W.E. UPJOHN INSTITUTE FOR EMPLOYMENT RESEARCH

Upjohn Research

Upjohn Institute Policy Papers | Upjohn Research home page

3-1-2012

Resolving America's Human Capital Paradox: A Jobs Compact for the Future

Thomas A. Kochan
Massachusetts Institute of Technology

Policy Paper No. 2012-011

Citation

Kochan, Thomas A. 2012. "Resolving America's Human Capital Paradox: A Jobs Compact for the Future." Policy Paper No. 2012-011. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
https://doi.org/10.17848/pol2015-011

Policy Paper No. 2012-011

Resolving America's Human Capital Paradox: A Jobs Compact for the Future

Thomas A. Kochan
MIT Sloan School of Management
Institute for Work and Employment Research
e-mail: 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.

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

This policy brief 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 working paper 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.

Resolving America's Human Capital Paradox:
A Jobs Compact for America's Future

Thomas A. Kochan

There is widespread recognition that human capital must serve as a significant asset for the American economy to be competitive and to support a high and rising standard of living. Given this, why is it that

- society tolerates persistence of the worst jobs crisis since the Great Depression in the form of historically high rates of unemployment and underemployment,
- many U.S. firms place a low priority on human resource relative to financial and shareholder considerations,
- wages of the majority of the labor force have stagnated for three decades while income inequality has been allowed to grow,
- job satisfaction continues to decline, and
- unions are under constant attack by private and public employers?

These are all symptoms of an economy that undervalues work, the workforce, and the institutions, policies, and practices needed to translate the rhetoric surrounding the importance of human capital into reality. Failure to address this paradox will extend the current jobs crisis indefinitely and further erode the standard of living for current and future generations of Americans.

Since there is no single cause of these trends, there is no single silver bullet solution. Instead, we need a systemic set of changes in policies, practices, power, and norms to turn rhetoric about the importance of human capital into reality for the workforce and the economy. A companion paper (Kochan 2012) suggests that market and institutional failures are the root causes of the undervaluing of human capital. Although it is not necessarily in the interest of any individual firm to invest in and compensate employees or to promote high living standards, it is in the interests of the overall business community, workforce, and society do so—that is the market failure The institutional failure is that the key groups that would need to coordinate efforts to overcome this market failure—business, labor, education, and government—either do not interact or are at impasse over how to address employment issues.

In this paper I outline a strategy for resolving the paradox by taking a new approach to addressing the institutional and market failures. I propose that four key stakeholder and leadership groups—business, labor, education, and government—engage at the regional and national levels to build consensus and implement a new long-term Jobs Compact for America, one capable of generating the estimated 20 million new jobs needed between now and 2020 to replace those lost in the last recession and to keep up with the growth in the labor force. 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

The market failure arises because 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 off shoring 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. 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 stable tax environment that encourages investments in U.S. jobs, 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. Doing so in this case, however, will require overcoming the failure of these institutions to take these actions to date by doing 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.

