

3-1-2012

## America's Human Capital Paradox

Thomas A. Kochan  
*Massachusetts Institute of Technology*

Upjohn Institute working paper ; 12-180

Follow this and additional works at: [https://research.upjohn.org/up\\_workingpapers](https://research.upjohn.org/up_workingpapers)

 Part of the [Labor Economics Commons](#)

---

### Citation

Kochan, Thomas A. 2012. "America's Human Capital Paradox." Upjohn Institute Working Paper 12-180. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. <https://doi.org/10.17848/wp12-180>

This title is brought to you by the Upjohn Institute. For more information, please contact [repository@upjohn.org](mailto:repository@upjohn.org).

## **America's Human Capital Paradox**

**Upjohn Institute Working Paper 12-180**

Thomas A. Kochan  
*MIT Sloan School of Management*  
*Institute for Work and Employment Research*  
e-mail: [tkochan@MIT.EDU](mailto:tkochan@MIT.EDU)

March 2012

### **ABSTRACT**

It is widely recognized that human capital is essential to sustaining a competitive economy at high and rising living standards. Yet acceptance of persistent high unemployment, stagnant wages, and other indicators of declining job quality suggests that policymakers and employers undervalue human capital. This paper traces the root cause of this apparent paradox to the primacy afforded shareholder value over human resource considerations in American firms and the longstanding gridlock over employment policy. I suggest that a new jobs compact will be needed to close the deficit in jobs lost in the recent recession and to achieve sustained real wage growth.

**JEL Classification Codes:** J01, J08, J53

**Key Words:** social contract, jobs compact, job growth, wages

This working paper is prepared for a joint project of the W.E. Upjohn Institute for Employment Research and the Employment Policy Research Network. A summary of this paper and its companion policy brief appears in the March issue of the *Harvard Business Review*. The views expressed are solely those of the author. Thomas Kochan is the George M. Bunker Professor of Management at the MIT Sloan School of Management and Co-Director of the Institute for Work and Employment Research.

## **America's Human Capital Paradox**

Thomas A. Kochan

There is widespread recognition that human capital has to serve as a significant asset for the American economy to be competitive and to support a high and rising standard of living. This poses a paradox. Given this, why does society tolerate high and persistent unemployment and underemployment? Why do so many U.S. firms place a low priority on human resource relative to financial and shareholder considerations? Why is it that wages of the majority of the labor force have stagnated for three decades while income inequality continues to grow, job satisfaction continues to decline, and unions are under constant attack by private and public employers? These are symptoms of an economy that undervalues work and the workforce, and lacks the institutions, policies, and practices needed to translate the rhetoric surrounding the importance of human capital into reality.

Failure to address this paradox will ensure continued decline in the standard of living for current and future generations of Americans. Since there is no single cause of these trends, there is no single solution. Moreover, since most of these trends predate the onset of the 2007–2009 recession, solutions are not likely to be natural byproducts of a normal economic recovery. Instead, a systemic and sustained set of changes in policies, practices, power, and norms will be needed to turn rhetoric about the importance of human capital into reality for the workforce and the economy. To do so, I propose that four key stakeholder and leadership groups—business, labor, education, and government—begin working toward consensus on a new, long-term Jobs Compact for America, one that addresses the root causes of the failure to take human capital seriously. The compact will need to consider significant changes in each of these institutions and in the interactions among them. This includes corporations and the overall business community;

unions, professional associations, and other groups that give voice to the workforce; government policymakers and administrators; and educators who prepare and update the knowledge, skills, and abilities of the current and future workforce.

## **ROOT CAUSES**

Most labor market research focuses on identifying and quantifying the effects of specific causal forces, such as changes in skills and technologies, global trade, or declines in institutions such as unions or investments in education or training on a specific labor market outcome. While that is highly appropriate for furthering knowledge and policy making, it is also necessary to look deeper at the root causes of the failure to prioritize human capital considerations in public and private decision making that give rise to and perpetuate the combination of labor market outcomes noted above. Indeed, I believe there is a set of identifiable market and institutional failures that explain why human capital considerations are not elevated to a level needed to serve as a competitive advantage for the nation.

The essence of the market failure problem is that what is good for individual U.S. companies is no longer automatically good for American business, workers, or the economy.

Former IBM executive and Sloan Foundation President Ralph Gomory puts it this way:

The principal actors in attaining [the nation's] economic goals must be our corporations. But today our government does not ask U.S. corporations, or their leaders, to build productivity here in America; much less does it provide incentives for them to move in that direction . . .

[Government leaders] do not realize that the corporate goal of profit maximization at all costs does not serve the interests of the nation. ***They do not realize that the fundamental goals of the country and of our companies have diverged.*** The sole focus on profit maximization, which leads to offshoring and holds down wages, does not serve the nation . . . We must act to realign the goals of company and country. (emphasis in the original) (Gomory 2010)

Yet what is good for the overall American business community is in many ways good for the economy. Despite the globalization of markets, Commerce Department data indicate that U.S. multinational firms continue to derive 60 percent of their sales from U.S. markets (Bureau of Economic Affairs 2011). These and other firms that continue to rely on the U.S. market for a significant portion of their sales need, among other things stronger and more sustained consumer purchasing power and product demand, a workforce with the education and mix of technical and behavioral skills needed to fill current and future vacancies, and a regulatory environment that encourages and rewards employers for upgrading employment practices while assuring no firms can gain a cost advantage by violating or minimizing employment standards. All of these goals lie beyond the reach of individual firms but could be attainable if businesses work together and with the other key stakeholders that share power and responsibilities for these issues.

Overcoming market failures requires coordination and cooperation—a sharing of responsibilities—among the parties involved. That is why the key to solving America’s competitiveness—human capital paradox lies in developing dialogue, consensus, and coordinated actions among business leaders and across the business, education, labor, government, and other civil society institutions that share an interest in and responsibility for economic and social affairs.

There also is, however, an institutional failure to overcome in taking this approach. The reality is that there is sparse dialogue across these groups, and what little there is tends to take the form of ideological posturing rather than consensus building and strategizing around shared national interests. Overcoming this institutional failure will require leaders to do today what their predecessors did in response to past national emergencies, namely, to come together around a

shared sense of urgency and engage in a process capable of translating their separate and shared interests into a strategy for investing in and fully utilizing America's human capital.

The nation's jobs crisis is indeed a national emergency that should provide the shared sense of urgency. The labor market is failing to generate sufficient high-quality jobs to produce a sustainable economy. If a more comprehensive and aggressive strategy is not implemented, America will remain on a path of, at best, economic stagnation and slow growth. More likely, it will continue sliding into a long-term economic decline. Either scenario puts the nation at risk for an explosion of the public's pent up anger and frustration with the lack of jobs and a declining standard of living.

