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In this issue . . .

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Missing Pieces: A New Report to Congress Details Biases and Gaps in Economic Statistics Resulting from Globalization



*Stephen A. Wandner*

From Workforce Research to Workforce Policy

Vol. 17, No. 4

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## Missing Pieces

### A New Report to Congress Details Biases and Gaps in Economic Statistics Resulting from Globalization

*This article is adapted from Houseman and Ryder (2010b). That document, along with the research papers underlying the report that was sent to Congress (Houseman and Ryder 2010a), can be found at [www.upjohn.org](http://www.upjohn.org). See the references on p. 4 for URLs.*

**G**lobalization of the U.S. economy is perhaps the most important economic phenomena of our time. The value of trade has increased dramatically over the last two decades relative to the size of the U.S. economy, reaching the equivalent of 30 percent of U.S. GDP in 2008, just

**The report was motivated by concerns that offshoring has resulted in systematic biases in key economic statistics and in an understatement of the true effects of trade on the U.S. economy.**

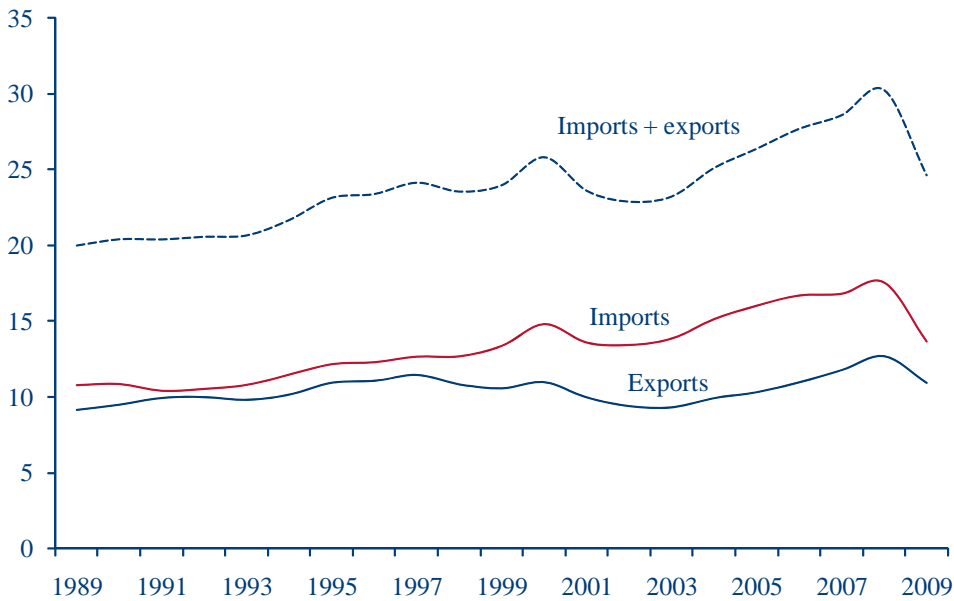
prior to the onset of the recession. The growth of imports greatly outpaced the growth of exports, resulting in a widening trade deficit in the 2000s (Figure 1). Moreover, import growth was largely accounted for by imports from emerging economies, reflecting a fundamental shift in the composition of our trading partners (see Figure 2). In recent years, China became the largest exporter to the United States, surpassing Canada.

While the growth of international trade and the emergence of China and other developing economies as major trading partners offer great opportunities for Americans, these developments also present many challenges, particularly during recessionary times. Formulating effective labor market policies in a global economy requires understanding how recent developments in international trade impact U.S. businesses and workers. Critical questions include

- What are the effects of imports, particularly from low-wage countries such as China, on U.S. wages, employment, and inequality?
- Will specific federal and state stimulus programs be effective in mitigating unemployment, or will there be considerable leakage of the monies spent on imports?
- What is the import content of exports, and how effective will export promotion policies be in raising domestic employment?
- How will the expected rise in trade in business services affect the occupational distribution of employment in this country and the educational requirements of U.S. workers?

