

From Innovation to Financialization: How Shareholder Value Ideology is Destroying the US Economy

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1. Maximizing Shareholder Value

The United States is the richest economy in the world. Yet in the 2000s the United States has been unable to deliver equitable and stable economic growth to its own population (Lazonick 2009a, ch. 1; 2009b; and 2011a). The national unemployment rate, which was over six percent in the “jobless recovery” of 2003, exceeded ten percent in the “jobless recovery” of 2009, and in April 2011 was still at 9.0 percent. The distribution of income has become increasingly unequal over the past three decades, with a disappearance of middle-income jobs. In the 1990s and 2000s even the jobs of well-educated and experienced members of the labor force have been vulnerable to downsizing and offshoring. Meanwhile, there has been a growing concentration of income among the richest households. The share of total income (including capital gains) going to the top one percent of households in the income distribution rose from about nine percent in the mid 1970s to over 22 percent on average in 2005-2008 (Alvaredo et al. 2011).

A prime reason for the decline of employment opportunities and the growth in income inequality in the last three decades in the United States is the way in which US business corporations are governed, and in particular the way in which the stock-based remuneration of corporate executives influences their resource-allocation decisions. In the 1980s and 1990s agency theorists advocated stock-based compensation so that corporate executives would have the incentive to “maximize shareholder value” (MSV), which would supposedly improve the performance of the economy as a whole (Jensen 1986; Jensen and Murphy 1990). In this paper I will argue that, on the contrary, MSV is an ideology that has been destructive of the performance of the US economy.

In the next section of this paper, I show that agency theory makes false assumptions about those participants in the economy who make risky investments, and hence about who should therefore be rewarded if and when those investments generate returns. Innovation theory, which can comprehend the roles of governments and of workers in making risky investments in productive capabilities, is far more powerful than agency theory in explaining the relation between risky investments and superior economic performance (see Lazonick and O’Sullivan 2000; Lazonick 2010b and 2011b). Then I show that in the corporate economy of the United States over the past three decades, the implementation of the incentives advocated by agency theory for the sake of MSV have resulted in an explosion of top executive pay. I go on to document the importance of stock buybacks in the United States as an instrument for MSV that, by manipulating a company’s stock price, help to boost executive pay. I contend that in the United States the use of stock-based compensation, and in particular stock options, to motivate corporate executives to have a strong personal interest in the performance of their company’s stock price has resulted in not only an inequitable distribution of income but also unstable economic performance and reduced investment in innovation. I conclude with a brief discussion of the types of public policies that would be needed to correct these corporate governance problems.

2. Critique of MSV Theory

It was only in the early 1980s that corporate executives began to embrace the ideology that, for the sake of superior economic performance, companies should “maximize shareholder value” (Rappaport 1981 and 1983). Among academic economists, agency theorists supported this ideology by propounding a shareholder-value perspective on corporate governance that is consistent with the neoclassical theory of the market economy (Fama and Jensen 1983a and 1983b). Especially in the United States, some three decades later MSV remains the dominant ideology of corporate governance in business schools, economics departments, executive suites, and corporate boardrooms.

The argument put forward by agency theorists is that among all the stakeholders in the business corporation only shareholders are “residual claimants”. The amount of returns that shareholders receive depends on what is left over after other stakeholders, all of whom it is argued have guaranteed contractual claims, have been paid for their productive contributions to the firm. If the firm incurs a loss, the return to shareholders is negative, and vice versa.

By this argument, shareholders are the only stakeholders who have an incentive to bear the risk of investing in productive resources that may result in superior economic performance. As residual claimants, moreover, shareholders are the only stakeholders who have an interest in monitoring managers to ensure that they allocate resources efficiently. Furthermore, by selling and buying corporate shares on the stock market, public shareholders, it is argued, are the participants in the economy who are best situated to reallocate resources to more efficient uses.

The fundamental problem with the agency perspective on MSV is that it simply is not the case that shareholders are the only participants in the business enterprise who make investments in productive resources without a guaranteed return (see Lazonick 2011b). Taxpayers through government agencies and workers through the firms that employ them also make such risky investments on a regular basis. From this perspective both the state and labor have “residual claimant” status.

