RESOLVING AMERICA’S HUMAN CAPITAL PARADOX:
A PROPOSAL FOR A JOBS COMPACT*
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It’s generally understood that the United States can’t be competitive—and won’t be able
to support high, and rising, living standards—without a well-trained, well-paid, and
continuously improving workforce that can compete with the best that other countries
have to offer.

Yet, at all levels of the economy, we behave as if we don’t believe this: firms value
short-term profits over investment in the workforce; federal policymakers tolerate high,
persistent unemployment and underemployment; wages for most of the workforce have
stagnated for three decades, despite gains in productivity; unions have become a
convenient scapegoat despite their sharp decline in influence; and job satisfaction
nationally has declined steadily over the past decade.

Why this human capital paradox? At one level, the reasons are complex—and, as a
result, there can be no single, silver-bullet solution. At another level, though, we’re looking
at a simple market failure, and a not-so-simple institutional one.

Let’s start with the market failure.

ROOT CAUSES

The nub of the problem is that what is good for individual U.S. companies is no longer automatically good for American business as a whole, for American workers, or for the economy. Here’s how former IBM executive and Sloan Foundation president Ralph Gomory put it:

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 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)

At the level of the individual firm, it often makes economic sense to close plants in the U.S., to send production jobs and functions to wherever they can be performed effectively at the lowest cost, and to otherwise keep labor costs down any way that’s possible.

Yet what the overall American business community needs is much better aligned with what the U.S. economy needs. Despite the globalization of markets, U.S. multinational corporations continue to derive 60% of their sales from U.S. markets, according to Commerce Department data. These firms—and all others that rely on the U.S. market for a significant portion of sales—need growing personal income to foster strong consumer demand and purchasing power; a stable tax environment that encourages investment; a workforce with the right education and technical skills; and a regulatory environment that rewards companies for upgrading employment practices. All of these lie beyond the reach of individual firms but within the power of business to achieve collectively, by working together and with other key stakeholders.

What we have here is a classic market failure: individual firms are not bearing the true costs of their actions. They benefit from minimizing labor costs; society picks up the tab associated with, among other things, slow economic growth, unemployment, welfare, and low or no return on the investments in human capital made through support for education. In addition, we have a short-term vs. long-term problem: individual firm activities that make sense at one end of the value chain, right now—shipping jobs overseas and cutting costs wherever possible—will backfire at the other end, further down the road, when there isn’t a robust enough middle class to create demand, and there isn’t a well-enough-trained workforce to grow the business through innovation.

Layered on top of this market failure is an institutional failure. The market failure can’t be fixed without coordination and cooperation among business leaders, and across business, labor, government, and civil society, which all share an interest in the economic and social wellbeing of the nation. But the sad reality is that there is little or no dialogue across these groups right now, and that when dialogue occurs it takes the form of ideological posturing rather than consensus building 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 to translate their separate and shared interests into a strategy for investing in and fully utilizing America’s human capital. Let’s call this a Jobs Compact
for America’s future—one that is forged by a multi-stakeholder council of leaders in education, business, labor, and government.

The nation’s jobs crisis is indeed a national emergency. The labor market is failing to generate enough jobs—and enough high quality jobs—to support a strong economy. If we do not put a more comprehensive, aggressive strategy in place, America will remain on a path of economic stagnation and slow growth, at best. More likely it will continue sliding into a long-term economic decline.

THE EVIDENCE THAT WE UNDERSERVE HUMAN CAPITAL

America has a two dimensional jobs crisis: It has a persistent deficit in the number of jobs needed, and it is not generating a sufficient number of high quality jobs.

Quantity of Jobs—Permanently Lower? Figure 1 compares the current situation with recovery periods following earlier recessions; it shows the depth and persistent nature of the jobs’ deficit. Two years after the end of the Great Recession, the economy still needs seven million jobs to get back to where we were just before the recession. Another five million jobs will be needed to account for the growth in the labor force over this time period. (This count is conservative: The President’s Jobs and Competitiveness Council estimates we will need to create more than 20 million new jobs by 2020 to make up for jobs lost in the recession and the growth in the labor force since that time. Not only is this not happening; the American economy has never, perhaps short of wartime, created jobs at that rate. Left to current market forces, America faces a serious job deficit that will last at least the rest of this decade, if not longer.

