Sustainable Prosperity in the New Economy?

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Driven by the microelectronics revolution, the United States has been a highly innovative economy over the past three decades. The resultant economic growth, however, has been unstable, and the distribution of income has become significantly more unequal. In this book, I have shown that the change from OEBM to NEBM in the ICT industries has contributed to this instability and inequity. Gone is the collective security that the corporatist OEBM once offered its employees. In its place is a far more individualized relation between employer and employee. The employment and incomes of even the most highly educated members of the U.S. labor force are now much more susceptible to the pressures and vagaries of “market forces” than they were a few decades ago. In particular, as I have shown in Chapters 5 and 6, global labor markets and national financial markets now exert preponderant influences on the conditions of high-tech employment in the United States.

In the regulation of the employment relation, market forces are not natural phenomena. Rather the policies and decisions of corporations and governments shape how and in whose interests capital and labor markets function (Lazonick 1991, 2003b). Since the late 1970s corporate strategies and government policies in the United States have combined to define the ways in which NEBM allocates resources, employs labor, and finances investments. Given the political will, government legislation can proscribe those corporate strategies that result in instability and inequity and can enable those corporate strategies that promote sustainable prosperity.

When U.S. corporate executives systematically offshore as much productive activity as possible to lower-wage regions of the world, they will argue that the forces of market competition compel them to do so. Yet, in making these decisions, these executives are generally unaccountable to current U.S.-based employees who have helped to build
the organizations that are capable of globalization, and they rarely con-
sult with these employees—as, for example, they once did at Xerox (see
Chapter 4)—about alternative strategies for maintaining and extending
the competitiveness of the company. Indeed, the United States is unique
among the advanced economies in according so little voice or protec-
tion to incumbent labor in this regard.

When U.S. corporate executives systematically allocate billions of
dollars to stock repurchases, they argue that the stock market requires
them to do so. Yet, in the 2000s, the powerful corporations that have
the financial resources to engage in this practice are actually using their
financial might to manipulate the stock market—to the direct benefit of
those executives who make resource-allocation decisions. Armed with
the ideology of maximizing shareholder value, U.S. corporate execu-
tives who control the allocation of their companies’ resources now sim-
ply take it for granted that they are responsible to shareholders alone.

The U.S. federal government has played a significant role in aiding
and abetting the modes of resource allocation that prevail under NEBM.
It continues to devote tax revenues to fund the nation’s high-tech knowl-
edge base, but it demands little if any accountability from so-called pri-
ivate enterprises about how or for whose benefit this knowledge base is
used. If the top executives of U.S. corporations that have benefited from
government largesse in the past now say they have to offshore jobs to
remain competitive, then the U.S. government will not stand in the way
or demand a quid pro quo. Through its immigration legislation, the U.S.
government has accommodated, until recently at least, the demands of
the high-tech lobby for more nonimmigrant work visas, while provid-
ing little in the way of effective oversight of the use, and abuse, of these
visas. In failing to intervene to regulate the remuneration of corporate
executives, the U.S. government has been a party to an unwarranted and
unseemly, and many would say obscene, explosion in top executive pay
that the United States has witnessed over the past three decades.

U.S. corporate executives claim that they have a fiduciary respon-
sibility to maximize shareholder value—a perspective that, as I have
shown in Chapter 6, fails to address the conditions under which busi-
ness enterprises are in fact innovative. Yet, even as corporate executives
spout this ideology and enrich themselves in the process, they are far
from shy in appealing to the U.S. government for increased spending on
knowledge creation and lower burdens of taxation to keep “America”
competitive. Nor, in the financial meltdown of 2008, have these corporate executives had any problem in invoking their responsibility to shareholders to justify the excessive remuneration that they received for mismanaging companies that, at a great cost to the public, ultimately failed. For example, Richard S. Fuld, CEO of Lehman Brothers, told the House Oversight and Government Reform Committee in October 2008 that the $300 million in remuneration he admitted to having received since 2000 was bestowed upon him by “a compensation committee that spent a tremendous amount of time making sure that the interests of the executives and the employees were aligned with shareholders” (Davis 2008).

A nation needs innovation to generate economic growth. When, however, corporate executives use stock-based compensation to skew the distribution of income in their favor, and when they decide to terminate the employment of qualified people even as the company is reaping the returns on its past investments in innovation in which these very people participated, then it may well be that many U.S. citizens will lose, even as the companies for which they work, or used to work, remain highly profitable. Moreover, as I have suggested in Chapter 6, as we stand at the end of the first decade of the twenty-first century, it may well be that corporate adherence to the goal of maximizing shareholder value is undermining the innovative capabilities of some of America’s most successful business enterprises.

Earning a living in the United States has never been easy for those who are poorly educated and lack work experience. In the 2000s, however, even well-educated Americans with substantial work experience face far greater employment insecurity than they did in the past. In documenting the instability and inequity inherent in NEBM, I am not advocating a return to OEBM. There is a need, however, to recognize the collective functions that OEBM performed in providing security in employment and retirement to a significant proportion of the U.S. labor force. The fact that, in the Old Economy, U.S. business corporations performed these functions greatly reduced the need for the government to be directly involved in ensuring stable and equitable growth. Indeed, I would argue that because business corporations performed these collective functions for such a substantial portion of the population by the 1960s, the U.S. government could contemplate launching a “War on Poverty” to upgrade the employment prospects of those segments of
the U.S. population for whom business corporations did not provide economic security. In a variety of ways, OEBM provided a foundation, including a consensus among an economic elite, for the government to intervene in the economy to deal with problems of instability and inequality. With the decline of OEBM, and its replacement by NEBM, from where will such a new consensus come?

THE LIMITED ROLE OF THE STOCK MARKET IN THE OLD ECONOMY

An understanding of the historical context in which OEBM performed these collective functions in the post–World War II decades is critical for analyzing both the power of OEBM to provide a foundation for stable and equitable growth and its ultimate limits. The historical context was marked by the following:

• government spending on World War II which resuscitated the U.S. economy in the first half of the 1940s, thus lifting the United States out of the Great Depression, which spanned the 1930s;

• the U.S. government’s enormous investment in the high-tech knowledge base after World War II in the context of the Cold War, including national research efforts and a system of higher education to disseminate this knowledge;

• the existence of powerful corporate research labs, many of them dating back to the beginning of the twentieth century, that could absorb and further develop that knowledge; and

• a progressive tax regime that enabled the U.S. government to intervene both to bolster the corporate foundations of sustainable prosperity and, when pushed by social movements, to try to spread the gains of prosperity through equal opportunity to those segments of the population that the corporate economy was leaving behind.

The provision of career employment with one company underpinned OEBM’s contribution to stable and equitable growth in the U.S. economy. Oligopolistic market positions and proprietary technology
strategies enabled and encouraged Old Economy corporations to offer career employment to their personnel. The presence in many Old Economy companies of industrial unions with their emphasis on employment security reinforced this corporate commitment to “the organization man.” For managers and workers, a clear manifestation of the expectation of career employment with one company was the inclusion, as integral to the employment relation, of a nonportable DB pension plan that rewarded longevity.

