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W.E. Upjohn Institute
for Employment Research
300 S. Westnedge Avenue
Kalamazoo, MI 49007-4686
(269) 343-5541
www.upjohninstitute.org

Randall W. Eberts
Executive Director

Alicia H. Munnell and Steven A. Sass

Social Security and the Stock Market

Lessons from Around the World

This article is based on the authors' book Social Security and the Stock Market: How the Pursuit of Market Magic Shapes the System, which is available now from the Upjohn Institute. See the form on the back cover for details.

The U.S. retirement income system faces major challenges as the transition to a much older society begins. The ratio of the elderly population (age 65 or over) to working-age adults (ages 20–64) will rise from 20 percent today to about 35 percent by 2030 (Figure 1). Social Security, the backbone of the nation's

investment management, risk-bearing, and a significant amount of employer contributions from the retirement income system. In the now dominant 401(k) plans, workers assume the investment and mortality risks formerly borne by their employers; so far they have not accumulated the assets needed for a secure retirement.

Our new book, *Social Security and the Stock Market: How the Pursuit of Market Magic Shapes the System*, is a contribution to the debate over how to restore financial balance to the Social Security program. It focuses on a surprising point of consensus in that contentious debate: a portion of the funds that pass through the program ought to be invested in equities. Policymakers from all political camps see investment in equities, with the higher expected returns they offer, as a way to minimize tax increases or retirement income cuts—the only other options for closing the financing shortfall.

The 1994–1996 Social Security Advisory Council proposed three main approaches for using equities in the U.S. Social Security program: 1) invest a portion of trust fund assets in equities; 2) use add-on individual accounts, which would top up the reduced benefits that could be financed by the payroll tax; and 3) use carve-out individual accounts, funded by redirecting a portion of current payroll taxes in exchange for a further reduction of guaranteed social

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retirement income system, faces a long-term shortfall equal to 2.02 percent of taxable payrolls when measured over the traditional 75-year planning horizon (Table 1). That deficit is significantly larger if we also consider the years beyond that horizon.

Compounding the challenge is the fact that fewer employers sponsor traditional defined-benefit pension plans. This removes employer

Figure 1 U.S. Population Age 65+ as a Percentage of Population 20–64, 1950–2050

SOURCE: U.S. Social Security Administration (2006).

insurance benefits. But the council failed to reach a consensus on which method to recommend, and no action has since been taken.

To help evaluate the nation's options going forward, our book explores the experiences of three countries—the United Kingdom, Australia, and Canada—with retirement systems much like that of the United States that have introduced equities into their public pension system in each of the three ways proposed by the Advisory Council.

Lessons from the U.K. Experience

The United Kingdom reformed its system along the lines of the Advisory Council carve-out approach. It sharply cut its two social insurance pension programs, the Basic State Pension and the

State Earnings Related Pension Scheme (SERPS), rather than schedule a sharp increase in taxes. The Basic State Pension fell from 25 percent of the average earnings in 1980 to 15 percent today, and is projected to be just 7 percent by the middle of the twenty-first century. The government even encouraged workers to “contract out” of SERPS by redirecting their payroll tax contributions to individual retirement savings accounts.

One lesson from the British experience is that individual accounts can result in high administrative and regulatory costs, along with significant mismanagement and scandal. Most U.S. carve-out proposals would improve on the British design by using the government to collect and administer accounts with small balances. But the cost of selling, administering, and regulating individual

accounts, even well above the “small balance” threshold, is nevertheless high.

The most important lesson from the U.K. experience is that a broad take-up of the individual account option, with a resulting reduction in guaranteed benefits below the socially acceptable level of adequacy, could quickly lead to a major expansion of means-testing. The British elderly, on the whole, are now on the road to becoming a welfare-dependent population. To avoid this outcome, the British government is considering major reform of its retirement income system that would abandon the carve-out design.

The goal of the U.K.'s carve-out approach was to reduce dependence on the state and increase reliance on individual initiative and private financial markets. However, retirement income systems emerged throughout the industrial world because people generally

The British elderly, on the whole, are now on the road to becoming a welfare-dependent population. To avoid this outcome, the British government is considering major reform of its retirement income system that would abandon the carve-out design.

proved themselves incapable of preparing for their own old age. The British experience suggests that this original incapacity has not been overcome. Thus the outcome of sharp social insurance cutbacks and expanded privatization—in the United States as in Britain—is likely to be just the opposite of what its proponents desire.