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

How Long-Term Unemployment Affects Workers

It’s well documented that recessions have persistent, long-lasting effects on individual workers.

- Following a mass layoff, displaced workers’ earnings losses extend 15 to 20 years after the job loss.
- Job instability lasts up to 10 years.
- In some circumstances, parental job loss has been found to reduce earnings or grown children.
- In situations where mass layoffs are pervasive and earnings declines substantial, initial declines in health can give way to differentials in mortality lasting for 15 to 20 years.
- Most individuals who enter the labor market in a recession experience lasting declines in earnings. (These are more short-lived for the highest and lowest skilled workers, but persist up to ten years for the average worker.) Many college graduates never catch up with counterparts who graduated into better economic conditions.


Quality of Jobs—Far Fewer Good Jobs for the Middle Class. From 1945 to 1979, productivity and real wages both grew by approximately two to three percent per year in the United States. As Figure 2 shows, this tandem movement (what some of us called the “old Social Contract”) ended around 1980. Figure 3 shows in more detail how productivity continued to grow steadily from 1980 on, while real wages for high school 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 women high school graduates. The combined effects of these trends have produced the greatest income inequality in the economy since 1928.

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 a large number of production workers, and equitable wage norms were supported by government policies and reinforced through collective bargaining and professional 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, particularly for those lacking a college education.
Figure 2.  

Social Contract:  1940s-70s: 1980s +

![Graph showing social contract trends](image)

Figure 3. Median Weekly Compensation of Men Working Full Time, 1980-2008, Non-Farm Business Productivity on the Right Axis

![Graph showing median weekly compensation](image)

Fringe benefits represent another key dimension of job quality. Since at least World War II, the U.S. has relied heavily on individual firms to provide health care and retirement benefits that most other countries finance as public expenditures. Since the 1980s, however, these benefits have been shrinking. Employer-provided health care coverage grew from the 1940s through the 1970s and peaked at approximately 70 percent of the workforce and then began a slow, steady decline to 64 percent by 2000 and has continued to decline slightly since then. Similarly, 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 401k plan. Today, approximately 20 percent of the workforce has coverage of that kind, and most of them are public sector employees. (See Figure 4) The defined contribution and 401k 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 5, the Wall Street Journal estimates that the median-income 60 year old worker today who is covered by only a 401k plan will fall approximately $30,000 short of what he or she needs in retirement.

**Figure 4. Private Sector Defined-Benefit and Defined- Contribution Plan Coverage, 1979–2009**

![Chart showing pension plans, 401(k)s, and defined contribution plans coverage from 1979 to 2008](chart.png)

Source: Employee Benefit Research Institute. EBRI’s estimates for 1998-2008 were done using Department of Labor and Current Population Survey data. Credit: Alyson Hurt / NPR.

Figure 5. Wall Street Journal Estimates of Retirement Income Shortfalls

Wages and benefits are not the only dimension of declining or stagnant job quality. Job satisfaction has also been declining for the past decade, now to the point that, according to a Conference Board survey, less than half of the workforce reports being satisfied with their jobs. Figure 6 tracks the decline from 1987 to 2009.

Figure 6. National Trends in Job Satisfaction, 1987–2009

Source: The Conference Board. Data used with Conference Board Permission.
The Increasingly Disposable Worker. It’s common for corporate leaders to say, “Human resources are our most important asset.” Yet there is a lot of evidence suggesting that most leaders don’t believe a word of it.

For years there was a widely accepted 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 of male employees with an employer, as well as the proportion of employees with ten or more years of service, has declined (Farber, 2008). Women’s average tenure has increased somewhat as their participation in the labor force has grown. In the last recession, American employers turned to layoffs earlier than in past downturns, cut deeper into their labor force 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). 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 can be attributed to the globalization of markets and changes in technology that reduce the demand for labor and put a higher premium on education and skills. Some can also be traced to the ascendancy over time of the “financialization” of the American corporation: the principle that maximizing shareholder value is the primary purpose of the firm. In fact, recent research shows that the shift to earlier and deeper layoffs is greatest in public corporations under the most intense scrutiny from stock market analysts and where chief finance officers are most prominent in the management hierarchy (Jung, 2011). (See the sidebar “Our Destructive Obsession with Total Shareholder Return” for Michael Useem’s eloquent analysis of this approach to capitalism.)