In the New Economy, pensions, along with much else, are heavily dependent on the performance of the stock market. In historical retrospect, a major reason why OEBM was able to contribute to stable and equitable growth was the limited role of the stock market, in its creation, control, combination, compensation, and cash functions, in the operations of its constituent corporations. In OEBM the prime role of the stock market was to separate share ownership and managerial control, a key social condition for the managerial revolution that permitted experienced salaried employees to run established companies and rendered dispersed public shareholders powerless to intervene in the corporate allocation of resources. By facilitating the separation of ownership and control, this “noncontrol” function of the stock market promoted stable and equitable economic growth under OEBM in the immediate post–World War II decades. That record stands quite in contrast to the destabilizing influence of the shareholder-value-driven “market for corporate control” that sought to unwind OEBM in the 1980s by “disgorging” corporate cash flows that were allegedly “free” (Lazonick 1992).

Under OEBM, as a rule, even established companies with listed shares did not make use of the stock market to fund new investment in productive assets. The period in which the stock market was an important source of cash under OEBM was during the speculative boom of the late 1920s, when corporations sold stock at inflated prices to strengthen their balance sheets by paying off debt or building up their cash reserves—quite the opposite of what U.S. industrial corporations did in the Internet boom at the end of the twentieth century (Carpenter, Lazonick, and O’Sullivan 2003; O’Sullivan 2004).

In the era of OEBM, it was only in the context of the “hot issues” market in the late 1950s and early 1960s that the over-the-counter (OTC) markets began to perform the creation function of the stock market by inducing investment in start-ups (O’Sullivan 2007). In his-
In both its compensation and combination functions, therefore, the stock market under OEBM fostered a separation in major corporations between the strategic allocation of resources and the processes of organizational learning. Yet the integration of strategy and learning is a *sine qua non* of innovative enterprise (Lazonick 2004a, 2006, 2007a; Lazonick and O’Sullivan 2000b; O’Sullivan 2000a,b). This separation of strategy and learning rendered the U.S. industrial corporation vulnerable to innovative competitors from abroad. During the 1970s and continuing in the 1980s, U.S. companies found that they were losing competitive advantage to foreign corporations in a number of key industries in which U.S. manufacturers had been the world’s leading producers. Foreign companies had been able through licensing agreements, multinational investments, and military contracts to gain access to the U.S. knowledge base. Given their highly integrated skill bases, Japanese companies were the most adept among foreign competitors
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at absorbing this knowledge and improving upon it through a process of indigenous innovation. It is of significance that the business model that enabled Japanese companies to outcompete their U.S. counterparts entailed more highly collectivized forms of OEBM that, through the institutions of cross-shareholding, lifetime employment, and main-bank lending, permitted the superior development and utilization of technology (Lazonick 1998, 1999, 2005).

THE STOCK MARKET IN NEBM: FROM INNOVATION TO SPECULATION TO MANIPULATION

The rise of NEBM in the 1960s and 1970s was only minimally influenced by the transformation that was taking place at the same time in the Japanese industrial economy. Nevertheless, in the 1980s and 1990s, NEBM emerged as, in effect, the U.S. response to Japanese competition. As was shown in Chapter 2, the U.S. stock market supported the reallocation of capital and labor from OEBM to NEBM through its creation and compensation functions, while it supported the rapid growth of young high-tech firms through its combination function.

Through its creation and compensation functions, the stock market reallocated capital and labor from Old Economy wealth holders to New Economy start-ups. The existence of a highly liquid stock market with lax listing requirements—namely, NASDAQ—enhanced the prospect of an early and successful IPO and thereby induced venture capital to invest in high-tech start-ups. As shown in Chapter 2, venture capital played a central role in the reallocation of resources from OEBM to NEBM by enabling start-ups to tap entrepreneurship and knowledge that may have otherwise remained locked up in established corporations. If venture capital reallocated financial resources from the Old Economy to the New Economy, stock options played a complementary role in the reallocation of labor. The stock market enabled high-tech start-ups to offer stock options to well-educated personnel as an inducement for them to forgo secure employment with established Old Economy companies. These stock options could become valuable with an IPO or an M&A deal with a listed company. Once a new venture had done an IPO, the combination function then became important for
the growth of New Economy firms, as epitomized by Cisco’s growth-through-acquisition strategy, discussed in Chapter 6.

In the 1990s the creation, compensation, and combination functions of the stock market were central to the expansion of NEBM. Entrepreneurs, venture capitalists, and high-tech employees could claim that they were contributing their resources to an innovative economy and reaping the rewards for these contributions through their stock holdings. At the same time, however, the augmented role of the stock market in NEBM has rendered U.S. economic growth both unstable and inequitable since the 1980s. While the stock market can facilitate the reallocation of capital and labor to innovative start-ups, it can also enable speculation, which engenders instability, and manipulation, which engenders inequity.

In the late 1990s the U.S. stock market became highly speculative indeed, as the public discovered the existence of highly innovative New Economy firms and then began making bets on many dot.com start-ups that had little in the way of innovative capability. The extent of the speculative bubble is displayed in Figure 7.1. The rise and fall of the NASDAQ Composite Index between 1998 and 2001 make the movements of the Dow Jones Industrial Average (DJIA), which at the time included Intel and Microsoft as the NASDAQ representatives among its 30 stocks, and the S&P 500 Index look like mere blips. Between March 1998 and March 2000, the NASDAQ Composite Index of more than 3,000 stocks rose by 149 percent, compared with 21 percent for the DJIA and 36 percent for the S&P 500.

This speculative bubble followed a long period since the early 1980s in which stock-price movements were driven much more by a combination of manipulation, as Old Economy companies restructured their organizations and balance sheets, and innovation, as New Economy companies pumped back virtually all of their earnings into enterprise growth. In the 2000s, however, as I have shown in Chapter 6, manipulation reemerged with a vengeance as a driver of stock-price movements, with stock buybacks as the main manipulative mechanism.

One of the high-fliers on NASDAQ in the late 1990s was Cisco Systems. In October 1998, Charles O’Reilly (1998, p. 1), a professor at Stanford Business School, published a case that began with the sentence, “Cisco is a $6 billion high technology stealth company, largely unknown to the general public.” Just 17 months later this “largely
unknown” company sported the highest market capitalization in the world. In May 2000, Thomas Donlan (2000, p. 34), a Barron’s editor, calculated that to justify its stock price, which stood at 190 times earnings, Cisco would have to increase its 1999 profits of $2.5 billion to $2.5 trillion by 2010!

Cisco remains highly successful in the 2000s, but given a relative absence of speculation, it has required massive stock repurchases to prop up its stock price. Figure 7.2, Panel A, depicts the movement of Cisco’s stock price as having passed through an innovation stage from 1990 to 1998 characterized by reinvestment of most of its earnings,1 followed by a speculation stage from 1998 to 2000 in which market exuberance drove up its stock price at an extremely rapid rate, and then a manipulation stage in the 2000s in which buybacks (as detailed in Chapter 6) supported the price of the company’s stock.