Lessons from the Australian Experience

Australia reformed its retirement income system along the lines of the add-on individual account approach. Like the add-on proposal of the Social Security Advisory Council, the Australian Superannuation Guarantee program brought additional resources

Table 1 U.S. Social Security's Financing Shortfall

Period	Present discounted value (trillion \$)	As a percent of	
		Taxable payrolls	GDP
2006–2080	4.9 ^a	2.02	0.7
2006–Infinity	13.4	3.7	1.3

^a The \$4.9 trillion includes \$4.6 trillion, the difference between scheduled benefits and projected revenues, and \$343 billion required to bring the trust fund to 100 percent of annual cost by the end of the period.

to the retirement income system. Superannuation Guarantee contributions, at 9 percent of earnings, are far larger than add-on proposals in the United States. But the preexisting Australian public system was limited to the means-tested Age Pension and had no earnings-related component.

Many Australians hoped that workers would accumulate enough assets in their Superannuation Guarantee accounts to return the Age Pension to its original safety net function. But Treasury projects that 75 percent of the elderly will collect Age Pension benefits even after the Superannuation Guarantee program matures, with even more collecting benefits at some point in their lives, and benefits for the average beneficiary only slightly reduced. For this reason, the Age Pension will remain the central component of the Australian retirement income system.

A key lesson for the United States arises from the interaction between Australia's Superannuation Guarantee individual account and its means-tested Age Pension programs. The retirement income generated by Superannuation Guarantee accounts, invested in equities, carries a good deal of risk. The risks are essentially identical to those in individual account employer plans, which are becoming as dominant in Australia as in the United States. The means-tested Age Pension plays an important role in offsetting a significant portion of this risk. Age Pension benefits rise for those who outlive their assets, invest poorly, or are in unlucky cohorts when it comes to investment returns. And it effectively funds those higher benefits by reducing benefits to those who do well or die young.

But using the Age Pension means test to dampen the risks of holding equities in individual accounts has two dysfunctional effects. The first is the overinvestment in privileged assets, such as housing and consumer durables, that yield higher returns than alternative investments, such as stocks and bonds, only after netting out Age Pension reductions. Potentially far more serious is the incentive, created by the means test, for workers to retire early, cut back on savings, and spend down

their assets prior to reaching old age to collect a higher Age Pension benefit.

Lessons from the Canadian Experience

Canada reformed its system along the lines of the trust fund approach. It set up the quasi-independent Canada Pension Plan Investment Board to oversee the investment of social insurance trust fund assets in equities. It also introduced a default mechanism that adjusts contribution and benefit levels to restore solvency over a 100-year period should market fluctuations, or other causes, push the plan out of balance.

The Canadian experience shows that the cost of administering and regulating equity investments through a centrally managed trust fund is dramatically lower than through a myriad of individual accounts. Investment and mortality risks are also pooled far more effectively, in that the effect of market fluctuations

The major concern about investing social insurance trust fund assets in equities is the power it potentially puts in the hands of government.

and "excess" longevity on individual workers and retirees is dramatically less. This is especially important as workers in Canada, just as in the United States, are increasingly dependent on individual account employer retirement plans. The trust fund approach to pooling risk also avoids the moral hazard inherent in Australia's means-tested approach.

The major concern about investing social insurance trust fund assets in equities is the power it potentially puts in the hands of government. The Investment Board is free to invest trust fund assets in the full gamut of opportunities available to managers of employer defined-benefit pension plans. The Board could use this freedom to advance "socially desirable" purposes, which could undermine retirement income security and open the door to government interference in the economy. To guard against such threats, Canada adopted an elaborate process to

minimize political influence in selecting the members of the Investment Board. It also mandated an extensive reporting process to make the workings of the Investment Board as transparent and open to public scrutiny as possible. Canadian observers generally agree that the Investment Board has thus far performed its duties in a professional manner, free of political influence.

Summary

The experience from these three countries seems to clearly indicate that a trust fund approach similar to the Canadian system would be the least problematic for the United States. The political stakes in placing such a large amount of wealth and corporate shares in government hands would be high. But the task of overseeing equity investments in Social Security would be simplified, and the likelihood of success significantly enhanced, if equities were added to the system through the trust fund approach. The task of governing the investment of the trust fund in a passive equity index is clearly less complex than the daunting challenge of overseeing and regulating equity investments in a great number of individual accounts.

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Alicia H. Munnell is the director of the Center for Retirement Research at Boston College and the Peter F. Drucker Professor in Management Sciences at Boston College's Carroll School of Management. Steven A. Sass is associate director for research at the Center for Retirement Research at Boston College.