## **EVIDENCE OF UNDERVALUING HUMAN CAPITAL**

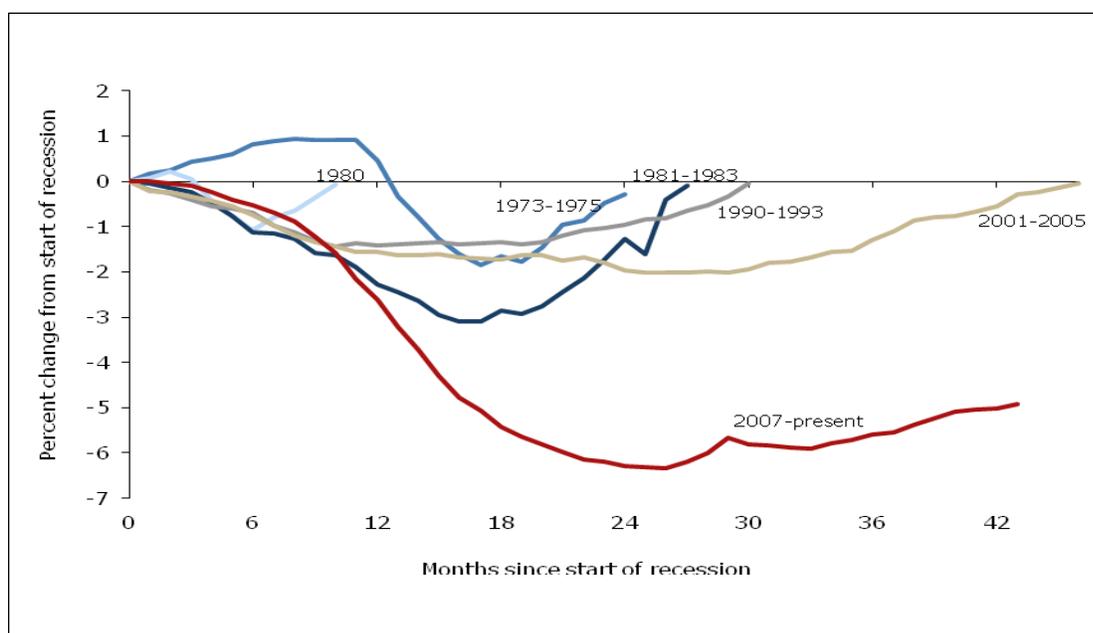
The undervaluing of human capital is most apparent in the inability of national policymakers to take actions needed to address the nation's job crisis. America has a two-dimensional jobs crisis: it has a persistent deficit in the number of jobs needed to fully utilize its human capital, and it is not generating a sufficient number of high-quality jobs to meet the expectations and needs of its population. Yet federal policymakers have consistently put off addressing this crisis in favor of other pressing priorities.

### **The Jobs Deficit**

Figure 1 shows the depth and persistent nature of the jobs deficit in the U.S. economy by comparing the current situation with the recovery periods that followed prior recessions. In January 2012, more than two and a half years after the end of the Great Recession, the economy still needed 5.8 million jobs to get back to the level that existed just prior to the start of the recession. An equal number (5.8 million) of jobs are needed to account for the growth in the

labor force over this time period. President Obama’s Jobs and Competitiveness Council estimates that more than 20 million new jobs will be needed by 2020 to make up for the jobs lost in the recession and the labor force growth that will occur throughout this decade.<sup>1</sup> This would require a consistent rate of growth of 208,000 per month, or 2.5 million per year between now and then. Not only is this not happening; the American economy has never sustained a rate of job growth this high for this length of time.

**Figure 1 Job Loss in Five Most Recent Recessions as Percent of Peak Employment**

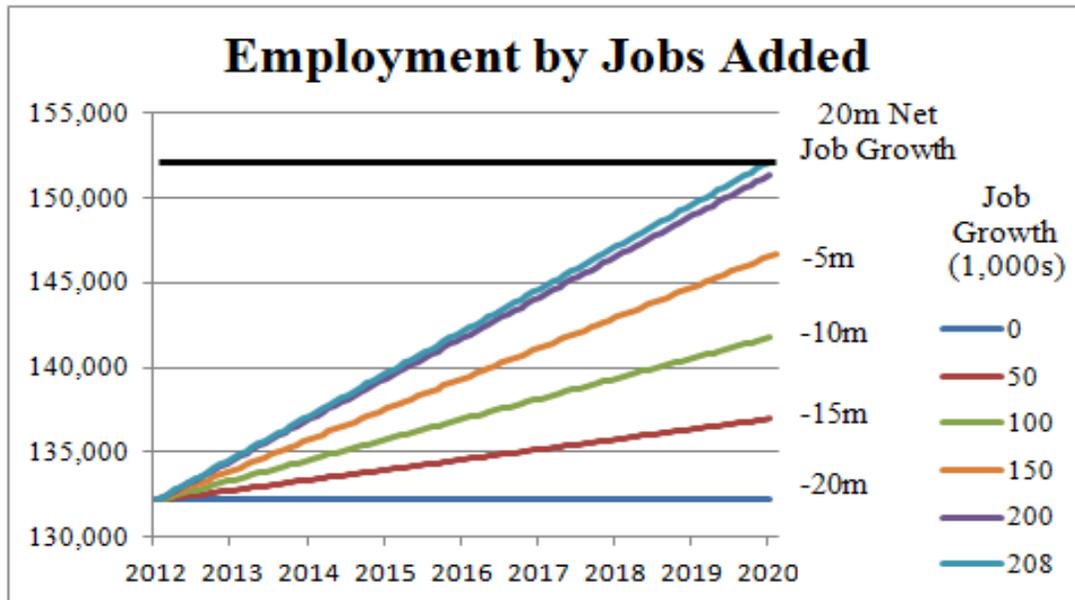


SOURCE: Bureau of Labor Statistics, Center for Economic and Policy Research.

Figure 2 projects how long it would take to close the jobs deficit with different levels of sustained monthly job growth. In 2011 the economy created an average of 150,000 jobs per month. At this rate a 1.5 million jobs deficit would remain in 2020. Thus, without more direct

<sup>1</sup> This estimate is consistent with the Bureau of Labor Statistics’ labor force projections that the labor force will grow by 10.5 million workers this decade (Toossi 2012). Adding the 5.8 million jobs lost between the start of the recession and January 2012 to the 5.8 million labor force growth since then, plus the 8.3 projected growth between 2012 and 2020, generates an estimate of 19.9 million jobs needed to close the deficit by 2020.

**Figure 2 Years to Close the Jobs Deficit at Different Monthly Job Growth Rates**



SOURCE: Bureau of Labor Statistics January 2012 Employment Report, Toossi (2012), and author's calculations.

into the next decade, along with the attendant economic and social costs of persistent unemployment (see Figure 3). In a recent working paper prepared for the Employment Policy Research Network, Til vonWachter (2011) summarizes the evidence on the consequences as follows:

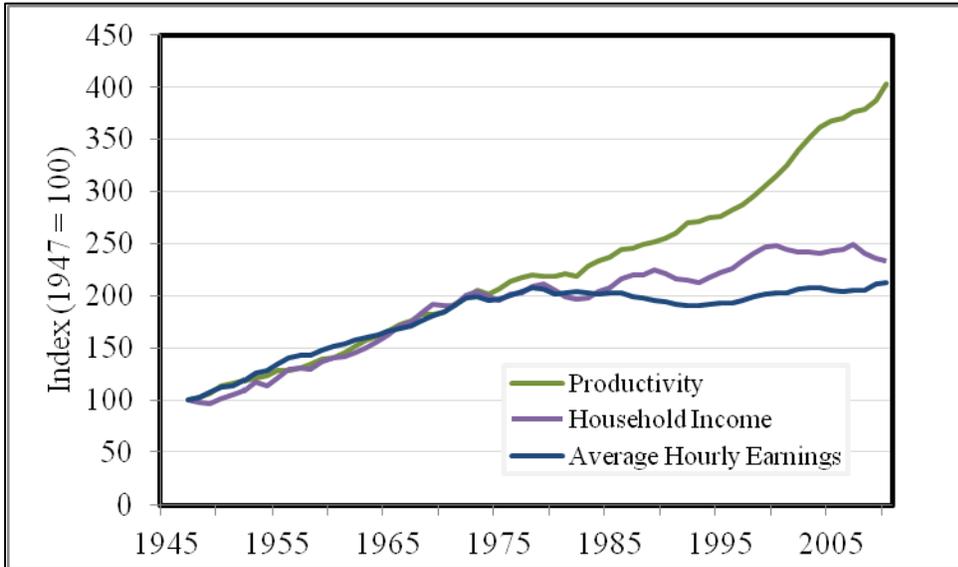
Increasing research suggests the cost of recessions can be large and long lasting for affected workers and their families. On the one hand, workers displaced from their stable job at stable employers when that employer experiences a mass-layoff suffer earnings losses extending 15 to 20 years after job loss. The long-lasting reductions in earnings are accompanied by an increase in job instability, and a rise of repeated mobility across firms, industries, and regions lasting up to 10 years. These large and persistent economic costs are also felt by families of displaced workers. In some circumstances, the parental job loss has been found to reduce earnings of grown children. Increasing research also suggests that health of job losers declines. In situations in which mass-layoffs are pervasive and earnings declines are substantial, these initial declines in health can give way to differentials in mortality also lasting for 15 to 20 years.