NOTE: As of August 2009, the Dow Jones Industrial Average (DJIA) consists of 30 stocks, of which 27 are listed on the New York Stock Exchange (NYSE) and 3 on NASDAQ; the S&P 500 Index consists of 500 stocks, of which 410 are NYSE and 90 are NASDAQ; and the NASDAQ Composite Index consists of 2,809 stocks.

Panel A of Figure 7.2 also shows the stock-price movements of Intel and Microsoft, which when charted on the Cisco scale give the appearance of having been flat in the Internet boom. But, as Panel B shows, they too experienced stock-price movements that reflect the innovation, speculation, and manipulation phases. And the main mode of manipulation is, again, stock buybacks. These three companies, mainstays of the U.S. ICT industries, together spent $113 billion on R&D from 2000 through 2007. Over those years, however, these three also spent $164 billion on stock buybacks. In fiscal 2008, Cisco (year ended July 26) spent $10.4 billion on stock repurchases and $5.1 billion on R&D, Microsoft (year ended June 30) $12.5 billion on repurchases and $11.6 billion on R&D, and Intel (year ended December 31) $7.1 billion on repurchases and $5.4 billion on R&D.\(^2\)

As we have seen, these companies are leaders of a larger trend that saw the 500 companies that are included in the S&P 500 Index spend well over $2 trillion to buy back their own stock in the first eight years of the twenty-first century. These buybacks are a measure of the grip that shareholder-value ideology has on corporate America, and hence on the ways in which financial resources are allocated in the U.S. economy. The shareholder-value perspective that I critiqued in Chapter 6 provides a simplistic answer to a complex problem: how to reward stakeholders so that their contributions raise living standards and provide economic gains that can be shared equitably. In the 2000s, the problem has not been addressed, and instability and inequity are the result.

THE RISE OF ECONOMIC INSECURITY

The result of this redistributive quest for shareholder value in the U.S. ICT industries has been growing economic insecurity for the U.S. ICT labor force. High-tech personnel already found themselves vulnerable to changes in markets, technology, and enterprise strategies because of the end of career employment in the 1990s. In its place was substituted interfirm labor mobility, especially in the “high velocity” labor markets of Silicon Valley (Benner 2002; Hyde 2003).

For many ICT employees, the power of individual labor mobility served them well in the Internet boom of the late 1990s, especially
Figure 7.2  Stock-Price Movements for (Panel A) Cisco Systems (March 1990–October 2008) and Intel and Microsoft (July 1986–October 2008) and for (Panel B) Intel and Microsoft (July 1986–October 2008)

Panel A

Panel B

when they entered into employment at companies with generous stock-option plans (see Chapter 2). The growth of NEBM, culminating in the tight labor markets of the late 1990s, and the very real and often realized possibilities for substantial gains from stock options, insured high-tech employees to an employment system in which their career prospects would be dependent on interfirm labor mobility rather than on the movement up and around the hierarchy of one company. By the beginning of the 2000s, the expectation of such career employment with one company had disappeared in U.S. ICT industries.

It was inherent in the transition from OEBM to NEBM in the 1990s that older members of the ICT labor force faced much greater insecurity than they had in the past. Career employment with one company typically meant that one’s salary rose with length of tenure and that the accrual of the value of traditional DB pensions was much greater toward the end of one’s career. The position of older high-tech workers became much more vulnerable in the 2000s. The deterioration in employment conditions that faced high-tech labor in the first half of the 2000s extended beyond the downturn in economic activity in 2001–2002. Unemployment rates among engineers and programmers rose in the “jobless recovery” that began in late 2002 (Hira 2003; IEEE-USA 2004a,b; Khatiwada and Sum 2004).

A major part of the explanation for the jobless recovery in ICT was the acceleration of offshoring of ICT jobs from the United States in the early 2000s (Groshen and Potter 2003; Houseman 2007), with India and China as the favored locations. There is a need for reliable data on the extent and locations of offshoring, the proportion of offshored jobs that are high skill, and the impacts of offshoring on employment in the United States and the performance of the U.S. economy as a whole.\(^3\) Data collected by the Semiconductor Industry Association on engineers employed by large- and medium-sized U.S.-based semiconductor firms show that offshored positions accounted for 12.3 percent of 56,995 employees in 1997, 20.8 percent of 96,093 employees in 2000, and 33.7 percent of 125,360 employees in 2005. While the number of U.S.-based engineers at these firms declined from 76,129 in 2000 to 66,851 in 2004 before rising sharply to 83,167 in 2005, the number of offshore engineers rose steadily from 19,964 in 2000 to 42,193 in 2005 (Brown and Linden 2008a, p. 5).\(^4\) It appears that most of this increase in offshore employment has been at semiconductor manufacturing facilities
in China and chip design centers in India (Brown and Linden 2008a; see also Ernst 2005).

What is clear is that, in the 2000s, U.S. companies have been able to access growing supplies of high-tech labor in India and China with the capabilities to perform increasingly sophisticated work that had previously been done in the United States (Chapter 5). Moreover, as we have also seen, U.S.-based companies can access this labor in the United States through nonimmigrant H-1B and L-1 visas. The H-1B program has come under heavy criticism from those who see the influx of nonimmigrant labor into the United States as subverting the remuneration and work conditions of permanent members of the U.S. labor force (Matloff 2004).

In principle, employers are supposed to pay workers on H-1B visas “at least the local prevailing wage or the actual wage level paid by the employer to others with similar experience and qualifications, whichever is higher.” The law also stipulates that an employer can only engage someone on an H-1B visa, if such employment “will not adversely affect the working conditions of workers similarly employed” (U.S. Department of Labor 2007). In practice, it is difficult to ensure the preservation of these labor conditions since there is little if any enforcement of compliance on the part of the employer.⁵

Even when the employer complies with the letter of the law, moreover, the H-1B worker is not in the same position of power vis-à-vis her employer as a U.S. citizen or permanent resident. Under NEBM, the power of the employee resides in her ability to switch jobs. An H-1B worker can only leave her employer and remain in the United States if she can find another employer with a vacant H-1B visa who is ready to hire her. An employer may use his leverage over H-1B employees to demand that they be reassigned to different geographic locations within the United States that regular members of the U.S. labor force might be unwilling to accept. The dependency of the H-1B worker on her employer will be even greater, moreover, when the employer has sponsored the employee for U.S. permanent residency, the acquisition of which may be a long, drawn-out process (Chakravarty 2006).