Any realistic account of economic development must take into account the role of the state in a) making infrastructural investments that, given the required levels of financial commitment and inherent uncertainty of economic outcomes, business enterprises would not have made on their own; and b) providing business enterprises with subsidies that encourage investment in innovation. Indeed, in terms of investment in new knowledge with applications to industry, the United States was the world’s foremost developmental state over the course of the twentieth century (see Lazonick 2008; Block 2009; Block and Keller 2010). As one prime example, it is impossible to explain US dominance in computers, microelectronics, software, and data communications without recognizing the role of government in making seminal investments that developed new knowledge and infrastructural investments that facilitated the diffusion of that knowledge (see, for example, National Research Council 1999; Abbate 2000). As another prime example, the 2010 budget of the National Institutes of Health (NIH) for life sciences research was \$30.9 billion, almost double in real terms the budget of 1993 and triple in real terms the

budget of 1985. Since the founding of the first national institute in 1938, NIH spending has totaled \$738 billion in 2010 dollars (Lazonick and Tulum 2011).

More generally, the US government has made investments to augment the productive power of the nation through federal, corporate, and university research labs that have generated new knowledge as well as through educational institutions that have developed the capabilities of the future labor force. Business enterprises have made ample use of this knowledge and capability. In effect, in funding these investments, the state (or more correctly, its body of taxpayers) has borne the risk that the nation's business enterprises would further develop and utilize these productive capabilities in ways that would ultimately redound to the benefit of the nation, *but with the return to the nation in no way contractually guaranteed*.

In addition, the US government has often provided cash subsidies to business enterprises to develop new products and processes, or even to start new firms. The public has funded these subsidies through current taxes, borrowing against the future, or by making consumers pay higher product prices for current goods and services than would have otherwise prevailed. Multitudes of business enterprises have benefited from subsidies without having to enter into contracts with the public bodies that have granted them to remit a guaranteed return from the productive investments that the subsidies help to finance.

Like taxpayers, workers can also find themselves in the position of having made investments without a contractually guaranteed return. In an important contribution to the corporate governance debate, Margaret Blair (1995) argued that, alongside a firm's shareholders, workers should be accorded residual-claimant status because they make investments in "firm-specific" human capital at one point in time with the expectation – but without a contractual guarantee – of reaping returns on those investments over the course of their careers. Moreover, insofar as their human capital is indeed firm-specific, these workers are dependent on their current employer for generating returns on their investments. A lack of interfirm labor mobility means that the worker bears some of the risk of the return on the firm's productive investments, and hence can be considered a residual claimant. Blair goes on to argue that if one assumes, as shareholder-value proponents do, that only shareholders bear risk and residual-claimant status, there will be an underinvestment in human capital to the detriment of not only workers but the economy as a whole.

I concur with Blair's argument that workers often have residual-claimant status. From the perspective of innovation theory, however, I look at the relation between the risks that workers bear and rewards that workers may, or may not, receive differently. Quite apart from whether or not their skills are "firm specific", workers often contribute their time and effort over and above the levels required by their current level of pay to a collective and cumulative innovation process. By definition, this innovation process can only generate returns in the future, and, indeed, because the innovation process is uncertain, may not in fact generate returns. As members of the firm, therefore, workers, bear the risk that the extra expenditures of time and effort will not yield the gains to innovative enterprise from which they can be rewarded. If, however, the innovation process does

generate returns, workers, as risk-bearers, have a claim to a share (Lazonick 1990 and 2010a).