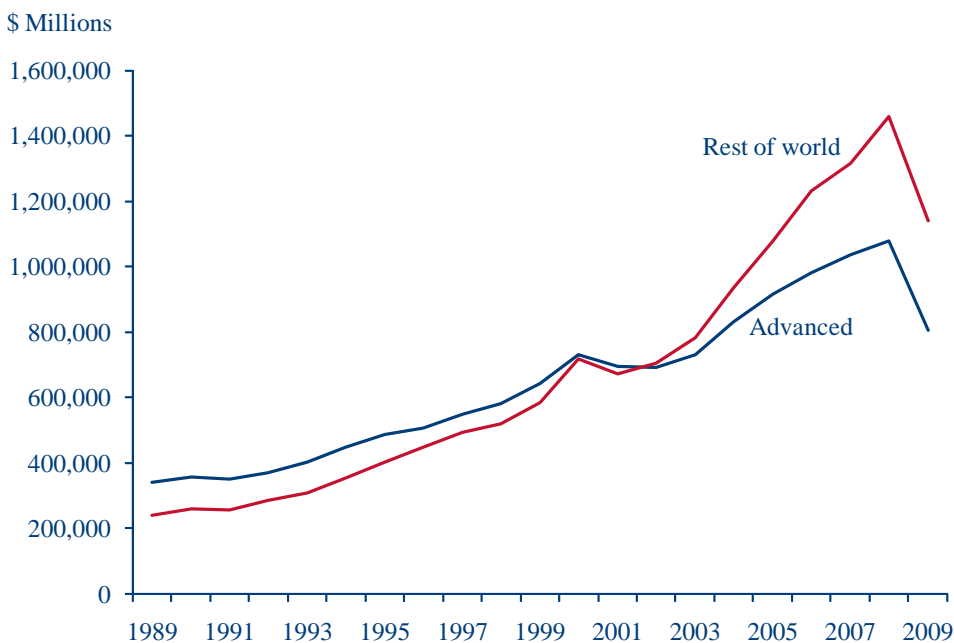
Answering these questions requires good economic data. But while the

**Figure 1 Imports and Exports as a Percent of GDP**



SOURCE: National Income and Product Accounts, U.S. Bureau of Economic Analysis.

**Figure 2 Imports by Country Type**



NOTES: Advanced countries include Western European countries, Canada, Japan, Australia and New Zealand.

SOURCE: U.S. International Transactions, U.S. Bureau of Economic Analysis.

growth of globalization underscores the need for sound data to understand its effects and formulate policies, globalization greatly complicates the collection of economic data and the construction of reliable statistics.

A new report to Congress by the Upjohn Institute, in collaboration with the National Academy of Public Administration, was motivated by concerns that “offshoring” or the growth of imports from low-wage economies has resulted in systematic biases in key economic statistics and in an understatement of the true effects of trade on the U.S. economy. (This concern was publicized in Mandel [2007].) The report, *Measurement Issues Arising from the Growth of Globalization* (Houseman and Ryder 2010b), summarizes findings and recommendations of new research supported by funding from the Bureau of Economic Analysis and the Alfred P. Sloan Foundation and conducted by leading researchers in academia and the federal statistical agencies. Much of the research focuses on biases in import price indexes that, in turn, may result in significant biases in key economic statistics.

**Import Prices and Biases Arising from Shifts in Sourcing**

Underlying the trends displayed in Figures 1 and 2 has been a rapid shift in the sourcing of consumer products and intermediate inputs to low-wage countries, most notably China. As currently constructed, price indexes generally do not capture price declines, often large, associated with such shifts in sourcing. This and related problems in the construction of import prices have prompted concerns that the real (constant dollar) growth in imports has been understated and domestic productivity and real output growth have been overstated. (See sidebox for an explanation of the critical role import prices play in the construction of domestic output and productivity statistics.)

New research commissioned for the report examined three aspects of the issue: 1) What is the precise nature of the price measurement problem? 2) Is there concrete evidence of biases to price

indexes and to output and productivity measures? 3) What are the solutions?