Our Destructive Obsession with Total Shareholder Return

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. …

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. [I]t 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.

This financialization of the firm—and the increasingly easy-come, easy-go attitude towards the workforce—were part of a bigger context that emerged during the 1980s. That decade witnessed major innovations in capital markets, 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 and leveraged buyouts led to a new view of corporations: they were increasingly seen as bundles of tradable assets that could be reconfigured or restructured to maximize short term financial returns. Power within corporations shifted from executives responsible for production, human resources, and labor relations to finance executives, who served 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 compensation packages. More of the best technical talent from business schools (and other university majors with strong mathematical training) went into the financial sector and absorbed a higher proportion of national income and compensation (Blair, 2010; Tomaskovic-Devey and Lin, 2011). These trends led to stronger pressures for short-term returns, which in turn led firms to cut jobs as a preemptive act, rather than as a last resort. The net effect was to weaken the voices of those favoring a more balanced view of the corporation as a public entity with responsibilities to shareholders and other stakeholder groups inside firms and in business associations, in business schools, and in government.

**THERE IS ANOTHER WAY: USING HUMAN CAPITAL TO DRIVE INNOVATION AND PERFORMANCE**

Not all American firms fell under the spell of these financial market pressures. Indeed, nearly every industry includes firms that competed 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 knowledge, skills, and abilities of their full workforce. The human resource literature often refers to the practices needed to achieve high productivity and service quality as “high road strategies,” accompanied by “high performance,” or “knowledge-based” work systems.

While the specific practices vary across industries, the generic features include the following:

- careful selection for employees with strong technical, problem-solving, and collaborative skills;
- significant investment in training and development;
- commitment to building trust and to drawing on employees’ 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 high-road companies 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, Gittell, and
Leona, 2011). 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).

If we define U.S. competitiveness as the capacity to be attractive to businesses, on the one hand, and to create a more widely prosperous society, on the other, then high-road strategies become absolutely critical. For these are the companies that generate consistent returns to shareholders and support high and rising living standards—far better than companies that seek to minimize labor costs and focus on short-term returns do. I believe that these companies are developing 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 though employment security and longevity are more uncertain even in these companies, they are building a rich stock of human capital for American industry to draw on.

The problem is these practices and systems are not diffusing widely across American industries, and in fact their prevalence may have declined somewhat in the past decade (Benson and Lawler, 2011). We don’t have a clear understanding of why. Explanations (really hypotheses) are varied: lack of information about how to implement these practices; the high start-up costs and delayed benefits they involve (sometimes called “worse before better” traps); failure to reform and modernize labor law to support these strategies; and the pressures from financial market agents for maximizing short-term returns.

There may also be a market failure may be at work here. 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 the workforce also declines. Indeed, the most recent fad in the human resource management literature is to emphasize “talent management” of key executives rather than invest in the firm’s overall workforce. This may be rational behavior for an individual firm, but it is not optimal for building human capital across the value chain or across American industry.

Very likely all of these factors play a role. The net effect is a two-equilibria economy: some firms compete on “high road,” knowledge-driven strategies, while others compete on the “low road” by minimizing labor costs. To date, more have chosen the latter than the former. This puts high-road firms on the defensive and discourages others from following their lead. The key challenge is to tip 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-ups and small firms appear to have the same variation in practices. 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 focused on gaining competitive advantage through teamwork and/or individual talent; the rest followed traditional command-and-control managerial 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 (Shane, 2009). Yet, as with large, older firms, within most industries examples of young-smaller firms can be found that pay above average wages and achieve above average productivity (Hitachi Foundation, 2011; Ton, forthcoming).
UNIONS, PUBLIC SCHOOLS, AND BUSINESS SCHOOLS

Companies don’t function in a vacuum, of course; three other institutional groups have played a key role in the fortunes of the U.S. workforce.