Therefore MSV ideology, as put forth by agency theorists, provides a flawed rationale for denying taxpayers and workers residual-claimant status, and thereby excluding them from sharing in the gains of innovative enterprise. But, to turn agency theory on its head, on what grounds do *public shareholders* have residual-claimant status? Put differently, what risk-bearing role do public shareholders play in the innovation process? Do they confront uncertainty by strategically allocating resources to innovative investments? No. As portfolio investors, they diversify their financial holdings across the outstanding shares of existing firms to minimize risk. They do so, moreover, with limited liability, which means that they are under no legal obligation to make further investments of “good” money to support previous investments that have gone bad. Indeed, even for these previous investments, the existence of a highly liquid stock market enables public shareholders to cut their losses instantaneously by selling their shares – what has long been called the “Wall Street walk”.

Without this ability to exit an investment easily, public shareholders would not be willing to hold shares of companies over the assets of which they exercise no direct allocative control. It is the liquidity of a public shareholder’s portfolio investment that differentiates it from a direct investment, and indeed that distinguishes the public shareholder from a private shareholder who, for lack of liquidity of his or her shares, must remain committed to his or her direct investment until it generates financial returns. The modern corporation entails a fundamental transformation in the character of private property, as Berle and Means recognized almost 80 years ago in The Modern Corporation and Private Property. As property owners, public shareholders own tradable shares in a company that has invested in productive assets. In an innovative enterprise, however, the most important productive assets are human assets – assets that, in a free society, cannot be owned by others.

Given the central role of the development and utilization of human assets in the growth of the firm, the fundamental role of the stock market in the United States has been to transform illiquid claims into liquid claims on the basis of investments that have already been made, thereby separating share ownership from managerial control. Business corporations sometimes do use the stock market as a source of finance for new investments, although the cash function has been most common in periods of stock-market speculation when the lure for public shareholders to absorb new issues has been the prospect of quickly “flipping” their shares to make a rapid speculative return. Public shareholders want financial liquidity; investments in innovation require financial commitment. It is only by ignoring the role of innovation in the economy, and the necessary role of insider control in the strategic allocation of corporate resources to innovation, that agency theory can argue that superior economic performance can be achieved by maximizing the value of those actors in the corporate economy who are the ultimate outsiders to the innovation process.

3. The Impact of MSV

My book, *Sustainable Prosperity in the New Economy? Business Organization and High-Tech Employment in the United States* (Lazonick 2009a), focused on employment opportunities in information and communication technology (ICT), a set of industries that has been central to economic growth in recent decades. Especially in the 1980s and 1990s ICT created a strong demand for college-educated white-collar workers even as good jobs for high-school-educated blue-collar workers disappeared in the face of manufacturing challenges from East Asian nations. In the 1990s, however, the character of employment opportunities for college-educated white-collar workers also changed dramatically as leading corporations such as IBM and Hewlett-Packard that had previously offered employees the realistic expectation of a career with one company now opted to employ a flexible labor force, even laying off older, more experienced (and more expensive) workers in the Internet boom of the late 1990s as they hired younger, less experienced (and less expensive) workers. In the 2000s these new workers were likely to be employed by US multinational corporations in lower-wage developing economies such as India and China. The changed employment situation for college-educated workers in the United States is apparent in the decline in the 2000s in job tenure and the wage premium to a college education (Farber 2008).

I summarize these structural changes in employment conditions that have permanently eliminated “middle-class” jobs in the US economy as *rationalization*, *marketization*, and *globalization*. From the beginning of the 1980s rationalization, characterized by plant closings, eliminated the jobs of unionized blue-collar workers (Lazonick 2011a). From the beginning of the 1990s marketization, characterized by the end of a career with one company as an employment norm, placed the job security of middle-aged and older white-collar workers in jeopardy. From the 2000s globalization, characterized by the offshoring of employment, left all types of members of the US labor force, even those with advanced educational credentials and substantial work experience, vulnerable to displacement.

In each case the structural change in employment took root in a cyclical downturn: rationalization in the double-dip “blue-collar” recession of 1980-1982, marketization in the “white-collar” recession of 1990-1991, and globalization in the “Internet” recession of 2001. In historical retrospect we now know that the recoveries that followed the recessions of 1990-1991 and 2001 were “jobless” as, respectively, marketization and globalization continued after the recoveries. Indeed, in terms of blue-collar employment, the recovery from the recessionary conditions of 1980-1982 was also jobless, but the continuation of plant closings in 1983 and beyond was offset for the economy as a whole by new employment opportunities for white-collar workers created by the microelectronics boom.