Matthew Dey, Susan Houseman, and Anne Polivka

Outsourcing to Staffing Services

How Manufacturers' Use of Staffing Agencies Affects Employment and Productivity Measurement

This article is adapted from and summarizes Upjohn Institute Working Paper no. 07-132, titled "Manufacturers' Outsourcing to Employment Services," which is available at <http://www.upjohninstitute.org>.

The decline of manufacturing employment represents one of the most fundamental—and many believe worrisome—changes to the U.S. economy of the last decade. During the 1990s, a decade marked by high trend job growth in the economy overall, manufacturing employment actually fell: between 1989 and 2000, aggregate employment grew 22 percent, while manufacturing employment dropped 4 percent. Since 2000, the decline has been precipitous. From 2000 to 2005, the manufacturing sector lost 2.2 million jobs, or about 13 percent of its 2000 employment base.

The decline of manufacturing jobs has been widely attributed to new technology, competition from foreign companies, and the offshoring of production and service jobs by U.S. manufacturers. But a less-discussed factor is outsourcing to domestic contractors. When, for example, a U.S. manufacturer outsources janitorial work to a contract cleaning company, packing and shipping to a transportation company, IT to a computer services company, and clerical and production work to a staffing agency, manufacturing employment declines in official statistics, but the occupational structure of employment in the economy may not change. Quantifying such domestic outsourcing is important for understanding the true nature of structural changes in employment in the

economy, why companies outsource, and outsourcing's implications for workers.

We examine an important component of outsourcing by manufacturers: outsourcing to staffing services—or what is called employment services in government statistics—over the 15-year period from 1989 to 2004. Our analysis highlights the occupational shift that has occurred in employment services toward production and low-skilled manual occupations, the growing share of manufacturing work in the United States being performed by employees of staffing agencies, and the implications

By 2000, employment services accounted for 5.9 percent of all production workers and for 79 percent of the growth of production workers economy-wide from 1989 to 2000.

this outsourcing has for productivity measurement in manufacturing.

Employment Services Sector

The employment services sector includes three industries: temporary help services, professional employer organizations, and employment agencies—which accounted for 71 percent, 21 percent, and 8 percent, respectively, of employment in the sector in 2005. Temporary help agencies assign workers to clients on a temporary basis, though the assignment can vary considerably in length. Professional employer organizations “lease”

employees back to the client company. They handle payroll, benefits, and government compliance issues for the company, and hence represent the full outsourcing of an organization's human resources function. Employment agencies, often known as “head hunters,” assist in matching employers and workers.

Except in employment agencies, which account for a small minority of employment in the sector, almost all employees in the employment services sector are assigned to a client organization where they perform work. Unlike most other types of contract company workers, staffing agency workers typically work under the supervision of the client organization's management and often are employed in the client's “core” functions.

The Difficulty of Measuring Outsourcing to Employment Services

Although it is important to understand where employees of staffing agencies perform their work, this information is difficult to glean from published statistics. In the principal government household and establishment surveys, the Current Population Survey and the Current Employment Statistics program, workers in the employment services sector are counted as employees of their staffing agencies, not of the client agencies where they perform their work. The only direct information on the industries to which these workers are assigned has been collected in five Contingent Worker Supplements to the Current Population Survey conducted between 1995 and 2005, but the number of agency workers sampled in these supplements has been small.

A major innovation of our work is the construction of a panel data set from the Occupational Employment Statistics program—a large, nationally representative establishment survey—on employment by occupation by industry from 1989 to 2004. We use these panel data to document the dramatic changes in the occupational structure of the employment services sector and, in conjunction with information from the

Contingent Worker Supplements, to impute the number of staffing workers assigned to manufacturing over this 15-year period.

Occupational Trends within Employment Services

Between 1989 and 2004, the relative importance of office and administrative support occupations and blue-collar occupations within employment services reversed (see Figure 1). In 1989, office and administrative support workers comprised 42 percent of those in employment services, while blue-collar workers made up just 28 percent. By 2004, blue-collar workers accounted for 48 percent of all those in employment services, while office and administrative support workers accounted for just 24 percent.

The large majority of blue-collar workers in staffing agencies are in just

By 2004, employment services accounted for 17.6 percent of all workers in rather low-skilled manual occupations.

one of two occupational categories: production occupations and helper, laborer, and material mover occupations. In 1989, less than 1 percent of all production workers economy-wide were employed in the staffing services. By 2000, employment services accounted for 5.9 percent of all production workers and for 79 percent of the growth of production workers economy-wide from 1989 to 2000. Employment services production workers bore a disproportionate share of the decline in production employment during the recession, but whereas employment in production occupations in the aggregate continued to decline following the end of the recession, employment of production workers within the employment services sector began to recover in 2003.