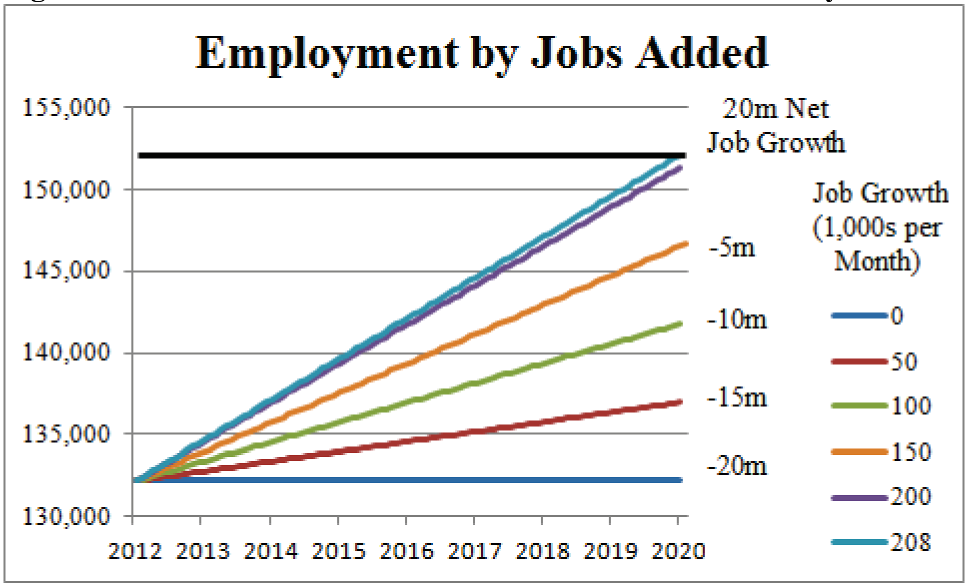
SOLVING THE PARADOX: A JOBS COMPACT

Given their adversarial histories, the odds are low that the key stakeholder groups will initiate a dialogue on their own that is capable of overcoming these barriers. Yet a number of business and labor leaders appear ready and willing to begin a dialogue. Specifically, on November 29, 2011, the Harvard Business School brought leaders of business, labor, and the academic communities together to discuss actions needed for firms operating in the United States to be competitive and to contribute to high and rising living standards.[1] One of the promising results of the discussion was a shared sense of urgency on the need to address the nation's jobs crisis. Participants called for direct actions to encourage investments needed to generate new high-quality jobs and strengthen their ability to compete in the United States, rebuild apprenticeships, and expand and improve links between industry and community colleges and four-year universities. I propose we build on the momentum generated at that meeting and bring national and regional leaders of these same stakeholder groups—business, education, and labor—to commit to a jobs compact capable of generating 20 million new high-quality jobs by 2020 needed to get the nation back to the level of employment that existed prior the 2007–09 recession. As shown in Figure 1, this would require creating on average 208,000 new jobs each month between 2012 and 2020. Below I outline an initial set of options that, if taken together, I believe would achieve this goal.

---

[1] The March 2012 issue of the *Harvard Business Review* contains summaries of the papers discussed at this meeting.

Figure 1 Years to Close the Jobs Deficit at Different Monthly Job Growth Rates



SOURCE: Kochan (2012).

OPTIONS FOR ACCELERATING JOB GROWTH

Infrastructure Investments

One of the most widely discussed options for stimulating and sustaining demand for American jobs and strengthening long-term competitiveness is to address the nation's deteriorating infrastructure. The American Society of Civil Engineers estimates that America has a $2.2 trillion backlog in investments needed to repair the nation's infrastructure. Others have estimated significant positive economic returns and employment multipliers from such investments (Pollin 2010; Tyson 2011). Based on Tyson's estimates, investment of $100 billion would generate more than 2 million jobs. Thus, an investment of $25 billion per year through the rest of this decade would close 20 percent of the jobs deficit.

Most of the proposals for an infrastructure initiative call for a mixture of private and public capital to serve as the initial source of funds. However, the private sector could take the lead in raising the necessary capital. The labor movement has recently announced it is prepared to commit up to $10 billion in pension funds to an infrastructure initiative. Given their special interest in reducing uncertainty, Wall Street firms could be called on to build a substantially larger pool of funds. Then business and labor could jointly propose the government further leverage these funds in ways that lower the effective interest rate costs associated with infrastructure projects.

Recapturing Lost Manufacturing Jobs

Just less than 10 percent of the workforce is currently employed in manufacturing, down from a peak of 30 percent in 1960, 20 percent in 1980, and 14 percent in 2000. Concerns over this decline fall into three broad domains: 1) manufacturing jobs paid medium-skill workers relatively high wages, and those displaced have neither the opportunities nor in some cases the skills needed to find replacement jobs at equivalent wages; 2) a decline in manufacturing leads to not only a loss of production capacity and knowhow, it may also lead to a decline in innovative capacity as opportunities for lessons from manufacturing to influence design and engineering are lost; and 3) spillover/multiplier effects that manufacturing has on jobs in supply and distribution and related services lead to further declines in jobs, incomes, and community welfare.