### Nature of the Problem and Evidence of Biases

The fact that price indexes generally fail to capture price declines associated with a shift in sourcing to low-cost suppliers—whether domestic or foreign—is widely recognized. Although a large body of research has examined biases to the Consumer Price Index resulting from the growth in discount retail chains, biases to price indexes resulting from the growth of imports from low-wage countries has not been previously considered. The increased import penetration in consumer goods and intermediate inputs and the large price differentials between domestic and foreign suppliers—as documented in the research papers in the report—have increased the possibility that some economic statistics are significantly biased.

Research uncovered anomalies in recent price index trends, providing concrete evidence of a problem. In instances where import penetration in consumer goods has grown significantly, import price indexes generally have risen faster than consumer price indexes, suggesting that the import price indexes have not accurately captured the lower prices that have prompted many retailers and consumers to shift from domestic to imported goods. Similarly, although manufacturers increasingly have been sourcing intermediate inputs from low-cost foreign suppliers, the import materials price deflator has been rising faster than the domestic materials price deflator, indicating that these price indexes often fail to capture the cost savings driving manufacturers' offshoring.

If the growth of import prices is overstated, then the growth in imports in real terms will be understated. Moreover, an understatement of the real growth in imports implies that domestic productivity and real output growth will be overstated. Such biases in the data have potentially important implications for studies of the impacts of imports in the U.S. economy; at least to some degree the growth of low-cost

## Why Import (and Export) Prices are Important in Computing Domestic Output and Productivity Measures

In a global economy, accurately measuring the prices of imports and exports is critical to computing key *domestic* output and productivity measures. Consider GDP, the value of goods and services produced in a country. In the United States, GDP is computed indirectly using the “expenditure” approach. The value of final goods and services expenditures by consumers, governmental entities, and businesses (private investment) is summed. To deduce the value of goods and services produced domestically, exports (goods and services produced in this country for foreign consumption) are added to domestic expenditures and imports (goods and services produced overseas for domestic consumption) are subtracted, thus yielding the familiar formula:  

$$\text{GDP} = \text{C} + \text{I} + \text{G} + \text{X} - \text{M}.$$

A leading indicator of the economy's health is the growth of real (constant dollar) GDP. To compute real GDP growth, all domestic expenditures and export and import values must be properly deflated to control for price changes. Errors in measuring import and export price indexes would make little difference if the volume of international trade flows was small. But as shown in Figure 1, the value of trade flows in recent years has reached 25–30 percent of GDP.

Similarly, import price indexes are critical in computing the growth of real value added in industry statistics. Intermediate inputs, including imported intermediates, must be netted out from shipments in calculating value added. The BEA estimates that about 40 percent of imported commodities are used as intermediate inputs by businesses, and that the import share of intermediates has grown dramatically in the last decade.

Measures of the growth in real imports and real value added are used, in turn, to construct various measures of productivity growth. For example, an industry's labor productivity growth might be computed as the growth in its real value added less the growth in labor input (employment or hours worked). As a result, an error in import price growth will translate into errors in the measurement of both domestic real output and productivity growth.

While accurately computing price indexes for imports and exports has become more important in the construction of key domestic economic indicators, accurately computing import and export price indexes has been greatly complicated by the rapid shift in sourcing of global production and expansion of trade in business services. Several research papers concerned biases in import price indexes resulting from the growth of low-cost imports and gaps in measurement of prices for imported and exported business services, the most rapidly growing area of trade.

Data on import and export prices are collected by the International Price Program (IPP) in the Bureau of Labor Statistics. Despite the dramatic growth in trade and the importance of import and export price indexes in constructing key domestic economic indicators, the IPP's budget is small—\$19 million—and has not risen since 2003.

imports will be incorrectly manifested as productivity and output growth, and the economic effects of import growth will be underestimated. Although the size of any bias to productivity and output measures for the aggregate economy is unknown, evidence in the research papers points to the possibility of sizable biases in some sectors, including manufacturing and construction.

### Solutions

In the report, the Bureau of Labor Statistics proposes a new input price index to help address this fundamental problem in industry statistics (Alterman 2010). Currently, input price deflators are constructed from surveys of domestic producers and importers of inputs and may miss a price decline when businesses shift to a low-cost supplier for their inputs. The proposed index would directly survey the purchasers of inputs, who could report the price change of a given item irrespective of its source. The report recommends that Congress provide modest funding for a pilot of the proposed index to determine its feasibility.