Unions

Throughout much of the 20th century, unions served as the principle, most powerful voice for the American workforce. Unions helped to build and sustain the old social contract that kept wages and productivity moving in tandem; in doing so, they upgraded the quality of the jobs that in the past had been low wage, unsafe, and subject to arbitrary managerial behavior. Unions have now declined to the point they no longer give voice to America’s workforce, serve as a countervailing power in industry, or engage business leaders in fashioning a new social contract. 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 worked in partnership 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 hundred best places in America to work. 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 use of electronic medical record technologies, and improved employee and patient satisfaction.

Public Schools, Community Colleges, Training Programs

It is standard to argue that America needs to improve basic education outcomes. True enough for a starting point. 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 20th century but then leveled off (actually declined for men) in the 1980s and grew at a much slower rate in the past two decades (Goldin and Katz, 2008). Enrollment in America’s community colleges has grown, particularly in recent years; 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.

Estimates of private-sector expenditures on training are notoriously unreliable. The best estimates are that American firms spend somewhere between $70 and $100 billion on training (Lerman, 2011). The bulk of private-sector training dollars are spent on managers and more highly educated professionals in executive education programs and tuition reimbursement. While these investments are important, they do not address the current and future shortage of mid-level employees with the mathematical, technical, and behavioral-social skills needed to staff advanced manufacturing or service operations and industries.

Apprenticeship programs are one form of training that we do have good data for. 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 (Lerman, 2011). The miniscule size and the decline in apprenticeships are particularly unfortunate since apprenticeships have high economic returns to graduates and achieve almost universally positive evaluations and endorsements from employers. One study estimated 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 to $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

Courses on human resource management have been eliminated from most core MBA curricula, and labor relations is not taught at all in most major business schools today. Students learn almost nothing about how to manage a high-performance, high-engagement organization. Just as in corporations, finance has ascended in power, and the view of the corporation as a shareholder-maximizing institution dominates both the teaching and the culture of most leading business schools. As an MIT MBA student mentioned in a class on work systems last year: “This is the only place in the MBA curriculum where we are exposed to research and teaching on how to manage an organization so that both shareholders and workers can win.”

A CALL TO ARMS

We’ve identified four barriers to building the stronger human capital that American business, and the American economy, need:

- It is not necessarily in the short-term interests of individual firms to compete on, and invest in, human capital.

- Strategies and practices capable of achieving both high productivity and high wages are not diffusing across firms.

- 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 without the support of government, labor, and other stakeholders. The same is true for each of these other stakeholder groups: none can do it without the support of the others.

- These groups engage in very little constructive dialogue with one another.

Clearly the odds are very low that any of the stakeholder groups will begin a conversation intended to overcome these barriers. Yet the status quo is unacceptable. New leadership and a new approach are needed.
I believe that the top business schools have the convening power, and are perfectly positioned, to get something started, and I challenge them—I challenge us—to take the lead.

We need to:

- Bring together industry, labor, and government representatives to develop a long-term *Jobs Compact*. Call it a 20-20 Jobs Compact: Commit to creating 20 million new, high quality jobs by 2020!
- Use the jobs crisis to create a sense of urgency and to achieve some early wins.
- Use the data presented here, and the array of specific options already on the national table, to outline a strategy for moving forward.

We will need to call on our experience in managing complex negotiations; putting to work the modern tools of negotiations and problem solving can help us to structure the conversations, and to figure out which issues should be tackled first, by whom, and with what resources. My own sense of priorities is roughly as follows (and I invite attendees/readers to read a more detailed version of these proposals at www.employmentpolicy.org.)

**Pick the low-hanging fruit.** The first order of business should be to agree on immediate actions to jumpstart job growth. They might include continuation of unemployment benefits for the long-term unemployed, tax credits or incentives for job creation, and expanded investments in alternative energy technologies.

**Invest in Infrastructure.** The American Society of Civil Engineers estimates 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). Given its special interest in reducing uncertainty, Wall Street leaders should be challenged to help raise the private capital needed to build a National Infrastructure Fund or Bank. The labor movement has recently announced it is prepared to commit up to $10 billion in pension funds to an infrastructure initiative. Surely Wall Street can build a pool of matching and perhaps substantially greater funds.

**Recapture lost manufacturing, and capture next-generation manufacturing.** There is a growing awareness that manufacturing depends on the overall eco-system in which it embedded, i.e., the existence of adequate sources of capital for risk-taking and investment, good technical schools and universities to provide the middle-skill and high-skilled employees and professionals needed for next-generation technologies, a supply and service base that shares services, knowledge and competes openly for talent, and a predictable and sizable consumer market. Thus, perhaps the best strategies for both bringing back and capturing next generation manufacturing work lies in building the cross institutional dialogue at a national and regional level needed to build and support these eco-systems.