Recapturing lost manufacturing jobs is difficult and requires some hard choices and changes in past practices by management and employees. For employers, this requires recalculating the total costs (as opposed to the differences in labor costs) of producing abroad products that are then shipped and sold in the United States. The Boston Consulting Group argues that when total costs and productivity differences are taking into account, the cost advantage of China will be closed for many manufacturing goods sold in the United States within five years (Sirkin, Zinser, and Hohner 2011). Ford, General Motors, General Electric, and a number of other companies have significantly reduced their entry labor rates and renegotiated wage formulas to provide for-profit sharing or other contingent compensation arrangements and in return made commitments to bring work back to U.S. plants. The business leaders at the Harvard Business School Competitiveness Summit suggested it could be possible to bring 1 million jobs back to the United States under the "right" conditions. Let the negotiations begin over what these "right" conditions might be. If, as predicted, the cost gaps close gradually, the number of jobs that can be generated with this approach should increase over time. If the initial estimate could be doubled over the next eight years to 2 million, another 10 percent of the jobs deficit could be closed.

Capturing Next Generation Manufacturing Work

There is a growing awareness that manufacturing depends on the overall "ecosystem" in which it embedded, that is, the existence of adequate sources of capital for risk taking and investment, good technical schools and universities to provide the medium- and high-skilled employees and professionals needed to develop and use current and next-generation technologies, a supply and service base that shares services and knowledge and competes openly for talent, and a predictable and sizable public and/or private sector consumer market. Thus, the educational innovations, regional cluster strategies, and strengthening of the links between technical and organizational/human resource strategies discussed in the companion working paper should pay particular dividends in capturing the manufacturing work that will flow from the next generation of technological and product innovation. A recent study of the New England region suggested that taking an integrated "ecosystems" approach could generate 7,500–8,500 new high-quality jobs per year in advanced manufacturing industries that already have a strong presence in the region. Matching this level of effort in 15 additional regions would generate 1 million new high-level design, engineering, and production jobs. This would contribute to closing another 5 percent of the jobs deficit.

Strategic Human Capital Investments

One of the most perplexing aspects of the human capital paradox is that despite the high levels of unemployment and underemployment, employer groups report shortages of medium- and high-skilled workers. While evidence on skilled shortages is debatable, there is enough expressed concern to warrant those experiencing shortages to work together to address the market and institutional failures that might be causing them. The biggest market failure is that individual firms are reluctant to invest in the training and development of their employees because if the employees leave, other employers (and society) will gain the benefits. The key institutional failure is the low level and decline in industry- and/or occupation-based apprenticeship programs (Lerner 2011), despite the high rates of returns in lifetime income they generate for graduates and the uniformly high levels of satisfaction employers report with apprentice hires (Hollenbeck 2008).

Participants at the Harvard Summit agreed with the need to rebuild apprenticeship programs and suggested a target of 1 million new apprenticeships. While no time period was specified for reaching this target, it would be reasonable to expect that once the institutional infrastructure was rebuilt, that number could be doubled again by the end of the decade; doing so would close another 10 percent of the jobs deficit.