On the other hand, individuals who enter the labor market in a recession can also experience lasting declines in earnings. These earnings losses are short lived for the highest and lowest skilled workers. Yet, for the average labor market entrant recovery after entry into the labor market in a severe recession can take over ten

years. Among college graduates, some never catch-up with their more lucky counterparts graduating in better economic conditions. (p. 3)

Besides effects on directly involved individuals, prolonged unemployment may also have broader social consequences, ranging from lowering the tax base or creating long-term dependency to social programs, to bringing lasting declines in skills or underutilization of available labor. (p. 2)

**Figure 3 The Social Contract: 1947–2010**

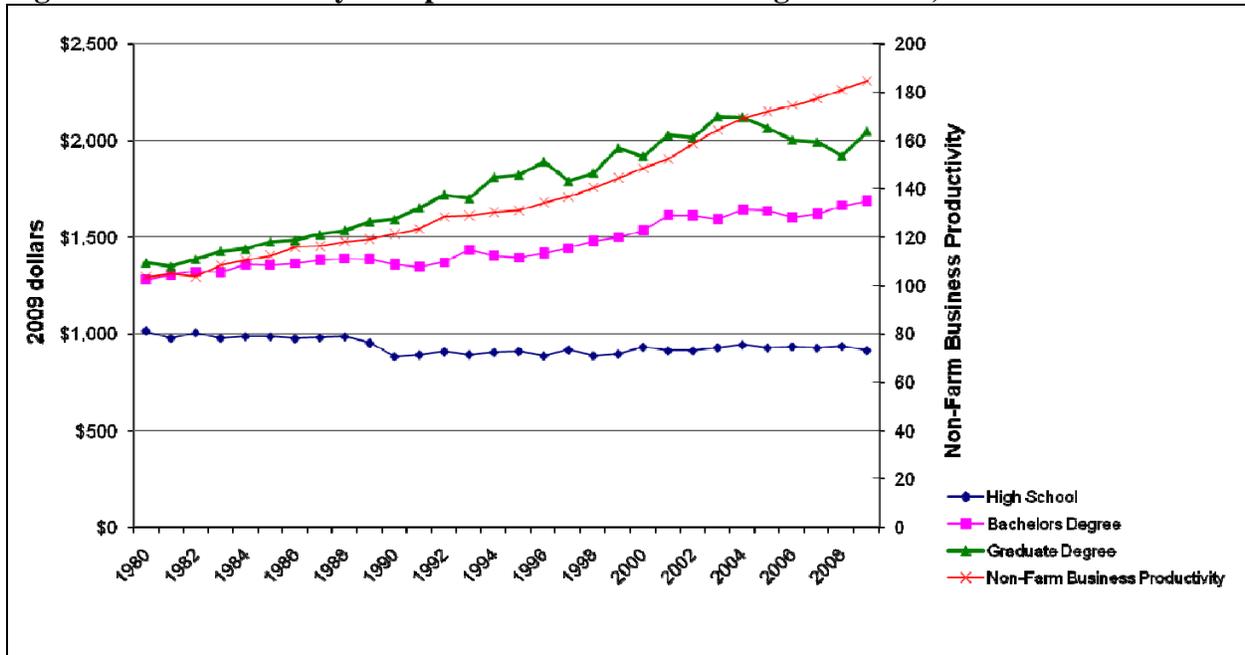


SOURCE: Bureau of Labor Statistics and the Economic Policy Institute.

### Job Quality

Figure 4 presents a picture of the long-term trends in wages in relation to productivity growth. The picture portrays what a number of us have described as a “broken social contract.” The term relates to the expectation that wages for average workers will grow in rough tandem with aggregate productivity growth in the U.S. economy. From 1947 to 1979 productivity and real wages both grew approximately 2–3 percent per year. Between 1980 and 2010 productivity grew 84 percent, family income grew 10 percent due largely to the increased hours of paid work contributed by wives and mothers, and real hourly wages grew by only 5 percent. Figure 4 shows these effects by different education levels for men. Since 1980 real wages for high school

**Figure 4 Median Weekly Compensation of Men Working Full Time, 1980–2008**



SOURCE: Levy and Temin (2010).

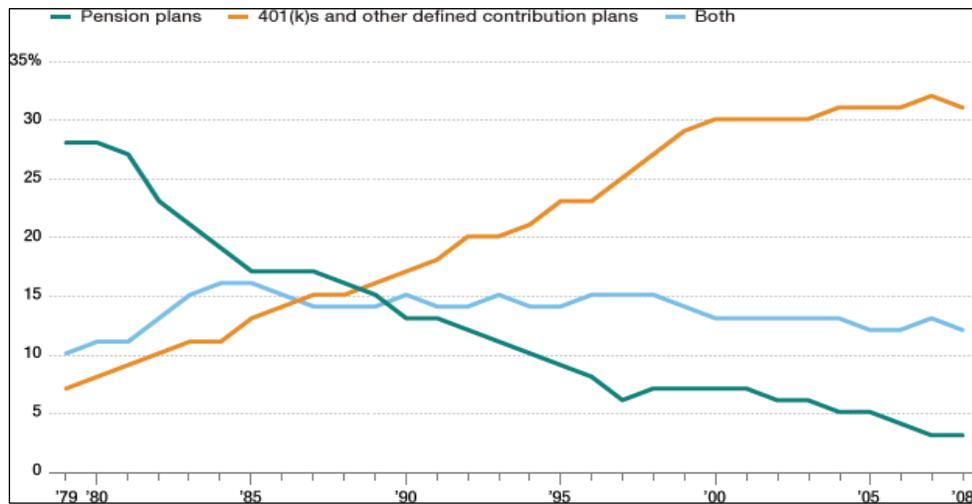
men remained stagnant, and the gaps between productivity growth and college graduates expanded albeit at lower rates. The same basic pattern has persisted over these years for female high school graduates. Moreover, the picture worsened in the last decade. Since 2000 wages have also stagnated or declined for all but those with either advanced degrees and/or others in the top tier of the wage distribution.

The combined effects of these trends have produced the greatest income inequality in the economy since 1928. The most recent summary of the trends in income distribution indicate that between 1976 and 2007 the top 1 percent of the population captured 58 percent of family income growth. In 2007 the top 10 percent of the population received 50 percent of national income, compared to approximately 35 percent in 1980 (Atkinson, Piketty, and Saez 2009).