Initially, each of these structural changes in employment could be justified in terms of changes in industrial conditions related to technologies, markets, and competition. The plant closings that characterized rationalization were a response to the superior productive capabilities of Japanese competitors in consumer durable and related capital goods industries that employed significant numbers of unionized blue-collar workers.

The erosion of the one-company-career norm among white-collar workers that characterized marketization was a response to the dramatic technological shift from proprietary technology systems to open technology systems that was integral to the microelectronics revolution. The offshoring of the jobs of well-educated and highly experienced US members of the labor force that characterized globalization was a response to the emergence of large supplies of highly capable labor in nations such as China and India.

Once US corporations adopted these structural changes in employment, however, corporate executives often pursued these employment strategies purely for financial gain. Some companies closed manufacturing plants, terminated experienced workers, and offshored production to low-wage areas of the world simply to increase profits, often at the expense of the company's long-term competitive capabilities. Moreover, as these changes became embedded in the structure of US employment, financialized business corporations declined to invest in new, higher value-added job creation on a scale that could at least offset the job losses from rationalization, marketization, and globalization.

Legitimized by shareholder value ideology, over the past three decades trillions of dollars that could have been spent on innovation and job creation in the US economy have instead been used to manipulate corporate stock prices. With superior corporate performance defined as meeting Wall Street's expectations of steadily rising quarterly earnings-per-share targets, companies turned to massive stock repurchases to boost their stock prices. From 2000 through 2009 S&P 500 companies – which account for about 75 percent of the market capitalization of all US publicly-listed corporations – spent more than \$2.5 trillion on stock buybacks, equal to 58 percent of their net income. In addition, these companies distributed dividends equal to 41 percent of net income over the decade, bringing the total payout ratio (buybacks plus dividends) to 99 percent. The average buybacks per company more than quadrupled from less than \$300 million in 2003 to over \$1.2 billion in 2007, before falling to around \$700 million in 2008 and \$300 million in 2009. Average buybacks rebounded to \$600 million in 2010, and, as of the time of writing this paper, were on pace to total at least \$700 million in 2011, or \$350 billion for the S&P 500 as a whole (Lazonick 2010b and 2011b).

What was unique about the Great Recession that began in December 2007 and ended in June 2009 was that it was primarily the result of financialization, especially in the subprime mortgage market and emanating from the financial sector. In my view, the Great Recession and the prolonged joblessness of the current recovery are culminations of rationalization, marketization, and globalization in the presence of the financialized business corporation, both industrial and financial. The primary cause of the current jobless recovery is neither a mismatch in the labor market nor a lack of business confidence – the two main contenders among conventional economists for explaining the sluggishness of reemployment. Rather the most potent explanation for the current dearth of employment opportunities in the United States is the financialized business corporation characterized by massive stock buybacks and outsized executive pay.

The prime reason why the US economy gets a “match” between the capabilities of labor supplied and labor demanded is because major business corporations invest in the

capabilities of the types of workers whom they require. From this perspective, a so-called “mismatch” results from a failure of business corporations to make these investments in the training – both formal and on-the-job – of the US labor force. Indeed when educated and experienced workers suffer permanent job loss in their areas of specialization, valuable human capital quickly atrophies. I argue that the structural changes that have resulted in the loss of middle-class American jobs going back some three decades emanate primarily from a combination of rationalization, marketization and globalization.