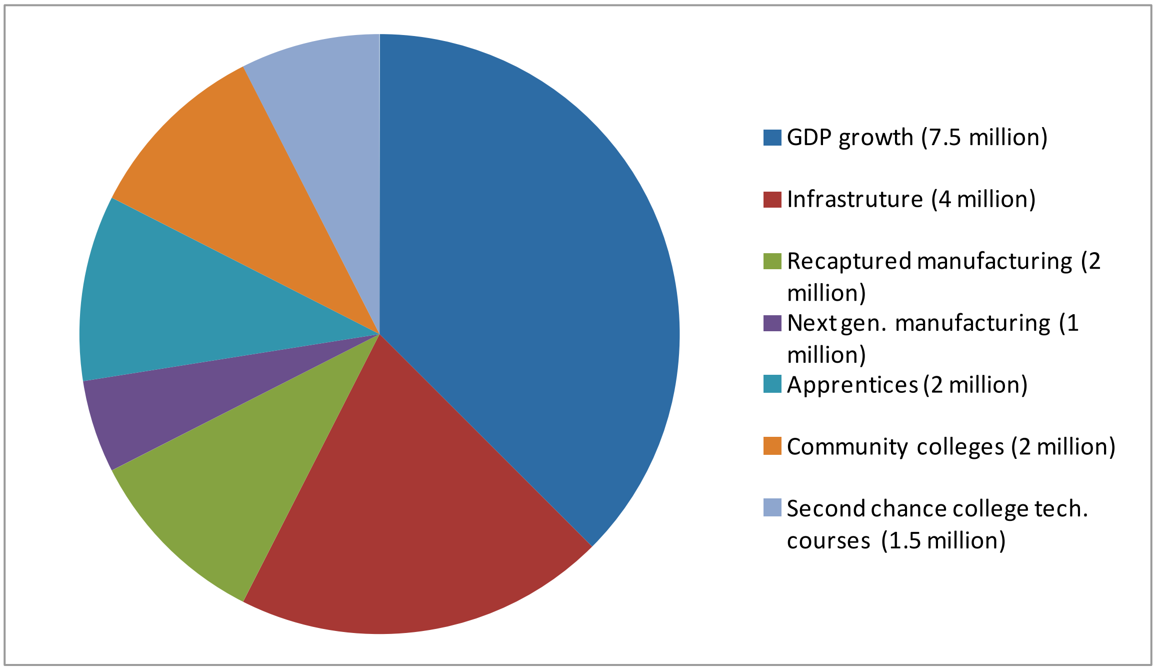
Community colleges can also contribute to filling the medium-skill jobs if they work closely with regional firms to enroll, graduate, and place workers with technical skills in short supply. The White House estimates that an $8 billion increase in community colleges would generate 2 million new jobs and thereby reduce the jobs deficit by another 10 percent.

Only 15 percent of the approximately 1.7 million 2010 graduates of four-year colleges majored in science, engineering, or math—technical skills that are critical to an innovation-based economy. Many college graduates outside of these fields are currently underemployed. At the same time universities across the country are developing new on-line models for delivering courses in science, math, and engineering, and some already have advanced industry-sponsored engineering and management degree programs. Education leaders could be challenged to develop more graduate on-line or in-person courses that are open to nontechnical undergraduate majors who are able and willing to now invest in these basic skills. Co-op programs, internships, and other "apprentice-like" models that are based on close university-industry partnerships could all be expanded to serve this national interest and to avoid a further depreciation of the human capital of underemployed college graduates.

Suppose those college graduates who now find themselves either unemployed or underemployed were offered a "second chance" option to enroll in on-line technical courses designed cooperatively by industry executives and university faculty to fill entry-level jobs in the technical fields employers argue are in high demand. If, as some estimates suggest, up to 50 percent of graduates with nontechnical BA degrees are underemployed, the pool of potential candidates could be as high as 750,000. If industry–university partners would sponsor and enroll 25 percent of these underemployed college graduates per year, or provide internships or co-op job opportunities with the chance to be hired when they complete sufficient coursework to meet entry level job requirements, 1.5 million new hires would be available for entry-level technical jobs. This would contribute to a 7.5 percent reduction in the jobs deficit.

As summarized in Figure 2, taken together, these actions could generate approximately 12.5 million jobs, accounting for over 60 percent of the jobs needed to close the deficit by 2020.

Figure 2 Contributions to Closing the Jobs Deficit



SOURCE: Author's calculations.