The alignment of wage and productivity growth from the mid 1940s through the 1970s resulted from two main factors. Labor markets met the demand for large numbers of production

workers, and equitable wage norms were supported by government policies and reinforced through collective bargaining and professional personnel/human resource management practices. The good match between these market forces, policies, and institutions set a reasonable floor on wages and sustained real wage growth for all workers, and particularly for those lacking a college education.

**Figure 5 Private Sector Defined-Benefit and Defined-Contribution Plan Coverage, 1979–2009**

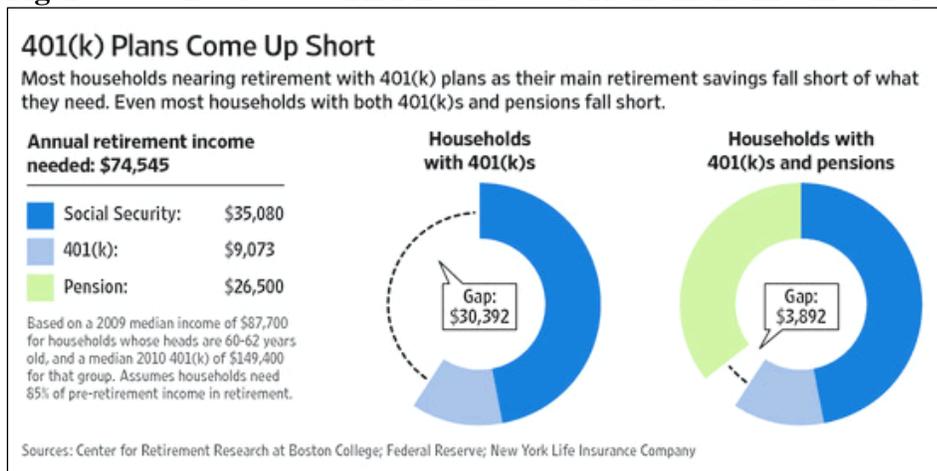


SOURCE: Employee Benefit Research Institute estimates for 1998–2008 using Department of Labor and Current Population Survey data. Credit: Alyson Hurt/NPR. <http://www.npr.org/templates/story/story.php?storyId=124131819>.

Fringe benefits represent another key dimension of job quality. Since at least World War II, the United States has relied heavily on individual firms to provide health care, retirement, and other benefits that most other countries finance as public expenditures. Since the 1980s, however, coverage, value, and risks of future costs/value of these benefits have all shifted in ways that reduce job quality for the majority of the workforce. Employer-provided health care coverage grew from the 1940s through the 1970s and peaked at approximately 70 percent of the workforce; it then began a slow steady decline to 64 percent by 2000 and has continued to decline slightly since then. Similarly, as Figure 5 illustrates, in 1979, over 40 percent of the

workforce was covered by a defined benefit pension plan and/or both a defined benefit and a defined contribution or 401(k) plan. That number declined to approximately 20 percent today, and most of those who continue to have a defined benefit plan are public sector employees. The defined contribution and 401(k) savings plans not only shift risk of retirement saving to employees, in the aggregate they provide a significantly lower level of retirement income. As illustrated in Figure 6, the *Wall Street Journal* estimates that the median income 60-year-old worker today who is covered by only a 401(k) plan will fall approximately \$30,000 short of replacing the 85 percent of his or her preretirement income, a standard that actuaries assume as a target for an adequate retirement income.

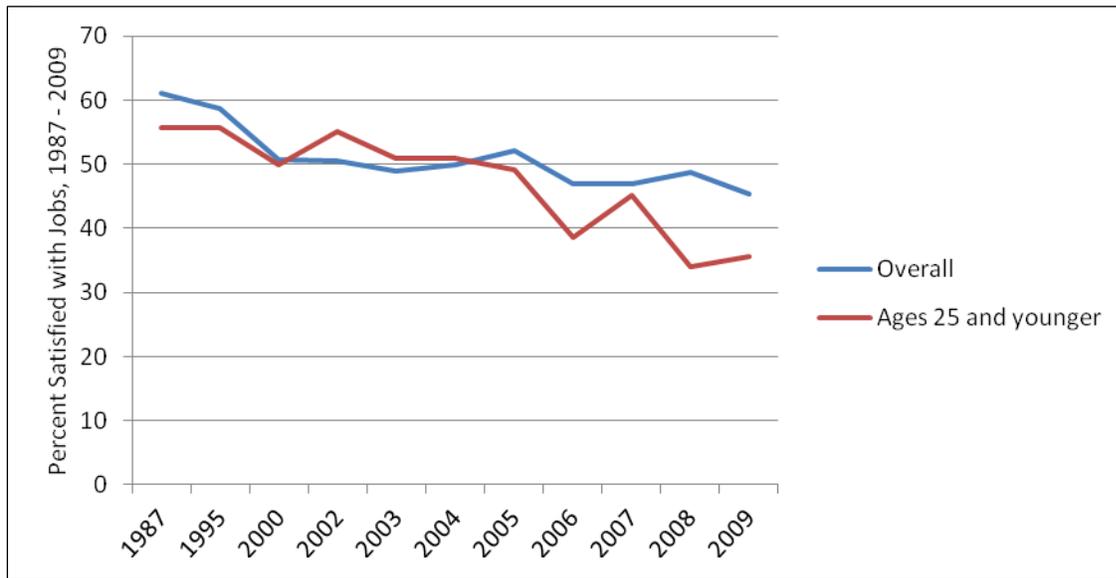
**Figure 6 Wall Street Journal Estimates of Retirement Income Shortfalls**



SOURCE: Browning (2011). Reprinted with permission.

Wages and benefits are not the only dimension of declining or stagnant job quality. Job satisfaction has been declining for the past decade, now to the point that less than half of the workforce reports being satisfied with their jobs (Gibbons 2010). Figure 7 tracks the decline from 1987 to 2009. The lowest level of satisfaction (36 percent) is reported by young (under 25 years old) employees.

**Figure 7 National Trends in Job Satisfaction, 1987–2009**



SOURCE: The Conference Board. Reprinted with permission.

Note that these trends in job quality are long term, dating back to at least the 1980s. Thus, like the deficit in the number of jobs, there will be no quick fix capable of reversing these trends in job quality. Moreover, the persistence of wage stagnation and wage inequality through at least four business cycles suggests that market forces alone will not reverse these trends, neither will politics, as in the past 30 years there have been three Republican and two Democratic presidential administrations. New approaches are necessary to avoid further reductions in the standard of living of future generations.

## **THE ROLE OF CONSTITUENTS OF THE WORKFORCE DEVELOPMENT SYSTEM**

Efforts to reverse these trends need to be grounded in an accurate understanding of the constellation of factors that are driving them and options for addressing them that are within the reach of the key labor market institutions. In this section I turn to an analysis of the role of employers, unions, and educational institutions.

## **Employers: The Effects of Financialization**

*“Human resources are our most important asset.”* Although this is an often heard corporate mantra, evidence suggests that it does not translate into organizational actions. One indicator of the relative importance American business leaders assign to human capital is the influence and status of the top officers responsible for these issues relative to other corporate functions. In the past, unions served as a countervailing force that gave a voice to worker interests in unionized and nonunionized firms that felt a threat from potential unionization. So too did the expansion and vigorous enforcement of new occupational safety and health, equal employment opportunity and affirmative action, and other employment standards enacted in the 1960s and 1970s (Dobbin 2009). As pressures from these two external forces declined, so did the influence of the corporate labor and human resource executives in charge of these responsibilities.