Recall from Chapter 5 that the annual new H-1B visa cap was 65,000 through 1998, 115,000 in 1999 and 2000, and 195,000 in 2001 through 2003, before reverting back to 65,000 in 2004, plus an additional 20,000 for foreigners with a graduate degree from a U.S. university.
There has been an excess demand for these 85,000 visas since 2004, and high-tech employers have been clamoring for a substantial increase in the cap that would alleviate, so they claim, a shortage of high-tech labor in the United States. The Comprehensive Immigration Reform Bill that was passed in the Senate in May 2006 would have raised the H-1B cap to 115,000 and instituted an automatic increase of 20,000 per year whenever the previous year’s quota was reached. In 2007 and 2008, however, legislative approval for an increase was stalled in the House of Representatives, not over the H-1B question, but rather over the treatment of illegal foreign entrants to the U.S. labor force.

ICT employers argue that more H-1B visas are needed because there is a shortage of high-tech labor in the United States. Absent a remedy that includes an expansion of the H-1B visa program in the short run and an upgrading of the U.S. K–12 education system in the long run, they warn of a deterioration of innovative capabilities in the United States and a further acceleration of offshoring of high-tech jobs.

In an influential op-ed piece, Bill Gates (2007) said that the U.S. schooling system had to be improved to enable “young Americans [to] enter the workforce with the math, science and problem-solving skills they need to succeed in the knowledge economy.” He cited a 2003 report that found that U.S. high school students ranked twenty-fourth out of 29 developed economies in math scores. Gates called upon business and government to work together to improve the delivery of science and math education in the U.S. K–12 system. He also counseled that the United States should make it “easier for foreign-born scientists and engineers to work for U.S. companies.” Indeed, the shortage of computer science graduates in the United States had reached, Gates argued, a “crisis point.” He called for an increase in the quota of H-1B visas as well as a faster and simpler process for acquiring permanent residency. Given that foreigners constitute half of the doctoral candidates in computer sciences in the United States, an important impact of these changes would be to increase the number of foreign graduates from U.S. universities who remain in the United States after completion of their studies.

Not surprisingly, the United States branch of the Institute of Electrical and Electronics Engineers (IEEE), which “promotes the careers and public-policy interests of more than 220,000 engineers, scientists and allied professionals” (IEEE-USA 2006a) is far from enthusiastic about
changes in immigration law that would expand the supply of high-tech workers in the United States. After the U.S. Senate passed the Comprehensive Reform Bill in May 2006, IEEE-USA President Ralph W. Wyndrum, Jr., commented, “The bill opens the spigot on numerous skilled visa categories. The question is how many high-tech workers can the United States absorb annually without driving up unemployment and driving down wages?” (IEEE–Cedar Rapids Section 2006).

There is considerable debate over whether a shortage or a surplus of high-tech labor exists in the United States in the 2000s (Gordon 2007). Responding generally to claims of crisis in the reproduction and expansion of the STEM (science, technology, engineering, mathematics) workforce in the United States, a 2004 study by the RAND Corporation for the U.S. Office for Science and Technology Policy and the Alfred P. Sloan Foundation argued that “many of these claims of shortfalls are suspect or are based on metrics that must be taken in context” (Kelly et al. 2004, p. 5). Writing during the jobless recovery of 2003, Michael S. Teitelbaum (2004, p. 13), a demographer and program director (now vice president) at the Alfred P. Sloan Foundation, observed: “The profound irony of many such claims [of labor shortage] is the disjuncture between practice in the scientific and engineering professions—in which accurate empirical evidence and careful analyses are essential—and that among promoters of ‘shortage’ claims in the public sphere, where the analytical rigor is often, to be kind, quite weak.”

Rhetoric of crises aside, given rapid changes in technology and the high degree of specialization of high-tech workers, these two very different perspectives on the adequacy of the supply of high-tech personnel in the United States are two sides of an age-related coin. In any market for skilled labor, there may be at any point in time a labor market “mismatch” between the skill set of the extant supply of high-tech employees and the demand for new skills inherent in new high-tech jobs (see Levy and Murnane 1992; Morris and Western 1999; Powell and Snellman 2004). For members of the ICT labor force generally, one’s age may have an inverse relation to the relevance of one’s learned skills to meet new demands for ICT labor. If companies are systematically employing younger workers, ostensibly with up-to-date skills, and systematically laying off older workers, ostensibly with obsolete skills, it is quite possible that there will exist, simultaneously, a shortage of the
new workers that companies want to hire and a surplus of the old workers that companies have decided to fire.

Such a scenario is entirely consistent with everything we know about the transition from OEBM to NEBM. A key characteristic of NEBM is a lack of commitment by companies to career employment. Under NEBM, companies continue to value the productivity that emanates from the experience of many of their existing employees, and, for employees, the prospect of promotion within the organizational hierarchy still can serve as a powerful inducement for supplying more and better effort in making productive contributions to the firm. At the same time, however, under NEBM there are no institutional constraints to terminating some employees even as, or often because, the company seeks to take advantage of new profitable opportunities that result from changes in its industry’s technological, market, and competitive conditions. When such opportunities present themselves—and in the fast-changing, globalizing ICT industries such events are regular and continuous phenomena—the company will be apt to replace older workers with younger workers.

One need only look at the transformation in employment relations at IBM between 1990 and 1994, as I have done in Chapter 3, to see how older employees could be made redundant as the company restructured with a bias toward hiring younger employees. A central purpose of IBM’s massive restructuring in the 1990s was to rid itself of its decades-old system of lifelong employment. Indeed, about 3,500 IBM employees filed a class action lawsuit against the Internal Revenue Service in 1994, claiming that IBM should not have withheld taxes on their severance pay, since these awards represented a legal settlement obtained in return for signing an agreement in which they waived their right to sue IBM for age discrimination (DeBare 1997; Ramstad 1994b,c; see also Associated Press 1994; Raleigh News and Observer 1996). As we have seen in Chapter 4, in 1995 and 1999 IBM made fundamental changes in its pension system for the expressed purpose of making the company more attractive to younger employees. In the process, many midcareer IBM employees who were not able to remain on the traditional DB plan experienced substantial reductions in their expected pensions.

Given its size, reputation, and central position in the ICT industries, IBM’s transformation from OEBM to NEBM marked a fundamental juncture in the transition from employment security to employment
insecurity in the U.S. corporate economy. Indeed, in line with the IBM experience, for the period of 1992–1997, Abowd and his coauthors (2007) found a general shift in U.S. employment from older experienced workers to younger skilled workers related to the adoption of computer technologies. Using Current Population Survey data, Schultze (1999, pp. 10–11) discovered that “middle-aged and older men, for whatever reason, are not staying as long with their employers as they once did.” He goes on to show, moreover, that the job displacement rate for white-collar workers relative to blue-collar workers rose substantially in the 1980s and 1990s, starting at 33 percent in 1981–1982 and rising to about 80 percent in the 1990s.

In late 1998, as the Internet boom gained momentum and as Congress stood ready to increase the H-1B visa cap from 65,000 to 115,000, the IEEE-USA published its “MisFortune 500”—“a parody of Fortune magazine’s annual listing of top profit-making companies,” according to the Web site www.misfortune500.org, which posted letters from hundreds of experienced engineers who had lost their jobs and could not find work as engineers during the boom (PR Newswire 1998). In IEEE-USA surveys of unemployed engineers, age was listed as the primary barrier to getting a new job by 67 percent of respondents in 2004 and 72 percent in 2006 (IEEE-USA 2006b).