The remainder deficit should be closed as a byproduct of normal economic growth. The President's Council of Economic Advisers (2012) estimates that real GDP will grow between 2.5 percent and 3.1 percent per year between 2012 and 2022. If the historical relationship between GDP growth and job creation were to hold and lower the bound estimate of 2.5 percent per year, GDP growth would generate approximately 10 million additional jobs, well above the 7.5 million needed to close the jobs deficit by 2020. Since there is evidence that the relationship between GDP and job growth has weakened in recent years, something closer to the 3.1 annual growth rate may be needed. Given the uncertain nature of both the growth rate and its effects on jobs, progress toward the 2020 target should be carefully monitored on an annual basis. If the economy is falling short, or the initiatives suggested above are falling short of their annualized targets, stronger actions may be required.

INSTITUTIONAL INNOVATIONS NEEDED TO SUSTAIN THE MOMENTUM AND IMPROVE JOB QUALITY

While the strategies outlined above will jumpstart the processes needed to close the jobs deficit, considerable institutional innovation will be needed to sustain these initiatives and to reverse the downward trends in job quality by promoting and diffusing high-productivity, high-wage practices across the economy. The following is a beginning list that deserves serious consideration.

Business Organizations and the Business Community

Strengthening the voice of employees and human resource professionals

The critical change needed within private sector firms is to upgrade the voice of employees in strategy making and corporate governance to counter the narrow focus on shareholder interests that holds back efforts to invest in high-productivity, high-wage employment strategies. One option for doing so would be to make employee spokespersons and/or representatives more visible and influential in deliberations of company boards of directors. An informal approach advocated by management researchers is to have the chief human resources officer report regularly to the board of directors on key human resource issues and performance outcomes (e.g., turnover, productivity, absenteeism, morale, and employee development). Another option would be to include employee representatives on corporate boards. Evidence on these arrangements suggests that as standalone actions they do not transform the role of human resources significantly, however, as part of broader organizational strategies that include employee participation and other features of high-performance workplace systems, they in fact generate higher levels of performance.

Support for labor management partnerships would also open the door to a stronger voice in strategic decision making that helps sustain support for high-performance strategies. Case studies dating back to the labor management innovations of the 1980s to the large and comprehensive partnership for the past 15 years at Kaiser Permanente consistently document the critical role of joint oversight and high-level management and labor leadership engagement in these partnerships.

Alternative ownership/governance charters

Another option would be to encourage more direct changes in corporate governance such as those proposed by advocates of "B-Corporations." B-Corporations build broader metrics beyond shareholder maximizing directly into their corporate charters and commit to having a "material positive impact on society and the environment and to meet higher standards of accountability and transparency."[2] Currently 11 states have enacted enabling legislation to charter B-Corporations, and approximately 440 firms have incorporated with charters that adhere to these standards and expectations. These firms have explicit legal authority to go beyond the shareholder maximizing principle to address these broader issues and agree to collect data needed for others to monitor their performance against these multiple metrics. This is one way to avoid the pressures public corporations may feel to maximize short-term returns.

Sharing information/knowledge about high productivity-high wage strategies

Efforts to diffuse high-performance systems have to also look beyond the boundaries of individual firms. One way to do so would be to build learning networks to spread knowledge and promote high-productivity, high-wage strategies, practices, and labor management relationships. A great deal of evidence now exists on the performance effects of these strategies, thanks to industry-academic collaborative projects supported over the years by the Alfred P. Sloan and the Hitachi Foundations relationships (see Appelbaum, Gittell, and Leana [2011] for a review of

[2] http://www.bcorporation.net/publicpolicy, accessed March 20, 2012.

these studies). The academic and practitioner networks created by these projects could be important resources for participants in national and regional jobs compact discussions.

Start-ups, small firms, and clusters

Start-ups and small firms face a number of unique challenges and opportunities for building sustainable organizations that create and grow high-quality jobs. The first challenge lies in increasing their chance of survival and growth, given that over 50 percent of start-up firms fail to make it to their fifth anniversary (Reedy and Litan 2011). The second challenge lies in improving job quality and human capital development in small enterprises. On the other hand, the opportunity with start-ups and small firms is that the evidence on the imprinting effects of founders suggests that efforts to build high-quality jobs right from the start are likely to have a lasting effect as organizations grow. Business schools need to educate the next generation's entrepreneurs about how to build sustainable organizations that are both productive and profitable and support high-quality jobs. Little of this has been incorporated into the teaching or research on entrepreneurship to date.