**Recapture lost manufacturing jobs.** Some, clearly not all, manufacturing jobs could be recaptured if firms take into account the total costs (as opposed to the differences in labor costs) of producing abroad that are then shipped to and sold in the U.S.  Ford, General Motors, General
Electric, Boeing, and a number of other firms and unions have made these calculations recently, renegotiated entry level labor rates, expanded profit sharing and made commitments to invest in and bring work back to U.S. plants. In doing so these companies and unions cast aside 20th century doctrines that kept union representatives out of “managerial prerogatives” and moved away from detailed rigid work rules and arms-length relationships in favor of a 21st century labor management partnerships. At the HBS Summit a proposal was made that U.S. multinationals businesses set a collective target of bringing home a million jobs in the next several years. A bold, but perhaps achievable target!

**Make strategic investments in human capital.** 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 middle and high-skilled workers. While evidence on skill shortages is sketchy, there is enough concern to warrant addressing the market and institutional failures that might be causing them. There are numerous ways to address this problem, but I’ll mention again that apprenticeship and other joint union-employer programs are particularly effective. As noted, these have been declining at the same time that employers are voicing concerns over skill shortages in highly technical manufacturing, service operations, and construction jobs. The parties to a Jobs Compact would do well to explore tax credit and cooperative industry-level options for expanding the role of apprenticeships and joint training programs.

**INSTITUTIONAL CHANGE**

Clearly, the long-term, sustainable job growth we’re talking about will require a great many institutional innovations; an in-depth discussion of them is beyond the scope of this paper. But let me call out a few that I think are particularly important.

**Figure out why executives are reluctant to rethink how they do business.** Ever since Douglas McGregor published *The Human Side of Enterprise* in 1960, executives have been urged to think more about stakeholders and less about shareholders (though the buzz words have changed over the years). Yet few firms choose to do that. It is time to address this issue directly. We need an open, national debate over what we expect from business leaders, individually and collectively.

**Share information about high productivity-high wage strategies.** Dating back as far as the 1970s, various government commissions (and articles in managerially focused publications like the *Harvard Business Review* and the *Sloan Management Review*) have tried to build private sector constituencies for high-road strategies, but have largely failed. We now have strong evidence that these strategies do pay off; that evidence should be shared widely.

**Strengthen the voice of employees and human resource professionals and reinvent “Labor.”** Lawler and Worley suggest that the chief human resource officer should report regularly to the board of directors on key human resource issues and performance outcomes (e.g., turnover, productivity, absenteeism, morale, employee development, etc.). Another, stronger, option is to include employee representatives on corporate boards. Reinventing and rebuilding unions and professional associations to meet the needs of the 21st century workforce and economy is, I believe, a
critical national priority. The 21st century labor organization needs to view knowledge, skills, and its demonstrated ability to drive innovation as its sources of power (Kochan, 2005).

**Encourage the development of clusters.** There is growing evidence that firms embedded in regional clusters that are supported by institutions providing education, training, finance, and marketing services experience higher rates of job and wage growth than comparable firms not embedded in clusters (Delgado, Stern, and Porter, 2011).

**Reinvent business schools.** MBA and Exec Ed students need to have direct contact with real workers and managers, facing real problems and get educated in how to build high performance organizations that work for both people and profits. It’s time to change how we train the managerial workforce, and to be ambitious about what we can accomplish.

**Enact and enforce 21st century labor and employment policies.** All of these private institutional reforms need to be reinforced by a thorough modernization of national labor and employment policies. This starts with restoring workers’ ability to form a union and to support and encourage labor-management partnerships as the normal, not the exceptional, pattern of engagement. A wholesale review of employment regulations is also needed to both reward high-road employers and to bring the low-road employers up to a more acceptable standard. In addition, we need to put employment policy front and center in the formation and execution of our nation’s economic policies.

There is no silver-bullet solution to the undervaluing of human capital in America. But it is possible to tackle the problem systematically—if we decide to work together.
REFERENCES