While anecdotal information abounds on the displacement of senior ICT personnel in the 1990s and 2000s (e.g., see Hira 2007), there remains a deficiency of systematic research on this phenomenon. For example, HP’s “churning” of its labor force in the 2000s, subsequent to the merger with Compaq, presumably reduced the average age of employees (Wong 2006). It would be of interest to know how older employees fared relative to younger employees when thousands of positions were eliminated in the aftermath of the merger. In the absence of firm evidence, it is also debatable whether the displacement of older workers in favor of younger workers reflects the need of companies to employ people with different skills sets or simply a way to save money by getting rid of long-time employees who have traditionally received a pay premium for their seniority. The substitution of younger for older personnel for the purpose of cost reduction and not for the purpose of skill acquisition is particularly likely when the change in the age-composition of employment is achieved through offshoring to lower-wage regions.
In their book on “turbulence” in employment, which compares the financial services, retail food, semiconductor, software, and trucking industries, Brown, Haltiwanger, and Lane (2006, p. 108) suggest that both factors may be at work in ICT, thus posing a double whammy for older, higher-paid employees. They find that the most common career path in semiconductors is the “job switcher,” who works for two different companies, and the most common career path in software is the “job hopper,” who works for more than two companies (pp. 84–86). For personnel at all levels of education in these industries, workers who change jobs more earn less (see also C. Brown 2005; Brown and Linden 2008b). Based on intensive research on the U.S. semiconductor industry, Brown and Linden (p. 22) have concluded that “the labor market situation is especially difficult for older engineers, who face rapid skill obsolescence….When companies claim they face a shortage of engineers, they usually mean that they face a shortage of young, relatively inexpensive engineers with the latest skills, even when they have a queue of experienced engineers who want retraining.”

More research is needed on what skills older employees actually lack in an NEBM setting. Under NEBM, companies want to retain workers who have, or are willing to learn, the requisite skills, and who, in a highly competitive environment with “time to market” as a key to profitability, are willing to work long and hard. At a company like Microsoft, for example, software programming is a highly collective and cumulative process in which the generation of a faster, better, and cheaper product depends on the integration of the work of hundreds of individual contributors (Cusumano 2000). A high level of productivity at a company like Microsoft depends on a relatively low level of labor turnover, which in turn reflects a relatively high level of dependence of a particular employee on his or her current employer for remunerative work. The greater the available labor supply, the greater this dependence.

Long work hours are the norm under NEBM. High-tech workers at New Economy companies are generally salaried workers who are exempt from the requirement under the Fair Labor Standards Act that companies pay them overtime at one-and-a-half times the hourly rate when they work more than 40 hours a week. Exempt workers may find themselves working very long hours with little if any increase in remuneration. For Internet bloggers, a particularly well-known example of
such work conditions in ICT was that of an Electronic Arts (EA) software engineer whose spouse (female, as it turned out) posted an anonymous open letter on LiveJournal in November 2004 titled “EA: The Human Story.” Her complaint was that, under a permanent “crunch” to meet video-game publishing deadlines, EA compelled game developers like her spouse to work 85-hour weeks: “9am to 10pm—seven days a week—with the occasional Saturday evening off for good behavior (at 6:30 pm).” For working these long hours, game developers received no overtime pay, extra time off, or sick days.

Within a month of publication of the open letter, more than 4,000 people had posted comments on LiveJournal, almost all in support of the “EA Spouse,” with many advising that EA employees should join a union. As it happened, under California law, many of the game developers had a claim to overtime pay. EA agreed to the settlement of two class action lawsuits for overtime pay, one by its graphic designers for $15.6 million in October 2005 and the other by its programmers for $14.9 million in April 2006. In both cases, EA then transformed those of its employees who were nonexempt under the California law into hourly employees who would henceforth be paid time-and-a-half for overtime hours. As part of this change, EA gave these workers a one-time grant of EA stock but ruled them ineligible for EA stock options (Maragos 2005; Jenkins 2006).

It will be remembered from Chapter 3 that in 1958 IBM sought to “blur the distinction between white-collar and blue-collar workers” (to repeat the words of CEO Thomas Watson, Jr.) by paying all 89,000 of its employees on a salaried basis. Almost a half-century later, in early 2006, with IBM operating on the basis of a totally different business model, systems administrators, network technicians and other technical staff throughout the United States launched a class action lawsuit against IBM for “depriving its employees who install, maintain, and support computer software and hardware by unlawfully characterizing them as ‘exempt’ from state and federal labor law protections” (Business Wire 2006a,b). In November 2006, IBM settled the lawsuit with a payment of $65 million, but without admitting any wrongdoing or liability (Konrad 2006). Then, in January 2008, IBM announced that 7,600 technical-support workers would be reclassified as nonexempt, and that their base pay for a 40-hour work week would be cut by 15 percent because they would now be eligible for overtime pay (Bergstein 2008).
Meanwhile, as we have also seen, from 2000 through 2007 IBM increased its worldwide employment by more than 72,000 people while cutting its U.S. employment by almost 27,000. Nevertheless, insofar as high-tech companies like IBM, Microsoft, Intel, and Cisco still employ people in the United States, their executives want to find labor in abundant supply in this country. ICT executives lobby the U.S. government for an expansion in the H-1B visa program not simply, or even primarily, because the availability of more high-tech workers will help to keep down wage costs. If these companies want to lower their wage bills, they can offshore more routine activities to India or China, as indeed they have done and will continue to do. For work that is kept in the United States, however, the problem for ICT companies is not the wages of labor but rather the productivity of labor.

Labor productivity depends on effort as well as skill, and tight labor markets reduce the power of employers to demand that their employees deliver high levels of work effort (see Lazonick 1990). An exclusive focus on wage rates as the equilibrating mechanism in the labor market misunderstands the nature of the problem from an employer’s point of view, especially in a high-wage, high-skill sector of the economy. The key issue for ICT employers operating in the United States is not the level of remuneration per se but the lack of control over the work effort of a highly mobile labor force. Employees at these companies—well aware that changes in corporate strategy could bring a career within a particular company to an end, and supported by a labor market that encourages interfirm mobility—are on the lookout for employment opportunities with other companies that might be beneficial to their personal careers. All other things being equal, the larger the available high-tech labor supply, the more dependent the high-tech worker on employment with his or her current company, and the greater the power of the employer to demand that the employee work long and hard.