Twenty-First Century Labor Unions and Professional Associations

The labor movement also needs a twenty-first century makeover if it is to be a significant contributor to a long-term jobs compact. Unions and collective bargaining functioned well for advancing the living standards of workers (union and nonunion alike) because they were well matched to the features of the labor and product markets of that era. The same matching principle needs to be followed now. Today, the key lies in meeting the needs of a knowledge-based workforce and economy, and to serve as a driving force and champion for innovation. Like their corporate counterparts, unions need to learn from the isolated examples of cases in which unions played this role in the past or are currently doing so in different industries. Joint union-management apprenticeship and training programs are a classic, long-standing example, so too are the labor management partnerships such as those unions helped to create in various industries over the past several decades. The twenty-first century labor organization and/professional association needs to view knowledge, skills, and its demonstrated ability to drive and sustain innovation as its key sources of power. National policy needs to support this new role by providing workers and their unions the legal protections and active support needed for current and future representatives to lead these efforts.

Government

Changes are also needed to elevate the voice and influence of human capital considerations in government policy making and administration. Labor and employment policy has been a backwater, low-priority activity for many years, through both Democratic and Republican administrations.

Use of government purchasing processes to encourage or require high job quality standards

Governments at all levels are major purchasers of business products and services and therefore have considerable influence over the working conditions of their suppliers. Indeed, the federal government has used its contracting role to enforce standards for affirmative action since 1965. Various cities have enacted living wage standards for their contractors. Thus, it is not surprising that ideas for promoting high-quality jobs through government contracting have been proposed. The Obama administration announced but heretofore has not implemented a "high-road" contracting program of this type last year. Others have simply called for government to be vigilant in ensuring that contractors comply with all employment and labor laws. Requiring contractors to provide information on their employment practices and including employment standards in the criteria for selecting contractors would be another option for achieving wider diffusion of high-quality jobs.

Reform and modernization of employment and labor policies and enforcement processes

America's basic labor law has been broken for a long time. In the 1980s a number of us warned that the joint labor management experiments with high-performance work systems that were emerging at that time would not be sustained unless labor policy was reformed and modernized to better support them. Unfortunately, reforms were not forthcoming. Neither were the similar recommendations of the national commission on the future of worker management relations headed by former Secretary of Labor John Dunlop in 1994. Thus, stalemate over how to reform and modernize labor and employment laws and policies has now lasted for 30 years.

The purpose of a twenty-first century labor law and policy should be twofold: 1) to protect and support worker rights to choose whether or not to be represented by a union, and 2) to promote and sustain positive labor management relations—ones that have demonstrated their value in supporting high-productivity and high-wage practices and relationships. Reforming labor law in this way cannot be done as an isolated effort pursued by labor, management, or government. If embedded in this broader vision it has the potential to build the support needed from the diverse parties participating in development of a long-term jobs compact.

Options for reforming enforcement strategies to better use government resources and to support and incentivize workplace innovations have been proposed by many scholars. One approach would allow firms with state-of-the-art employment and dispute resolution practices greater flexibility in how to meet legal requirements while targeting traditional enforcement resources on the most egregious employment law violators. This strategy would create further incentives for firms on the margin to move in the innovative direction.

Education

After years of soul searching, the education reform and innovation process is well under way, thanks in large part to investments by the Obama administration through Race to the Top competitive grants. These funds have catalyzed actions in public schools, and in turn the public schools have learned from innovations implemented in charter schools. Translating the initial burst of innovation into lasting reforms and sustained improvement in educational outcomes will require considerable statewide and national collaboration among teachers and their unions, district-level administrators and community leaders, and perhaps most importantly, state governments. In a report prepared for Massachusetts, Bluestone and Kochan (2011) recommend creation of a statewide public-private "academy" to support and facilitate diffusion of these reforms and innovations—essentially the state-level education sector equivalent to the national-level compact proposed here.