In addition, the report recommends funding for the collection of price data for imported and exported business services. Currently, data on import and export prices in business services—which include IT services, engineering services, and call centers and represent the most rapidly growing category of services trade—is nonexistent. This serious data gap could result in significant inaccuracies in economic statistics as trade in business services expands.

### Other Measurement Issues Arising from the Growth of Globalization

Biases in price indexes from offshoring constitute just one of many serious challenges facing statistical agencies as a result of globalization. Because the destination of imports to final consumers, industry, and government is not tracked, in constructing statistics agencies must make assumptions about how imports are used in the economy. Research for the project indicates that this data gap, coupled with long lags in updating information

on the structure of U.S. industry (from benchmark input-output tables), may have resulted in significant inaccuracies to economic statistics in recent years, a period characterized by rapid globalization and changing supply chains.

The absence of data on how imports are used in the economy compromises our ability to understand which industries are engaging in offshoring. Moreover, it potentially compromises the accuracy of the numerous other economic analyses based on the input-output data published by the Bureau of Economic Analysis. For instance, the growth of imports renders it more difficult to predict the impact of state and local economic development policies because the degree to which policies will stimulate demand for imports rather than domestic goods and services cannot be accurately assessed.

In addition, trade in services is rapidly expanding, reflecting the role

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### The BLS has proposed a new input price index that would directly survey the purchasers of inputs, who could report the price change of a given item irrespective of its source.

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of the Internet and other technological developments in communications. The lack of industry detail in domestic services and services trade data, of data on export and import prices, and of longitudinal occupational data for the U.S. economy seriously hamper accurate measurement of these trade flows and analysis of their impacts on the U.S. economy and workers. Recommendations in the report include collecting longitudinal data on employment by occupation so that structural changes in the labor market and the educational requirements of the workforce may be better understood.

### The Need for Increased Funding and Data Sharing

The pace of globalization is unlikely to abate in the near future; our need to assess the impact of this continued expansion will similarly increase.

Filling these data gaps is critical for such assessments and will require at least modest increases in funding for international statistics.

In some cases, information gaps could be filled by linking data already collected by various federal statistical agencies. The efficient use of existing data, however, is greatly limited by legal restrictions on sharing microlevel data among agencies. Congress will need to modify existing legislation (specifically the Confidential Information Protection and Statistical Efficiency Act) to allow the sharing of nonsensitive business tax data.

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Stephen A. Wandner

# From Workforce Research to Workforce Policy

Otto von Bismarck is reported to have said that laws are like sausages; it is better not to see them made. And like sausages, legislation is improved by quality ingredients. Rigorous research can be a vital ingredient that improves the final policy and legislative product. The use of research to shape legislative development, however, should not be assumed. A forthcoming book published by the Upjohn Institute, *Solving the Reemployment Puzzle: From Research to Policy* (Wandner 2010), traces the use and misuse of research as it informed and guided workforce public policy during the Clinton and George W. Bush presidencies. (To order the book, see the order form on the back cover or visit [www.upjohn.org](http://www.upjohn.org)).

The new book closely examines the process by which eight social science experiments changed workforce development laws and policies. The experiments are analyzed through their entire policy process: experiment initiation, implementation, and evaluation; policy development; legislative enactment; program development; and program implementation.

The experiments all examined ways to return to work dislocated workers eligible to collect unemployment insurance (UI); hence, they were called the “UI Experiments.”

The UI Experiments resulted in policy proposals and federal legislation despite a hostile economic, fiscal, and political environment. In some ways, they succeeded because they anticipated and surmounted the difficult environment of the 1980s.

The experiments operated under at least three important environmental constraints. First, they were developed during the early and mid-1980s, a period of high unemployment. Thus, there was a clear need to help the long-term unemployed return to work.

Second, the experiments were conducted during a period of budget stringency. Conscious of fiscal constraints, the researchers designed the experiments to test whether the treatments could provide net benefits to the U.S. Department of Labor to enhance the chances that they could be enacted.