Here then is the significance of Bill Gates’ demand for unlimited H-1B visas. Besides increasing the labor supply, the holders of H-1B visas are much more dependent on their current employer for continuing employment. Moreover, they also tend to be younger than citizen members of the U.S. ICT labor force (U.S. General Accounting Office 2003, pp. 14, 42). Among electrical/electronic engineers, the median age of H-1B workers approved in 2002 was 32 years, compared with 41 years for U.S. citizen workers, while among systems analysts/programmers
these median ages were 31 and 37, respectively. The combination of youth and dependence makes H-1B personnel able and willing to work long and hard (see Matloff 2006a). Moreover, these H-1B visa holders are ideal recruits for a company operating in the United States that may want its employees to pursue global career paths as it decides to offshore higher value-added activities. With years of experience in the United States, still-young former H-1B holders from places like China and India can be very valuable to a company as, through the company’s offshored operations, they follow their global career paths back to the countries from whence they came.

THE PROBLEM OF MINORITY EDUCATION AND EMPLOYMENT

Major U.S. ICT companies could deal with a high-tech labor “crisis” if they would retrain and employ greater numbers of older employees on reasonable conditions of work and pay. These companies could pay for any additional cost of such employment by eschewing stock repurchases, which have no other purpose than to boost the price of the company’s stock. To take this high road to solving its labor shortage, a company would, however, in effect be rejecting the modes of employing labor and allocating capital that are characteristic features of NEBM. Instead these companies will doubtless continue to look to in-migration and offshoring to find the types of younger high-tech workers consistent with NEBM.

Given that the education systems of China and India have been generating massive numbers of potential ICT workers, both in-migration and offshoring have become the most viable solutions in the here and now of the 2000s. It has been estimated that, for the academic year 2003–2004, U.S. universities awarded (in round numbers) 137,000 four-year bachelor’s degrees in engineering, computer science, and information technology, compared with 139,000 in India and 361,000 in China (Wadhwa et al. 2007, p. 75). The U.S. number for 2003–2004 was up sharply from 109,000 in 1999–2000, but it declined to 134,000 in 2004–2005. The increase in these bachelor’s degrees awarded in China and India exhibited a much steeper trajectory from 1999–2000 to 2003–
2004, and grew further in 2004–2005. Large numbers of these Indian and Chinese college graduates subsequently migrate abroad, especially to the United States, for graduate education or work experience.

The greatly increased availability in the 2000s of a global supply of high-quality high-tech labor, via either in-migration or offshoring, has raised concerns in the United States about the adequacy of the U.S. K–12 education system to prepare the next generation of homegrown entrants to the U.S. labor force to compete in the global high-tech labor market. While the massive flow abroad of high-skill, high-tech jobs is a phenomenon of the 2000s, the concern with the adequacy of the K–12 system for preparing U.S. youth for a new world of work is not new. Since the early 1980s, various interests, including business associations, civil society organizations, and government agencies, have expressed concern with the adequacy of the U.S. K–12 education system to provide students with the levels of proficiency in math and science needed to pursue college degrees in the STEM disciplines (CPGE 2007; National Commission on Excellence in Education 1983; New Commission on the Skills of the American Workforce 2007).

The United States currently participates in the OECD’s Programme for International Student Assessment (PISA), which has done three rounds of data collection and analysis on literacy in reading, mathematics, and science of 15-year-old students around the world. The first assessment, done in 2000, focused on reading; the second (2003) on mathematics; and the third (2006) on science. In PISA 2000, the reading performance of U.S. students was just above the average for the 27 participating OECD nations, among which the United States ranked fifteenth, or just below the median (Lemke et al. 2001, p. 7). In PISA 2003, the mathematics performance of U.S. students was significantly below the OECD average, as the United States ranked twenty-fourth out of 29 OECD countries (Lemke et al. 2004, pp. 14–15).\(^\text{12}\) In PISA 2006, the science performance of U.S. students was significantly below the OECD average, as the United States ranked twenty-first of 30 OECD countries (Baldi et al. 2007, p. 6).

The roots of the problem of the performance of the U.S. system of mass education are deeply embedded in the nation’s social structure (see Berliner 2006). In all cases, blacks and Hispanics in the United States did significantly worse on these assessments than whites and Asians (Baldi et al. 2007, p. 55; Lemke et al. 2001, p. 50; Lemke et al. 2004, p.
In the PISA 2000 reading rankings, U.S. non-Hispanic whites had a score that would have placed them (as a hypothetical nation) second after Finland and just ahead of Canada, while U.S. blacks had a score that would have placed them twenty-fifth, leading only Luxembourg and Mexico. In the PISA 2003 math rankings, U.S. non-Hispanic whites scored above the OECD average and would have placed thirteenth out of 29 OECD countries, while U.S. blacks would have ranked twenty-eighth, ahead of Mexico. In the PISA 2006 science rankings, U.S. non-Hispanic whites would have been seventh among 30 OECD nations, while U.S. blacks would have been last, just behind Mexico.

In each case, U.S. Hispanics performed better than U.S. blacks but well below the OECD average. U.S. Asians did less well than U.S. non-Hispanic whites and were above the OECD average in reading and math but just below it in science. Much of the poor showing of the United States as an actual nation in PISA, therefore, can be attributed to deficiencies in the K–12 educations of blacks and Hispanics. During this period, of the U.S. population aged 15–19, non-Hispanic whites made up 63 percent, blacks 15 percent, Hispanics 16 percent, and Asians 4 percent (U.S. Census Bureau 2004, 2005, pp. 14–15).

An inadequate education places one at a great disadvantage in the global competition for good jobs. Even for well-educated whites, the employment trends under NEBM that I have documented do not give cause for optimism. For blacks and Hispanics the problem is far worse. Increasing proportions of the black and Hispanic populations have attained university degrees at the bachelor’s level or higher. Nevertheless, their numbers still lag far behind those of the white population (National Center for Education Statistics 2008, Table 8). In 2007 blacks and Hispanics were also still lagging behind whites at the associate’s degree level, which includes qualifications for entry into many ICT technician jobs (ibid., Table 9).

While some progress has been made, thus far blacks and Hispanics are not well represented in the STEM occupations—in sharp contrast not only to whites but also to people of Asian origin in the U.S. population (Lowell and Regets 2006, pp. 16–18). Much of the progress that blacks and Hispanics made in the STEM occupations in the last decades of the twentieth century was at the lower-paid technician levels (U.S. Census Bureau 2008f, p. 388), and these occupations are among the most likely to be offshored.
The lack of representation of black and Hispanic workers in the ICT industries is evident in those cases (all too rare) in which companies make data public on the changing composition of their U.S. labor forces by race, ethnicity, and gender. Exceptionally, IBM has provided detailed employment data by race, ethnicity, and gender for eight occupational categories, from officials/managers to operatives, for the years 1996 through 2008.13

In 1996, 9.9 percent of IBM’s 125,618 employees were black. In 2008 IBM had 120,227 U.S. employees, but the proportion who were black had fallen to only 7.5 percent. On net, blacks had 3,439 fewer U.S. jobs at IBM in 2008 than in 1996, while Asians had 5,281 more jobs. Hispanics saw their numbers increase slightly, but they represented only 4.0 percent of IBM’s U.S. labor force in 1996 and 4.2 percent in 2008.