The low relative status and influence of top corporate human resource officers can be observed in their compensation and their absence on corporate boards of directors and/or board agendas. Less than 2 percent of chief human resource officers (CHROs) are listed among the top five most highly compensated executives in publicly traded firms, and the few CHROs in this league are paid approximately 20 percent less than the other non-CEO executives (Hallock, Allen, and Haggerty 2008). Only 1 percent of CHROs are members of the corporate board of directors (Wright, Stewart, and Moore 2011). Moreover, a recent survey of the information on the state of human resources concludes that “. . . most boards do not get the information they need in order to monitor their company’s talent and they know it! A significant number (between 40 and 50 percent) report not receiving . . . data on employee attitudes, recruiting, turnover, and succession management for key technical positions” (Lawler and Worley 2011, p. 118).

How does this lack of influence translate into key decisions affecting the workforce? One way to assess this is to examine how employees are treated when corporations are under stress from current or perceived future product or financial market developments. For years there was a stylized fact in the economics literature: labor was viewed as a quasi-fixed factor of production (Oi 1962). This is less true today than in the past, at least for men. Average tenure with an employer as well as the proportion of employees with 10 or more years of service with an employer has declined for men (Farber 2008). The average tenure for women has increased somewhat as their attachment to the labor force has grown over the years. Evidence on how and when layoff decisions are made and received by the financial markets also indicates that the quasi-fixed view of human capital no longer holds in American corporations. In the last recession American employers turned to layoffs earlier than in past downturns, cut deeper into their workforces than declines in GDP would have predicted were necessary, and have been slower than ever before to begin hiring after the recession ended (Sum and McLaughlin 2010). In contrast with earlier decades, the stock market reinforces this behavior by no longer exacting a significant price penalty for announcing layoffs (Hallock, Strain, and Webber 2011).

Some of these trends in the declining value placed on human resources can be attributed to the globalization of markets and changes in technology that reduce the demand for labor in jobs that can be computerized and put a higher premium on education and skills. Part can also be traced to the ascendancy over time of what some are now calling the “financialization” of the American corporation. The quote from Gomory (2010) captures one key dimension of financialization—the primacy given to maximizing shareholder wealth as the purpose of the corporation. This view is also a product of the post-1980 time period and part of the reason for the breakdown in the postwar social contract. Michael Useem, a management scholar who has

studied the behavior of corporate executives and board members for several decades, recently summarized these developments and their consequences.

For executives, directors and owners of large, publicly traded companies, total shareholder return—TSR—has been the era’s dominant mantra. Improved share price plus cash dividends have come to define the currency of the realm. For company executives, corporate directors and portfolio managers to think otherwise is to violate their oath of office, to fall short of their fiduciary duty.

That is the formulation that has dominated the executive suite and board room for the past two decades. And little wonder. Institutional investors—pension funds, investment companies, hedge funds and other professionals that oversee giant portfolios—now control two-thirds of America’s publicly traded shares. This has given them the clout to force company leaders to focus on delivering near-term shareholder value above all else. Executives and directors who repeatedly fall short can find their careers cut short.

But what might seem an *idée fixe* of the American way is really a moment’s artifice, a prescription that served a past era but less well the current one. The rise of investor capitalism helped force out self-serving and poorly-performing executives, and bolstered boardroom prevention of executive malfeasance. Yet in doing so, it created two byproducts that have become increasingly dysfunctional for both companies and the country. The first is an unrelenting pressure of the equity market on company leaders to meet quarterly TSR expectations, regardless of the impact on the domestic workforce. Many companies have consequently streamlined their rosters at home and expanded their operations in China, India and other fast-growing markets abroad. The second is an incessant equity-market demand on company leaders to focus on their own advantage whatever the disadvantage for others. Fewer executives and directors have thus been able to step forward to advocate what is required for a vibrant economy, not just what is required for their own prosperity. (Useem 2011)

The 1980s witnessed major innovations in capital markets and views of the nature and purpose of public corporations, deregulation of financial institutions, and significant increases in the level of debt deemed acceptable in American firms. The increased use of junk bonds; hostile takeovers, leveraged buyouts, and break ups of large firms; and the new view of corporations as bundles of tradable assets that could be reconfigured or restructured to maximize short-term financial returns ushered in an era of financial capitalism. Power within corporations shifted from executives responsible for production, human resources, and labor relations to finance and

other top executives who serve as agents of increasingly demanding financial markets (Lazonick 2009). The era of rapid escalation in CEO income began as stock options and other incentives linked to share price became the driving factors in their compensation packages. This further increased the influence of finance in human resource decision making. Recent evidence shows, for example, that layoffs have come faster and deeper at firms that were most heavily scrutinized by stock market analysts, that CEO compensation is tightly linked to share price, and in firms that were among the first to put CFOs in powerful management positions (Jung 2011). Others have found that financialization as measured by the increased ratio of profits from interest, dividends, and capital gains (excluding income from sale of products and services) accounts for a significant portion of the decline in labor's share of national income, increased earnings inequality, and increased share of compensation going to top executives from the 1970s to 2007 (Lin and Tomaskovic-Devey 2012).

### **Alternative Employer Strategies: Using Human and Social Capital to Drive Innovation and Performance**

Not all U.S. firms fell under the spell of these financial market pressures. Indeed, within nearly every industry there are examples of firms that have sought to compete with growing international competition and changes in technologies by staying on the cutting edge of innovation, product development, and service quality. To be successful, these firms have invested heavily in human and social capital and made good use of the collective knowledge, skills, and abilities of their full workforce. The human resource literature often refers to the bundle of practices needed to achieve high productivity and service quality as high productivity-high wage, high-road, high-performance, or knowledge-based work systems.

While the specific practices needed to achieve high performance with these strategies vary across industries, the generic features include careful selection for employees with both

strong technical and behavioral-social (problem solving and teamwork) skills; significant investment in training and development; engagement of employees at the workplace to both build trust and to draw on their knowledge to solve problems, coordinate operations, and drive innovations; compensation systems that align employee and firm interests; and labor management partnerships in settings where employees are represented by a union and/or professional association. Two decades of research on companies adopting these human resource systems has documented their ability to achieve world class productivity and service quality in industries as diverse as steel, autos, airlines, telecommunications, apparel, health care, computers, and semiconductors (Appelbaum, Gittel, and Leana 2011; Ton 2012). More recent case studies are now documenting the same patterns of success in smaller firms across manufacturing, retail, and health care establishments (Hitachi Foundation 2011).

This high-road strategy is critical because, compared to strategies that seek to minimize labor costs and focus on short-term returns, it is better able to achieve the twin objectives of building and sustaining strong competitive companies that generate consistent returns to shareholders *and* support high and rising wages and living standards for employees. It is the contemporary means of achieving a new “social contract” in which workers’ incomes, employment conditions, and living standards advance in tandem with the productivity they help to generate. Moreover, even in the current world in which employment security and longevity are more uncertain, these work systems build and help keep current employees’ human capital and thereby provide a rich stock of human capital for American industry to draw on when hiring.

The problem is that these practices and systems are not diffusing widely across American industries. In fact, their prevalence may have declined somewhat in the past decade (Benson and Lawler 2010). Various hypotheses have been offered to explain the limited rate of diffusion:

- a lack of information about these practices and how to implement/manage them;
- the high start-up costs and delayed benefits that come with these (and any other) investments, sometimes called “worse before better” traps);
- failure to eliminate the “low road” option of competing by holding labor costs as low as possible;
- failure to reform and modernize labor law to encourage and support these strategies and practices; and the pressures from financial market agents for maximizing short-term returns.