America's universities need to be made more accessible to adults seeking to refresh and expand their skills while working. Open access would also support smoother transfer of ideas and scientific, technical breakthroughs to industry and to next generation entrepreneurs. Developing courses, certificate programs, and new degrees to encourage underemployed college graduates to get the engineering and/or other relevant technical training/education would be a good starting point for experimenting with a new model of higher education.

Few MBA graduates today are exposed to strategies for valuing and gaining strategic advantage through human capital in organizations and the economy. Business school faculty need to embed theory, research, and strategies that can achieve positive performance outcomes for all stakeholders across their curriculum and put MBA students and other future entrepreneurs and managers in direct contact with workers and managers facing real problems. Programs that bring these future management leaders into executive education programs with rising labor leaders would both broaden their thinking about ways to address shared problems and help build the negotiations and problem-solving skills needed to implement solutions in their organizations.

MOVING FORWARD

While there is no single silver bullet solution to the immediate jobs crisis or to the longer-term problem of undervaluing work and human capital in America, there are clear actions that, if taken together, could address the root causes of these problems and accelerate the creation of a number of high-quality jobs needed to close the jobs deficit by the end of this decade. The elements in the strategy seek to elevate discussion of solutions from the individual enterprise to the business community; reengage discussion of options among business, labor, government, and education leaders; focus on long-term reforms of policies and institutions; and foster diffusion strategies to make high-productivity, high-wage practices the new norm and accepted standard.

How do we get started? The Harvard Summit demonstrated that leadership by respected educators was successful in starting a long overdue dialogue among the private sector stakeholders that need to work together to address the nation's job crisis. We need to follow up this effort at both the regional and national levels. I urge educational leaders around the country to convene these key stakeholders in their regions to initiate the joint efforts necessary to contribute to closing the jobs deficit in the ways suggested above, or in other ways that better match their industry-regional needs. In parallel, leaders of these stakeholder groups need to convene at a national level to support and monitor progress toward the goal of creating 20 million new high-quality and sustainable American jobs by 2020.

REFERENCES

Appelbaum, Eileen, Jody Hoffer Gittell, 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).

Bluestone, Barry, and Thomas Kochan. 2011. *Toward a New Grand Bargain: Collaborative Approaches to Labor-Management Reform in Massachusetts*. Boston: The Boston Foundation.

Council of Economic Advisers. 2012. *Economic Report of the President.* Washington, DC: Council of Economic Advisers, pp. 76–79.

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 (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.

Kochan, Thomas. 2012. "America's Human Capital Paradox." Upjohn Institute Working Paper No. 12-180. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Pollin, Robert. 2010. "18 Million Jobs by 2012: How Obama Can Save His Presidency." *The Nation* 290(9): 10–18. http://www.thenation.com/article/18-million-jobs-2012.

Reedy, E.J., and Robert E. Litan. 2011. "Starting Smaller; Staying Smaller: America's Slow Leak in Job Creation." The Kauffman Foundation, July. http://www.kauffman.org/research-and-policy/starting-smaller-staying-smaller-americas-slow-leak-in-job-creation.aspx (accessed March 22, 2012).

Sirkin, Harold L., Michael Zinser, and Douglas Hohner. 2011. "Made in America, Again: Why Manufacturing Will Return to the U.S." Boston: Boston Consulting Group, August 25. https://www.bcgperspectives.com/content/articles/manufacturing_supply_chain_management_made_in_america_again/ (accessed March 22, 2012).

Tyson, Laura D. 2011. "A Better Stimulus Plan for the U.S." *Harvard Business Review* January/February: 52. http://hbr.org/web/extras/hbr-agenda-2011/laura-d-tyson (accessed March 22, 2012).