The main reason for the decline in black employment at IBM was the reduction of employment in the types of jobs that blacks had occupied in 1996, when over 43 percent of blacks were clustered in the operative and office/clerical categories. In 2008, as the combined result of divestments of manufacturing facilities and offshoring, IBM employed only 78 black operatives in the United States, down from 3,474 in 1996. In 2008 there were 885 black employees in office/clerical work, but in 1996 that number had been 1,905. In 2008 IBM employed 3,347 blacks as professionals, but that number was 8 percent less than the number employed in 1996. Blacks benefited from the growth of marketing positions at IBM, with the number of positions they held rising substantially, from 1,248 in 1996 to 2,853 in 2008. Nevertheless, the proportion of all marketing employees who were black declined, from 7.9 percent in 1996 to 7.2 percent in 2008.

Overall, then, in this age of high-tech global competition, the data on education and employment by race and ethnicity in the United States strongly suggest that significant groups within American society will still face tough times in the years and indeed decades to come unless public policy knocks down the systemic socioeconomic barriers to advancement that still face large proportions of blacks and Hispanics in the United States. Besides confronting the substantial supply-side problem of the transformation of the K–12 education system, public policymakers must also consider the types of policies that can deal with the demand-side problem of the expansion and augmentation of high-
tech employment in the United States in the face of the apparently irreversible tendency for U.S. jobs of ever higher quality to go abroad. The challenge of sustainable prosperity in the United States is not simply to replace the jobs that disappear but to generate an ever-expanding number of high-quality jobs that can draw members of previously excluded groups into remunerative and meaningful work.

To have any chance of success, legislators must desist from viewing the resource allocation decisions of companies such as Cisco, HP, IBM, Intel, and Microsoft as market forces that are presumably outside the purview of legitimate government policy. The analysis that I have presented in this book argues that, for government investment in the U.S. science and technology infrastructure to have any chance of resulting in prosperity for most Americans, blacks and Hispanics included, over the next generation, the government will have to intervene strategically to influence the allocation of resources by business corporations, U.S.-based and foreign, in a way that would make use of the high-tech knowledge and highly qualified people that government investment would generate.

CORPORATE GOVERNANCE FOR SUSTAINABLE PROSPERITY

The critical area for strategic policy intervention—yet one that has been virtually absent from the U.S. policy debate in the 2000s—is corporate governance, by which I mean the institutions and mechanisms that determine and regulate the ways in which business corporations allocate resources. More specifically, for the sake of sustainable prosperity, government policy must focus on the role of the stock market in the corporate allocation of resources. I have argued that stock-price movements can be driven by innovation, speculation, and manipulation. The general objective of government policy in the area of stock-market regulation should be to eliminate the forces of speculation and manipulation in the determination of stock-price movements so that the stock market can function to support, and stock-price movements reflect, innovation.
A prelude to such policy intervention is a rejection of the overwhelmingly dominant ideology that maximizing shareholder value results in superior economic performance. A rejection of this ideology will not be easy, to say the least. Shareholder-value ideology derives its credibility from the theory of the market economy that dominates the thinking of academic economists. It is, however, a theory that, as I have argued in many contexts, cannot come to grips with the role of the developmental state and the innovative enterprise in the process of economic growth (e.g., see Lazonick 2008b). In practice, moreover, as I have also shown in this book, the financial affairs of U.S. households, businesses, and governments have become tied up with the stock market. Powerful financial interests, including the top executives of major U.S. corporations, who profit enormously from the willingness of households to speculate on the stock market, will vigorously oppose any significant policies that threaten to bring their party to an end.

One might argue that, given that they are so invested in the stock market, U.S. households also benefit from the boosts to stock prices that stock buybacks generate. There are problems with this argument, however. Insiders who know when buybacks are actually to occur (as distinct from when the authorization of a repurchase amount is announced) will be best positioned to take advantage of subsequent stock-price increases (see Fried 2000, 2001; Netter and Mitchell 1989). More generally, households, as outsiders, lack the sophistication and knowledge of corporate executives and money managers as insiders to gain from stock-price volatility. Moreover, even before the financial turmoil of 2008, the evidence on pension assets suggested that working households had not been well served by corporate securities markets in the 2000s in terms of their expected retirement earnings (Munnell and Sundén 2006; Sorokina, Webb, and Muldoon 2008). The best way to ensure income security in retirement is to have well-paid employment as long as one can be productive. Yet in the 2000s, even for the best educated and most experienced middle-aged workers, such sustained employment has become hard to find.

Corporate stock repurchases and executive stock options must be brought under control if stable and equitable economic growth is to become a possibility over the next generation. The government needs to enact legislation that restricts, and indeed even forbids, the practice of corporate stock repurchases. It is a practice that only serves to manipu-
late the stock market in the interests of those with the power to allocate corporate resources. If economics is about the “optimal” allocation of resources to achieve superior economic performance, stock buybacks on the scale to which corporate executives and Wall Street have become accustomed represent a gargantuan misallocation of resources in the U.S. economy.

As shown in Chapter 6, the obsession with buybacks pervades the U.S. corporate economy (see Lazonick 2008d). U.S. companies that profit from offshoring buy back stock rather than augment the quality and quantity of jobs available in the United States (see Milberg 2008). Leading ICT companies do huge buybacks even as they demand that the government invest in the knowledge base, and they cut back on U.S. employment even as they expand abroad. Leading oil companies do huge buybacks even as U.S. households find their real incomes shrinking because of rising energy prices. Leading pharmaceutical companies do huge buybacks even as they argue in Congress against the regulation of U.S. drug prices because they ostensibly need as much of their profits as possible to pump back into drug research. Leading health-care providers do huge buybacks even as Americans face ever-mounting costs for health care. Leading Wall Street banks did huge buybacks even as they speculated on credit default swaps and collateralized debt obligations to such an extent that they brought the global financial system to its knees. U.S. government–sponsored financial entities Fannie Mae and Freddie Mac did huge buybacks even as they embroiled themselves in the subprime mortgage mess to the point where the government had to bail them out. And if bailed-out General Motors had banked the $20.4 billion distributed to shareholders as buybacks from 1986 through 2002 (with a 2.5 percent after-tax annual return), it would have had $33.8 billion of its own cash to help keep it afloat and respond to global competition in 2008.

The government also needs to enact legislation that drastically reins in top executive pay, which means placing restrictions on stock-based remuneration, especially stock options. The greatest gains from stock options come in periods of stock-market speculation, when holders of options benefit from the fact that in the United States there is virtually never any requirement that option gains can only be reaped if a company’s stock does better than similar companies in its industry. And when the market is less speculative, corporate executives can allocate
resources to stock buybacks to give a boost to the company’s stock price. Presto, the “performance” of the company improves, and it is time for executives to exercise their abundant options once again. Is it a surprise, as investigations into the 2008 financial crisis have revealed, that top corporate executives are prone to speculate with other people’s money and to manipulate earnings per share when they are remunerated in ways that encourage them to speculate with other people’s money and manipulate earnings per share?