There may, however, be a greater reason why these human capital–driven strategies are not diffusing or are in fact declining. A market failure may be at work here as well. As employee tenure declines and more parts of a firm’s value chain are outsourced, the incentive for an individual firm to invest broadly and deeply in these practices also declines. Indeed, the most recent fad in the human resource management literature is to emphasize “talent management” of key executives and other individuals and groups deemed most critical rather than invest in the firm’s overall workforce. This may be rational behavior for an individual firm, but it is not optimal for maintaining and building the human capital stock across the value chain or across American industry.

Very likely all of these factors, and perhaps others, play a role. The net effect of limited diffusion of this way of competing and managing human resources is to create a two equilibria economy: some firms compete on the high-road, knowledge-driven strategies, while others compete on the low-road, labor cost–minimization strategy. To date, more have chosen the latter than the former. This puts these high-road firms on the defensive and discourages others from

following their lead. The key challenge, if America is to be a competitive economy at high and rising living standards, lies in tipping the balance in favor of the former so that the low-road firms are forced to upgrade their practices and employment standards to remain competitive. This will require overcoming the barriers and market failure noted above.

### **Start-up Firms**

The above discussion focuses on changes that occurred in existing firms over the past three decades. What about new start-ups and small firms—the source of a substantial number of the new jobs created in the U.S. economy (Neumark, Wall, and Zhang 2011)? Have recent entrepreneurs avoided the financial market pressures for short-term results and created higher-quality jobs? While the evidence is limited, it appears that the same variation in practices exists among start-ups and small firms. A study of Silicon Valley start-ups in the 1990s found, for example, that only about half (57 percent) of start-ups were built around practices that sought to gain competitive advantage through teamwork and/or individual talent; the rest followed traditional command and control managerial strategies and practices (Hannan, Burton, and Baron 1996). On average, small firms pay lower wages and benefits, provide less training, and have higher employment volatility and greater likelihood of failure than large firms (Litwin and Phan 2011; Shane 2008;). Yet, as with large, older firms, within most industries there are examples of young, smaller firms that pay above average wages and achieve above average productivity (Hitachi Foundation 2011; Ton 2012). Moreover, there are the highly visible success stories like Southwest Airlines and Google that have grown rapidly and are recognized for their high wages and leading employment practices. Thus, the same diffusion challenge facing high-performance work practices in large firms appears to be an issue in entrepreneurial start-up firms as well.

## **Unions and Collective Bargaining**

Throughout much of the twentieth century, unions served as the principle and most powerful voice for the American workforce. Through collective bargaining and the threat of unionization, unions helped construct and sustain the social contract that kept wages and productivity moving in tandem and in doing so upgraded the quality of the jobs that had previously been low-wage, unsafe, and subject to arbitrary treatment by managers and supervisors. Unions have now declined to the point that they no longer can give voice to America's workforce, serve as a countervailing power in industry, or engage business leaders in fashioning a new social contract tailored to the modern workforce and economy. America therefore faces some strategic questions: What will fill this void? Will society default to more government regulations of employment relations? If unions, professional associations, or other forms of collective voice are to play a role, what would a twenty-first century models of these organizations look like? What changes in labor law and policy are needed to support new models?

Union membership in the private sector reached a peak of about one-third of the workforce in the mid-1950s. It declined slowly but steadily through the 1960s and 1970s, accelerated in the 1980s and 1990s, and now stands at 6.9 percent of private sector worker and 11.9 percent overall. Union decline has multiple causes, including the shift from blue-collar to white-collar work, the decline of manufacturing jobs to global competition and technological change, waning effectiveness of labor law in the context of increased managerial opposition to union organizing, and the failure of unions to adopt new strategies to respond to these developments.

In contrast to these trends in membership, worker interest in joining unions has increased over the years. Nationally representative surveys in the 1970s found that 30 percent of nonunion

workers would join a union if given the chance (Kochan 1979); that number increased to around 50 percent by the end of the 1990s (Freeman 2007). Yet the reality today is that the employers, not the workers, determine whether workers who want a union will be able to get one. An employer that is determined to avoid unionization through legal and/or illegal means has a 90 percent likelihood of being successful, even when a majority of workers sign a statement indicating they want union representation (Ferguson 2008). Among firms that have no union presence and no active union organizing drives, the threat of unions and collective bargaining is almost, if not totally, nonexistent.

As unions declined so did the bargaining power and innovative capacity of collective bargaining. By the mid 1980s union coverage declined sufficiently so that unions could no longer rely on strike threats as a source of bargaining power or use pattern bargaining to spread wage increases beyond their specific bargaining units. Innovative labor management partnerships that were competitive with the best of nonunion models emerged in a number of industries such as autos, steel, telecommunications, and others, but without labor law reforms needed to support and endorse them, the innovations failed to diffuse broadly enough to become the new norm (Kochan, Katz, and McKersie 1986). The result has been a downward spiral: it was easier for firms to avoid unions than to work with them to transform relationships and work practices. The threat effects of unions on new operations evaporated, and the pressure to match union wages and benefits eroded. Collective bargaining has never recovered its pre-1980s momentum. Recent evidence suggests that union decline accounts for approximately one-third of the increase in income inequality experienced since the 1980s (Western and Rosenfeld 2011).

Despite these trends, some unions have partnered with companies to foster high-road, high-productivity relationships. Southwest, the most highly unionized U.S. airline, is also the

most productive and profitable, pays industry-leading wages, consistently ranks at or near the top of the industry in customer satisfaction, and is rated as one of the 100 best places in America to work (Gittell 2004). Health insurer and provider Kaiser Permanente and its coalition of unions have maintained a comprehensive labor–management partnership for nearly 15 years. During this period, the company turned around its finances, supported steady growth in wages, used advanced problem-solving techniques to negotiate new labor agreements, gained national acclaim as a leader in the use of electronic medical record technologies, and improved employee and patient satisfaction (Kochan et al. 2009).

### **Demise of Business, Labor, Government Dialogue**

Another casualty of union decline has been the demise in forums for dialogue and communication among labor and business leaders in society that could be instrumental for addressing the market failures noted above. Although America has never had a tradition of formal consultative structures at the national level (except in wartime), various presidents (Truman, Eisenhower, Kennedy, Johnson, and Carter) have had informal labor management consultative groups. A variety of private groups also brought labor and business leaders together for discussion of national issues such as the National Planning Association (later renamed the National Policy Association), the Collective Bargaining Forum, Work in America Institute, the Council on Competitiveness, and in one case a private group created and chaired by former Secretary of Labor and Harvard Professor John Dunlop. All of these have gone away or are largely invisible.

Efforts to revise a national dialogue have failed, even in times of crisis. Proposals were rejected for high-level government leaders to bring business and labor together in the wake of the 9/11 terrorist attacks, during the aftermath of Hurricane Katrina, and when the Obama

administration was being formed in the midst of the deep financial crisis. There is a vacuum in dialogue between business and labor leaders that needs to be filled.

## **Education**

It is standard practice to argue that America needs to improve basic education outcomes to ensure the future workforce has world class competitive knowledge, skills, and abilities. American student performance on standard math and science tests has declined relative to students in a number of other countries. The percentage of young adults obtaining a four-year college degree grew steadily for much of the twentieth century, but then leveled off (it actually declined for men) in the 1980s and grew at a much slower rate in the past two decades, despite, as noted earlier, the increased demand and wage premium for college graduates (Goldin and Katz 2008). Enrollment in America's community colleges has grown, particularly in recent years, in the face of rising unemployment and changing skill requirements; however, the rate of completion of community college degrees remains low and problematic. The percentage of college students pursuing math, science, or engineering degrees remains at a low 15 percent.