Employment services already accounted for a sizable share—6.3 percent—of all helpers, laborers, and hand material movers in 1989, but that share swelled to 15.8 percent

Figure 1 Occupation Shares, Employment Services, Selected Years

by 2000. While the total number of helpers, laborers, and hand material movers declined slightly from 2000 to 2004 economy-wide, the number in employment services continued to register strong growth. By 2004, employment services accounted for 17.6 percent of all workers in these low-skilled manual occupations.

Outsourcing to Employment Services by Manufacturers

The strong growth in production and low-skilled manual occupations suggests that much of the growth of the employment services sector has been driven by manufacturers' outsourcing to staffing agencies. Figure 2 displays our estimates of the number of employment services workers assigned to manufacturing, along with measured manufacturing employment and manufacturing employment adjusted for use of employment services workers from 1989 to 2004.

We estimate that the number of employment services workers assigned to manufacturing grew by about 1 million, from about 419,000 in 1989 to over 1.4 million in 2000. Whereas measured employment in manufacturing fell by 4.1 percent from 1989 to 2000, adjusting for employment services workers, employment in manufacturing actually

grew by an estimated 1.4 percent over that period.

The number of employment services workers assigned to manufacturing dropped sharply from 2000 to 2001, as agency workers bore a disproportionate share of the adjustment during the recession. The number of employment services workers in manufacturing increased after 2001, regaining almost half of these losses by 2004, while measured employment in manufacturing continued its sharp decline. Thus, although factoring in manufacturers' use of employment services workers does not erase the large declines in manufacturing employment since 2000, a growing share of manufacturing work in the United States is being performed by employees of staffing agencies. In 2004, employment services workers added an estimated 8.7 percent to direct-hire manufacturing employment, compared to just 2.3 percent in 1989 and 8.2 percent in 2000.

Effects on Productivity Measurement in Manufacturing

Simple labor productivity statistics measure output divided by labor input. In manufacturing, output is defined as shipments in constant dollars, net of shipments between manufacturing establishments, and labor input is

Figure 2 Manufacturing Employment and Employment Service Workers Assigned to Manufacturing, 1989–2004

measured as the number of employees or hours worked by employees at manufacturing establishments. Staffing agency workers assigned to manufacturers are counted as purchased business services rather than labor input in manufacturing productivity statistics. Consequently, all else equal, the substitution of staffing agency workers for direct-hire employees will increase manufacturing labor productivity measures.

We estimate that outsourcing to employment services inflated the annual growth rate of manufacturing labor productivity by 0.5 percentage points, or 14 percent, over the 1989 to 2000 period. Because employment services workers in manufacturing bore a disproportionate share of employment adjustment to the downturn, failure to account for these workers in manufacturing depressed productivity statistics by an estimated 1.2 percentage points from 2000 to 2001. From 2001 to 2004, growth in outsourcing to employment services resumed and added a half a percentage point to labor productivity growth in manufacturing, representing 9 percent of the growth.

Implications for Future Research

Our findings illustrate the importance

of taking into account outsourcing when interpreting employment and productivity trends in manufacturing. In closing, we emphasize that our study measures only one type of outsourcing, albeit an important one for manufacturers. We do not examine manufacturers' outsourcing to domestic contractors in other industries. For instance, it is possible that the growth in outsourcing to staffing services, which largely fills

production, low-skilled manual, and clerical occupations, paralleled a trend to outsource to other business services industries for jobs in such areas as IT and shipping. Moreover, studies have begun to document recent growth in the foreign outsourcing of intermediate inputs and services.

Use of staffing services by manufacturers plateaued in the late 1990s, according to our estimates, and the subsequent slower growth in the staffing industry may reflect increased foreign outsourcing of production and services work, as opposed to outsourcing work to domestic contractors, a view recently expressed to us by a representative of Manpower, the country's largest staffing agency. Our findings regarding manufacturers' outsourcing to employment services, we believe, underscore the need to study the implications of other types of domestic and foreign outsourcing on employment and productivity measurement in manufacturing.

Matthew Dey is a research economist in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. Susan Houseman is a senior economist at the Upjohn Institute. Anne Polivka is chief of research for the Employment Research and Program Development Staff, Bureau of Labor Statistics.

Upcoming Conference Announced

The Upjohn Institute is planning a conference and book on U.S. labor market policy entitled "A Future of Good Jobs? America's Challenge in a Global Economy."