The problem of exploding executive pay has been around for a long time, and virtually nothing has been done about it. The last serious challenge to the legitimacy of executive stock options in the U.S. Congress was in the 1960s, when Senator Albert Gore (D-TN) was engaged in a battle with corporate tax-dodgers (Gore 1965). Congress did not go as far as Gore would have liked, but until the Tax Reform Act of 1976 there was a legislative movement toward restricting the tax advantages of stock options. All of that changed in the latter half of the 1970s as the newly organized high-tech lobby swung into action and got the capital-gains tax reduced, got accounting rules changed, and ensured that stock repurchases would be freely permitted to enhance the benefits of employee stock options.

The one attempt in the 1990s by Democrats to control the rise of executive pay ended up doing just the opposite. In 1993, after Bill Clinton assumed the presidency, his administration implemented a campaign promise to legislate a cap of $1 million on the amount of nonperformance-related, top-executive compensation that could be claimed as a corporate tax deduction. One perverse result of this law was that companies that were paying their CEOs less than $1 million in salary and bonuses raised these components of CEO pay toward $1 million, which was now taken as the government-approved “CEO minimum wage” (Byrne 1994). The other perverse result was that companies increased CEO stock option awards, for which tax deductions were not in any case being claimed, as an alternative to exceeding the $1 million salary-and-bonus cap (Byrne 1995).

A further irony of the Clinton-driven legislation was that the high-tech lobby at the time was fighting against an attempt by FASB to require companies to expense stock options (see PR Newswire 1994; World Accounting Report 1994). Especially for companies with broad-based stock option plans, this prospective regulatory change would
have resulted in lower reported earnings that, it was thought, would result in lower stock prices. Hence, even though the proposed FASB regulation (which was ultimately enacted in 2004) would have reduced the corporate tax bill, corporate executives were against it. Why would these same executives give much thought to the fact that there would be no corporate tax deductions for personal pay that exceeded the million-dollar cap?

Now, as then, it is futile to talk about placing restrictions on executive compensation without limiting the extent to which executives can reap gains from stock options that result from either speculation or manipulation. Besides making stock repurchases illegal, legislation is needed to place limits on stock option grants to individuals and to make the gains from the exercise of stock options dependent on achieving a variety of performance goals, including first and foremost ongoing contributions to job creation in the United States.

Finally, to pay for the many things that the United States needs, taxes on stock-based income, whether in the form of dividends or capital gains, need to be raised substantially. By lowering both the capital-gains and dividend tax rates to 15 percent, the Jobs and Growth Tax Relief Reconciliation Act of 2003 further enriched those who receive stock-based income, including income from the exercise of qualified stock options that can receive capital-gains tax treatment. The dubious rationale behind these tax cuts for the rich was that they would spawn real investment and economic growth. The result, however, has been to give corporate executives even greater incentives to do stock repurchases, a mode of resource allocation that reduces the number of productive jobs that U.S. corporations can generate for the U.S. labor force.

The OEBM was hardly perfect, but it did provide employment security, health coverage, and retirement benefits to tens of millions of people whose work was at the heart of the economy. Under NEBM, the corporate economy no longer assumes these collective functions. In an era of open standards, rapid technological change, convergence of technologies, and intense global competition, business enterprises do need to be flexible in the deployment of capital and labor. One way of attaining this flexibility is by giving the organized labor force a major role in enterprise governance, as for example the Japanese, Germans, and Swedes have done, each in their own particular ways (Lazonick 2005, 2007d). In such a system, there is the possibility of an interaction
between business and government to provide widespread economic security in employment and retirement while permitting business enterprises to remain innovative and competitive on a global scale.

The other way is the American way in the era of NEBM, which, in an updated version of what I have called “the myth of the market economy” (Lazonick 1991), works under the pretense that the collective provision of economic security is not required. Just get enough education to be “employable” in a well-paid job, and individual initiative will provide one with the lifetime of security that one needs. From the NEBM perspective, the only legitimate function of the government is to invest in the knowledge base, and even then with no notion that, through taxation, a substantial proportion of the gains from innovative enterprise that this knowledge base makes possible should be returned to the government to support the ongoing development of the economy as a whole.

In the United States in the 2000s, the quest for economic security evades even a substantial portion of the better educated population. In its stead stands the quest for shareholder value; the worship of wealth in the 2000s has rewritten the 1980s’ motto “greed is good” to read “greed is god.” The small minority of the population that controls the allocation of corporate resources is reaping unprecedented wealth—even when some among them cause a financial meltdown—while demanding that the government spend more of the taxpayers’ money on knowledge creation and warning that only lower taxes on their wealth can keep the spirit of innovation alive. With the aid of a compliant government, the NEBM may continue to generate respectable U.S. economic growth—although, given global competition and the U.S. financial crisis, even that outcome is in doubt. What does seem certain is that for a growing majority of Americans, the stock market–oriented political economy that has NEBM as its foundation will continue to generate instability and inequity as a normal way of life.
Notes


2. In September 2008, having completed a $40 billion stock repurchase program, Microsoft announced that its board had approved another $40 billion program through September 2013. Microsoft’s board also authorized debt financing of up to $6 billion, some of which could be used for buybacks (Associated Press News-wires 2008).

3. For an attempt to use newspaper articles and press releases to track the number of offshored jobs and the companies that are doing the offshoring, see the TechsUnite offshore tracker at http://www.techsunite.org/offshore/.

4. Brown and Linden point out that the data are not strictly comparable from year to year but nevertheless capture the general trend in the location of the employment of engineers in the U.S.-based semiconductor industry.

5. For a list of problems with the H-1B program from the perspective of an anti-H-1B Web site, see ZaZona.com (2008). See also hireamericansfirst.org, launched in January 2008.


7. Gates was undoubtedly referring to the 2003 International Student Math Assessment, sponsored by the OECD Programme for International Student Assessment (PISA) (OECD 2004), which is discussed below.

8. For a critique of the argument that there is a shortage of qualified science and engineering graduates in the United States, see Lowell and Salzman (2007).

9. According to Norman Matloff (2006b), who is among the most vocal critics of corporate and government policies that have generated surpluses of experienced engineers, in 2000 “IEEE-USA came under heavy pressure from the IEEE parent organization, which is dominated by industry and academia and thus is highly pro-H-1B. So IEEE-USA suddenly changed its stance. It still was critical of the H-1B program, but it started extolling ‘instant green cards’ for foreign workers instead of H-1B visas. It ignored member complaints that the green card idea would be just as harmful to IEEE-USA members as H-1B. The Misfortune 500 Web page was taken down.”

10. Hyde (2003, chap. 12) argues that employment discrimination law, including that which relates to age discrimination, is based on “an assumption of stable long-term careers inside individual firms,” and hence employment discrimination is very difficult to prove in the context of what he calls “a high-velocity labor market” such as exists in Silicon Valley.


12. Trailing the United States were Portugal, Italy, Greece, Turkey, and Mexico.