Equal concerns are voiced about the quality and skill mix of the adult labor force. Employers report shortages of key technical skills needed to work with advanced technologies and worry about the demographic cliffs facing key occupations and industries as skilled workers and technicians approach retirement (American Society for Training and Development 2006; McKinsey Global Institute 2011). A key question, therefore, is what mix of public and private resources and institutions are needed to build and maintain the nation's human capital stock?

Government training programs have always been relatively small, and those that exist have gotten smaller over time, with the exception of the one-time upsurge in training investments provided by the 2009 stimulus package. In 2012 the Department of Labor budgeted

approximately \$3 billion for adult training. The Department of Education spent about the same amount on Pell grants or other support for college students. Measured against the growth in the labor force, expenditures have declined as well.

Estimates of private sector expenditures on training are notoriously unreliable. One national survey of employees shows declines in participation in training between 1996 and 2003, while another survey with somewhat differently worded questions shows increases between 1999 and 2005 (Lerman 2011). The best estimates are that American firms spend somewhere between \$70 and \$100 billion per year on training (Lerman 2011). The bulk of private sector training is spent on managers and more highly educated professionals in executive education programs and tuition reimbursement for retaining or advancing professional certifications. While these investments are important, they do not reach deeply into the ranks of the workforce or address the current and/or future shortage of midlevel employees with the mathematical, technical, and behavioral–social skills needed to staff advanced manufacturing or service operations and industries. Filling this need will require significant expansion in the range of who gets access to training, the length of training, and the mix of classroom and on-the-job training programs. Bishop’s (1995) review suggests that the individual and social returns to employer sponsored training could be substantial if the disincentives to individual firms to finance general and vocational training could be overcome. The Urban Institute (2011) agrees and notes that a good deal has been learned over the years about the forms, duration, and organizational linkages that are essential to generating these potential returns:

Research has shown that workforce development works, but how we go about it matters. We know that training is more effective if it’s intensive, long-term, and workplace-based, such as on-the-job training, apprenticeships, or internships. Giving individuals real work experience while in training develops skills better than stand-alone training does. And this applies to all skill levels—whether someone is studying for a two-year degree or a PhD—if they don’t understand

how their education and skills relate to a job, their workplace success will be limited.

One form of training where more data are available on trends, scope, and effects is registered apprenticeship programs. Between 1998 and 2010 the number of Department of Labor registered apprenticeship programs declined by 36 percent, from 41,000 to 26,000. In 2010 only 376,000 workers were enrolled in these programs—less than 0.3 percent of the labor force, or an estimated 4 percent of each new cohort of labor force entrants (Lerman 2011). The miniscule size and the decline in apprenticeships are particularly unfortunate since apprenticeships have high economic returns to graduates and achieve nearly universally positive evaluations and endorsements from employers that sponsor them. One study estimates the returns to apprenticeship of over \$50,000 two years after completion with a lifetime net present value of \$266,000. This compares to about \$8,000 short-term and \$104,000–\$130,000 lifetime present value of completing a community college degree (Hollenbeck 2008). Employer sponsors cite increased productivity, morale, safety, and confidence in the skill levels of potential recruits as the primary benefits to apprenticeship. Given these sizable benefits and strong endorsements, and concerns over skill shortages and the aging of the labor force, apprenticeship models would appear to be particularly good candidates for expansion.

### **Business Schools**

Universities may be contributing to the decline in the value and influence of human capital in industry. Most business schools, for example, teach relatively little about how to compete and manage for high performance, high wages, and varying employment conditions. Human resource courses have largely been eliminated from core MBA curricula, and labor relations is not taught at all in most major business schools today. Just as in corporations, the power of finance has ascended, and the view of the corporation as a shareholder-maximizing

institution dominates both the teaching and the culture of most leading business schools. Consulting and financial services pay the highest salaries to MBA graduates and therefore are viewed as the most prestigious and coveted industries and careers. These two industries have absorbed the majority of MBA graduates over the past decade at business schools such as Harvard (37 percent into financial services and 24 percent into consulting) and MIT (27 percent into financial services and 29 percent into consulting). Nationally, financial services accounted for a significantly higher proportion of compensation and national income in the past two decades than in prior years (Blair 2010; Tomaskovic-Devey and Lin 2011)

### **SOLVING THE PARADOX: A JOBS COMPACT**

The above analysis has identified four barriers to overcoming the paradox that keeps America from translating rhetoric about the importance of human capital to the economy into reality.

- 1) It is not necessarily in the interests of individual firms to compete, invest, and manage in ways necessary to gain value from human capital.
- 2) Strategies and practices capable of achieving both high productivity and high wages are not diffusing across firms.
- 3) While it may be in the interests of the American *business community* to elevate human capital as a source of competitive advantage, it cannot do this alone without the support of government, labor, or education stakeholders. The same is true for each of these other stakeholder groups—none can do it without the support of the others.
- 4) There is insufficient dialogue across these groups to achieve a collective effort to do so.

Labor market institutions need to come together in a coordinated effort to address market and institutional failures—yet the odds are low that the key stakeholder groups will initiate a dialogue on their own that is capable of overcoming the barriers noted above. A new approach is needed. In a follow-up policy brief (Kochan 2012), I propose a way forward by providing a concrete set of job creation options that, if taken together, should be sufficient to both close the jobs deficit and put the economy back on a path of improving wages and other aspects of job quality. But new leadership is needed to get this process started. Specifically, I suggest that education leaders build on the ideas expressed by business and labor leaders who attended the Harvard Business School Competitiveness Summit by convening national and regional forums to build commitment to a Jobs Compact capable of creating and sustaining the 20 million new high-quality jobs needed by 2020.

## REFERENCES

- American Society for Training and Development Public Policy Council. 2006. "Bridging the Skills Gap." Washington, DC: American Society for Training and Development.
- Appelbaum, Eileen, Jody Hoffer Gittel, and Carrie Leana. 2011. "High Performance Work Practices and Sustainable Economic Growth." Champaign, IL: Employment Policy Research Network. <http://www.employmentpolicy.org/topic/23/research/high-performance-work-practices-and-sustainable-economic-growth-0> (accessed March 16, 2012).
- Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez. 2009. "Top Incomes in the Long Run of History." National Bureau of Economic Research Working Paper No.15408. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w15408> (accessed March 16, 2012).
- Benson, George S., and Edward E. Lawler III. 2010. "Raising Skill Demand: Generating Good Jobs." In *Transforming the U.S. Workforce Development System: Lessons from Research and Practice*, David Finegold, Mary Gatta, Hal Salzman, and Susan Schurman, eds. Champaign, IL: Labor and Employment Relations Association, University of Illinois at Urbana-Champaign, pp. 87–108.
- Bishop, John H. 1995. "Expertise and Education." Cornell University Center for Advanced Human Resource Studies Working Paper. Ithaca, NY: Cornell University ILR School. <http://digitalcommons.ilr.cornell.edu/cahrswp/203> (accessed March 16, 2012).
- Blair, Margaret. 2010. "Financial Innovation and the Distribution of Wealth and Income." Working Paper No. 95-13. Nashville, TN: Vanderbilt University Law School.
- Browning, E.S. 2011. "Retiring Boomers Find 401(k) Plans Fall Short." *Wall Street Journal* online, February 19. <http://online.wsj.com/article/SB10001424052748703959604576152792748707356.html> (accessed March 14, 2012).
- Bureau of Economic Affairs. 2011. "Summary Estimates for Multinational Companies: Employment, Sales, and Capital Expenditures." Washington, DC: U.S. Department of Commerce, April 18.
- Delgado, Mercedes, Michael E. Porter, and Scott Stern. 2011. "Clusters, Convergence, and Economic Performance." Working paper. Cambridge, MA: MIT Sloan School of Management.
- Dobbin, Frank. 2009. *Inventing Equal Opportunity*. Princeton, NJ: Princeton University Press.