Conference speakers will propose solutions to the difficulties facing the U.S. labor market in sustaining low unemployment, growth in living standards, and economic security for all workers. The conference will cover six major policy areas: 1) labor skills development and the U.S. education and training system, 2) health insurance and the labor market, 3) employment problems of older Americans, 4) immigration and trade, 5) labor market problems of the disadvantaged, and 6) ways of promoting employer competitiveness.

Authors of papers include Robert Lerman, Katherine Swartz, Katharine Abraham, Lori Kletzer, Steven Raphael, and Paul Osterman. The book will be edited by Susan Houseman and Tim Bartik of the Upjohn Institute.

The conference will be held in Washington, D.C. on June 22, 2007, followed by a book in early 2008. Further announcements about the conference will be forthcoming this spring.

New Books

Social Security and the Stock Market

How the Pursuit of Market Magic Shapes the System

Alicia H. Munnell and Steven A. Sass

The U.S. retirement income system faces an enormous challenge with the transition to an older society about to begin. Fewer employers sponsor traditional defined-benefit pension plans. Their replacement, the now dominant defined-contribution plans, has failed to produce the accumulations that baby boomers will need for a secure retirement. And the backbone of the retirement income system, Social Security, faces a long-term shortfall.

The authors explore whether equities offer a solution for the U.S. retirement income system funding crisis. They examine the experiences of three nations, the United Kingdom, Australia, and Canada, and how equities were added to the investment mix of their retirement systems. As these experiences show, while equities promise higher returns than government bonds, how they are used—as add-ons, carve-outs, or as trust fund supplements—matters greatly. Munnell and Sass describe the successes and failures experienced by each nation and find one approach that offers promise for the U.S. system.

"Munnell and Sass provide an excellent and lucid exposition of the issues which arise when seeking higher returns through riskier benefit designs. This is the book to turn to in order to review international experience so as to understand the pluses and minuses of equities." —*J. Michael Orszag, Watson Wyatt LLP*

171 pp. \$40 cloth ISBN 0-88099-291-3
\$18 paper ISBN 0-88099-290-5 / 2006.

The Shadow Workforce

Perspectives on Contingent Work in the United States, Japan, and Europe

Sandra E. Gleason, Editor

This volume provides a comprehensive overview of the state of nonstandard employment and its impact on employees, businesses, unions, and public policy. It not only reveals how nonstandard employment operates in the United States, Japan, and Europe, it also highlights the important similarities and differences in the labor market issues faced in those areas.

Key recurring concepts in the book, such as how the nonstandard workforce is measured and the meaning of labor force flexibility, are explained in the introduction. Ensuing discussions summarize and synthesize the current body of scholarly literature on the facts and challenges of nonstandard employment, and an array of tables and graphs presents a complete picture of the demographic, occupational, and industry characteristics of the nonstandard labor force.

This adds up to a book that serves as a one-stop, easy-to-use resource for anyone interested in learning about the characteristics of the contingent labor forces in the United States, Japan, and Europe, and the legal frameworks that guide the use of nonstandard workers in those labor markets. It also offers the reader insights into how employees, employers, unions, and policymakers perceive nonstandard employment.

349 pp. \$54 cloth ISBN 0-88099-289-1
\$22 paper ISBN 0-88099-288-3 / 2006.

The Working Life

The Labor Market for Workers in Low-Skilled Jobs

Nan L. Maxwell

The economic prospects for workers possessing relatively few skills have worsened as the demand for skills in the labor market has increased. Even in

jobs that might be categorized as low-skilled, workers require a diverse set of skills to succeed. Many of these skills can only be obtained through schooling or job training, which

is why workers lacking skills find it difficult to attain a foothold in the labor market and why employers have difficulty filling low-skilled jobs. While it was previously assumed that the supply of workers able to fill low-skilled jobs exceeded the demand, this book reveals that the labor market for low-skilled workers actually operates quite differently.

Maxwell presents the results of her groundbreaking survey of 405 employers that allows her to establish the link between skills and low-skilled jobs and to reveal the current state of the labor market facing low-skilled workers. The data also highlight the knowledge and skills that employers require in low-skilled jobs and the abilities that individuals who apply for those jobs bring to the table. In addition, Maxwell offers a useful definition of low-skilled jobs, identifies the populations who fill these jobs and the economic realities facing them, and offers policy solutions aimed at facilitating the career development of low-skilled individuals.

193 pp. \$40 cloth ISBN 0-88099-298-0
\$18 paper ISBN 0-88099-297-2 / 2006.

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