.

Woods, James F., and Christopher J. O’Leary. 2006. Conceptual Framework for an Optimal Labour Market Information System: Final Report. W.E. Upjohn Institute Technical Report 07-022 (December). Prepared for Employment and Social Development Canada. <http://www.upjohninstitute.org/publications/tr/tr07-022.pdf>.