Third, the experiments operated in a partisan environment both within Congress and between Congress and the executive branch. Experimental methods were used precisely in order to yield rigorous results that all parties would find convincing, since evaluations based on experimental methods are more likely to satisfy policymakers, regardless of their

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## Between 1986 and 1996, eight UI Experiments were conducted, searching for new or improved interventions that might expedite workers’ return to work and improve their skills.

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political philosophy. These methods are especially important in a time of divided and contentious government in order to enact into federal law new workforce policy that entails additional federal expenditures.

There are lessons to be learned from these experiments because they operated under many similar environmental constraints relating to difficult labor market conditions, severe federal and state budget constraints, and contentious governmental relations.

### The UI Experiments: Policy Proposals and Legislation

Between 1986 and 1996, eight UI Experiments were conducted, searching comprehensively for new or improved interventions that might expedite workers’ return to work and improve

their work skills. The interventions tested were intensive job search assistance (JSA), training, relocation assistance, reemployment bonuses, self-employment assistance (SEA), and an enhanced UI work test.

The New Jersey Experiment was a multitreatment project that tested four interventions: 1) comprehensive job search assistance, 2) training, 3) relocation assistance, and 4) reemployment bonuses. The other experiments tested only one intervention: comprehensive JSA (District of Columbia and Florida), self-employment assistance (Massachusetts and Washington), reemployment bonuses (Pennsylvania and Washington), and an enhanced UI work test (Maryland).

Six of the experiments provided promising results that were developed into policy proposals (see Table 1). The comprehensive JSA from the New Jersey Experiment was used as the foundation for launching the Worker Profiling and Reemployment Services (WPRS) system enacted into federal law in 1993. Later that year, SEA was temporarily enacted based on the interim report of the SEA experiment that had operated in Massachusetts. The SEA program was made permanent in 1998, after the final SEA evaluation was published. In 1994, reemployment bonuses were incorporated into the Clinton administration’s proposed Reemployment Act—a reauthorization of federal workforce legislation—but the legislation stalled in Congress and was never enacted. In 2003 and 2005, reemployment bonuses reemerged as a Bush administration legislative proposal in the form of Personal Reemployment Accounts.

The remainder of this article focuses on two interventions discussed in the book—comprehensive JSA and SEA—where positive experimental results guided the design of federal legislation and produced successful programs that help the unemployed return to work.

### The Case of Comprehensive Job Search Assistance

A series of reemployment experiments were proposed to Bill Brock after he

**Table 1 The Unemployment Insurance Experiments: Evaluations and Legislative Activity**

Intervention	Experiment	Evaluation	Legislation
Job search assistance	New Jersey	1989—Final report 1991—Four-year follow-up 1995—Six-year follow-up	1993—Worker Profiling and Reemployment Services (enacted)
Self-employment assistance	Massachusetts	1991—Interim report 1995—Final report	1993—Self-Employment Assistance (enacted for five years) 1998—Self-Employment Assistance (permanently enacted)
Reemployment bonuses	Illinois New Jersey Pennsylvania Washington	1987—Final report 1989—Final report 2002—Final report 2002—Final report	1994—Reemployment Act (not enacted) 2003 & 2005—Personal reemployment accounts (not enacted)

NOTE: Most of the data and final reports from these experiments are available at ERDC on our Web site: [www.upjohn.org](http://www.upjohn.org).

became Secretary of Labor in April 1985. Brock had been Special Trade Representative and was familiar with the issue of worker dislocation. He eagerly approved a budget proposal to launch a set of experiments dealing with dislocated workers, but he insisted that the New Jersey Experiment begin immediately using existing research funds rather than wait for a new congressional appropriation. Believing strongly in research, Brock firmly supported initiating the experiments, though he knew he would not oversee their completion as secretary.

The New Jersey Experiment was conducted in 1986 and 1987, and the final evaluation was completed two years later (Corson et al. 1989). The evaluation showed that comprehensive JSA reduced UI-compensated durations by half a week to all workers offered the treatment. The treatment resulted in a finding that the cost of providing the services would be more than offset by the benefits to the government. If policymakers were convinced by the evaluation report, comprehensive JSA could be provided with a federal budgetary savings.