- Farber, Henry S. 2008. "Job Loss and the Decline in Job Security in the United States." In *Labor in the New Economy*, Katherine Abraham, James Spletzer, and Michael Harper, eds. Chicago: University of Chicago Press, pp. 223–262.
- Ferguson, John-Paul. 2008. "The Eyes of the Needle: A Sequential Model of Union Organizing Drives, 1999–2004." *Industrial and Labor Relations Review* 62(1): 3–21.
- Freeman, Richard B. 2007. "Do Workers Still Want Unions? More Than Ever." Economic Policy Institute working paper. Washington, DC: Economic Policy Institute.
- Gibbons, John M. 2010. *I Can't Get No . . . Job Satisfaction, That Is*. Report R-1459-09-RR. New York: The Conference Board.
- Goldin, Claudia, and Lawrence F. Katz. 2008. *The Race between Education and Technology*. Cambridge: Harvard University Press.
- Gomory, Ralph. 2010. "A Time for Action: Jobs, Prosperity and National Goals." Huffington Post, January 25. [http://www.huffingtonpost.com/ralph-gomory/a-time-for-action-jobs-pr\\_b\\_434698.html](http://www.huffingtonpost.com/ralph-gomory/a-time-for-action-jobs-pr_b_434698.html) (accessed March 22, 2012).
- Hallock, Kevin F., Matthew Allen, and John Haggerty. 2008. "Senior HR Leaders in the 'Top 5': Evidence on Pay, Relative Pay, and Performance Using Data from 1,500 Firms over a Decade." Working paper. Ithaca, NY: Cornell University.
- Hallock, Kevin F., Michael R. Strain, and Douglas Webber. 2011. "Job Loss and Effects on Firms and Workers." Working paper. Ithaca, NY: Cornell University.
- Hannan, Michael T., M. Diane Burton, and Janes N. Baron. 1996. "Inertia and Change in the Early Years: Employment Relations in Young, High-Technology Firms." *Industrial and Corporate Change* 5(2): 503–535.
- Hitachi Foundation. 2011. Hitachi Foundation Pioneers Employer Initiative. <http://www.hitachifoundation.org/our-work/business-and-work-grants-program/initiatives/365-the-pioneer-employers-initiative> (accessed March 22, 2012).
- Hollenbeck, Kevin. 2008. "State Use of Workforce System Net Impact Estimates and Rates of Return." Paper presented at the Association for Public Policy and Management, Los Angeles, CA, November 6.
- Jung, Jiwook. 2011. "Shareholder Value and Workforce Downsizing, 1984–2006." Working paper. Boston, MA: Harvard University, Department of Sociology.
- Kochan, Thomas A. 1979. "How American Workers View Labor Unions." *Monthly Labor Review* 102(4): 23–31.

- . 2012. “Resolving America’s Human Capital Paradox: A Jobs Compact for the Future.” W.E. Upjohn Institute for Employment Research policy brief. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Kochan, Thomas, Adrienne Eaton, Robert McKersie, and Paul Adler. 2009. *Healing Together: The Kaiser Permanente Labor Management Partnership*. Ithaca: Cornell University/ILR Press.
- Kochan, Thomas A., Harry C. Katz, and Robert B. McKersie. 1986. *The Transformation of American Industrial Relations*. New York: Basic Books.
- Lawler, Edward E. III, and Stephen Worley. 2011. *Management Reset*. San Francisco: Jossey Bass.
- Lazonick, William. 2009. *Sustainable Prosperity in the New Economy*. Kalamazoo: W.E. Upjohn Institute for Employment Research.
- Lerman, Robert I. 2011. “Employer-Led Training: Extensive and Intensive Approaches.” In *Transforming the U.S. Workforce Development System*, David Finegold, Mary Gatt, and Susan Schurman, eds. Champaign, IL: Labor and Employment Relations Association, pp. 153–180.
- Levy, Frank, and Peter Temin. 2010. “Institutions and Wages in Post-World War II America.” In *Labor in the Era of Globalization*, Clair Brown, Barry J. Eichengreen, and Michael Reich, eds. Cambridge University Press.  
<http://www.employmentpolicy.org/topic/12/research/addressing-problem-stagnant-wages>  
(accessed March 16, 2012).
- Lin, Ken-Hou, and Donald Tomaskovic-Devey. 2012. “Financialization and Income Inequality in the U.S. Economy, 1970–2007.” Working paper. Amherst, MA: University of Massachusetts.
- Litwin, Adam Seth, and Phillip Phan. 2011. “Quality over Quantity: Reexamining the Link between Entrepreneurship and Job Creation.” Working paper. Baltimore, MD: Johns Hopkins University.
- Neumark, David, Brandon Wall, and Junfu Zheng. 2011. “Do Small Firms Create More Jobs?” *Review of Economics and Statistics* 93(1): 16–29.
- Oi, Walter. 1962. “Labor as a Quasi-fixed Factor.” *Journal of Political Economy* 70(6): 538–555.
- Shane, Scott A. 2008. *The Illusions of Entrepreneurship*. New Haven: Yale University Press.
- Sum, Andrew, and Joseph McLaughlin. 2010. “The Massive Shedding of Jobs in America.” *Challenge* (November-December): 62–76.

- Tomaskovic-Devey, Donald, and Ken-Hou Lin. 2011. "Income Dynamics, Economic Rents, and Financialization of the U.S. Economy." *American Sociological Review* 76(4): 538–559.
- Ton, Zeynep. 2012. "Why 'Good Jobs' Are Good for Retailers." *Harvard Business Review* Article No. BR1201, January 1. <http://hbr.org/2012/01/why-good-jobs-are-good-for-retailers> (accessed March 22, 2012).
- Toossi, Mitra. 2012. "Labor Force Growth Projections to 2020: A More Slowly Growing Labor Force." *Monthly Labor Review* January: 443–464.
- Urban Institute. 2011. "Five Questions for Demetra Smith Nightingale about Workforce Development Policy." <http://www.urban.org/toolkit/fivequestions/Nightingale-Workforce-Development.cfm> (accessed March 22, 2012).
- Useem, Michael. 2011. "The Business of Employment: Time to Revise Investor Capitalism's Mantra." *Washington Post*, August 9. [http://www.washingtonpost.com/national/on-leadership/the-business-of-employment-time-to-revise-investor-capitalisms-mantra/2011/08/09/gIQA8rs4I\\_story.html](http://www.washingtonpost.com/national/on-leadership/the-business-of-employment-time-to-revise-investor-capitalisms-mantra/2011/08/09/gIQA8rs4I_story.html) (accessed March 13, 2012).
- Von Wachter, Till. 2011. "Jobs' Deficit and Job Growth, Unemployment, and the Consequences for Workers." Employment Policy Research Network Policy Brief. Champaign, IL: Employment Policy Research Network.
- Western, Bruce, and Jake Rosenfeld. 2011. "Unions, Norms and the Rise of U.S. Wage Inequality." *American Sociological Review* 76(4): 513–537.
- Wright, Patrick, Mark Stewart, and Ozias A. Moore. 2011. "The 2011 CHRO Challenge: Building Organizational, Functional, and Personal Trust." Cornell University Center for Advanced Human Resource Studies. Ithaca, NY: Cornell University Center for Advanced Human Resource Studies, ILR School.