The findings from the 1989 evaluation and a series of multiyear follow-up reports were widely circulated. Briefings were held in Washington, DC, for each of the evaluation reports. The reports were distributed to state workforce

agencies, researchers, policy analysts, and policymakers. At a 1991 briefing of minority and majority staff members of the House Ways and Means Committee, all members agreed that the experimental evaluation results were convincing and that comprehensive JSA was highly cost effective.

In March 1993, less than a month after becoming the Secretary of Labor, Robert Reich was faced with high unemployment requiring the extension of emergency UI benefits. In response, he wanted to

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**For research to affect policy, political leaders in both the executive branch and Congress must commit to funding, conducting, and using research.**

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do something innovative. Cognizant of the results of the New Jersey experiment from her time as UI Administrator, Carolyn Golding, the acting assistant secretary for the Employment and Training Administration, suggested he consider comprehensive JSA. Larry Katz, Reich's chief economist, supported the proposal—he had read the New Jersey Experiment evaluation and had used it as a reading for his Harvard graduate labor economics class. Reich's chief of staff, Kitty Higgins, supported the proposal, having been briefed on the experiment

when she was legislative assistant to Representative Sander Levin, who served on the House Ways and Means Committee.

Clinton approved the proposal, and Congress enacted the extension of emergency benefits with the JSA provisions with bipartisan support. Clinton signed the legislation into law on March 4, 1993. Now the Labor Department was charged with implementing this new program in the states.

With unprecedented support from three key department programs—the UI, Employment Service (ES), and training programs—the WPRS system was successfully implemented nationwide by mid-1996. A newly developed worker profiling statistical mechanism allowed state UI programs to identify UI beneficiaries who were permanently displaced and likely to exhaust their UI benefits. Targeted workers were referred to One-Stop Career Centers where ES workers provided them with reemployment services, and some of these workers were referred to training programs.

In recent years the WPRS system has screened 6–12 million UI beneficiaries and has referred over 1.0 million of these UI beneficiaries to the One-Stops to receive WPRS reemployment services. The WPRS system works as both a targeting tool to identify workers in need of reemployment services and as an allocation tool to effectively provide these services consistent with state and local workforce budgetary constraints.

### Self-Employment Assistance

SEA was tested in Massachusetts, providing self-employment allowances to UI-eligible workers in lieu of regular UI benefits. This intervention also was found to provide net benefits to the Department of Labor. SEA was a fundamental change in the way that UI benefits are paid. While regular UI requires that unemployed workers search for wage and salary employment, the SEA program relaxes that requirement and allows workers to draw benefits as long as they are laboring full time to

start their own businesses. Unemployed workers create their own jobs by starting microenterprises, and they may employ other workers as well.

SEA was the other UI Experiment that both yielded a Clinton administration legislative proposal and was enacted into federal law. SEA is a voluntary state program that must be adopted by individual states and made a part of their state UI laws. Less than a dozen states have adopted the program, and usage has been limited to a few thousand workers a year. Nevertheless, the SEA program holds promise as a practical option for some workers to create their own jobs and, based on experimental results, to earn more money than workers who are not offered this option.

### Conclusion

Rigorous research can have a major impact on federal workforce public policy and legislation. For research to affect policy, political leaders in both

the executive branch and Congress must commit to funding, conducting, and using research. Implementing research findings requires that government workers at the national, state, and local levels be supportive of the research results and use them to develop new and innovative programs and processes. When policymakers use research results as a prominent ingredient in policymaking, they are more likely to develop cost-effective policy that works. However, when the research is not conducted or the research results are ignored, policy and programs suffer.

WPRS and SEA are success stories. WPRS helps expedite the return to work of dislocated workers. The Obama administration and Congress recognized this contribution by including \$250 million in Recovery Act funds for reemployment service grants that have provided funds to provide comprehensive JSA. While the SEA program needs more encouragement and more entrepreneurial training funds to expand its scope, its

success in the states with SEA programs demonstrates the promise of permitting unemployed workers to create their own jobs and to increase their earnings by starting their own microenterprises.

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