I contend, furthermore, that the financialization of the corporation has exacerbated permanent job losses from these three structural changes in employment while undermining investment in innovation and new high-value-added job creation in the United States. US corporations are currently sitting on almost \$1 trillion in cash, notwithstanding a sharp rebound in stock repurchases in 2010 from recession-induced declines in 2008 and 2009. Much of this cash is held abroad by US multinational corporations that are exploiting a tax loophole that permits them to avoid paying corporate taxes in the United States until they repatriate the profits. Indeed some corporate executives are pushing for a tax holiday on repatriated profits so that they can use the untaxed funds to do, among other things, stock buybacks (see Chambers and Catz 2010; Lazonick 2011b; see also Dharmapala et al. 2010). Rather than manifesting a lack of business confidence, these cash hoards also reflect a desire by corporate executives to have cash available for stock repurchases as, in the years ahead, companies use an escalation of repurchases to compete to boost their stock prices, as was the case from 2003 to 2007. The globalization of the labor force for educated and experienced workers is here to stay. In the absence of a change in corporate financial behavior, the future of the US economy is more booms, busts, and jobless recoveries, with each boom more speculative, each bust more devastating, and each recovery more jobless than the one before.

Why do corporations repurchase stock? Executives often claim that buybacks are financial investments that signal confidence in the future of the company and its stock-price performance (Louis and White 2007; Vermaelen 2005, ch. 3). In fact, however, companies that do buybacks never sell the shares at higher prices to cash in on these investments. To do so would be to signal to the market that its stock price had peaked. According to the “signaling” argument, we should have seen massive sales of corporate stock in the speculative boom of the late 1990s, as was in fact the case of US industrial corporations in the speculative boom of the late 1920s when corporations took advantage of the speculative stock market to pay off corporate debt or bolster their corporate treasuries (O’Sullivan 2004). Instead, in the boom of the late 1990s corporate executives as *personal investors* sold their own stock to reap speculative gains (often to the tune of tens of millions). Yet, if anything, these same corporate executives as *corporate decision-makers* used corporate funds to repurchase their companies’ shares in the attempt to bolster their stock prices – to their own personal gain.

Those gains have been enormous. According to AFL-CIO Executive Paywatch (2009), the ratio of the average pay of CEOs of 200 large US corporations to the pay of the average full-time US worker was 42:1 in 1980, 107:1 in 1990, 525:1 in 2000, and 319:1 in 2008. Based on proxy statement data in Compustat, Table 1 shows the average

compensation of the highest paid corporate executives in the United States, and the percent of that compensation derived from exercising stock options (the difference between the stock-option exercise price and the market price of the stock on the exercise date).

Table 1. Total compensation of top executives of US-based corporations, average for 100, 500, 1500, and 3000 highest-paid executives, and the proportion of total compensation derived from gains from exercising stocks options, 1992-2009

Mean compensation in millions of 2009 US dollars

	S&P 500 Index	NAS- DAQ Index	NAS- DAQ/ S&P	Top 100		Top 500		Top 1500		Top 3000	
				Mean \$m.	% SO	Mean \$m.	% SO	Mean \$m.	% SO	Mean \$m.	% SO
1992	100	100	1.00	22.7	71	9.2	59	4.7	48	2.9	42
1993	109	119	1.10	20.9	63	9.0	51	4.7	42	3.1	36
1994	111	125	1.13	18.2	57	8.0	45	4.3	35	2.9	29
1995	131	155	1.18	20.5	59	9.6	48	5.2	40	3.4	34
1996	162	195	1.20	31.8	64	13.7	54	7.1	47	4.5	41
1997	210	243	1.16	43.3	72	18.2	61	9.3	55	5.8	49
1998	261	300	1.15	76.9	67	26.8	65	12.5	59	7.5	54
1999	319	462	1.45	68.8	82	27.4	71	13.2	63	7.9	57
2000	341	614	1.80	103.7	87	40.3	80	18.6	73	10.8	67
2001	284	332	1.17	62.1	77	23.6	66	11.3	58	6.8	53
2002	237	252	1.06	37.3	57	16.7	49	8.6	43	5.4	38
2003	232	275	1.18	48.2	64	20.9	55	10.7	48	6.7	43
2004	272	330	1.21	54.4	75	24.5	62	12.8	55	8.0	50
2005	290	348	1.20	66.3	78	28.1	63	14.2	56	8.9	51
2006	316	463	1.47	67.1	68	28.9	58	15.0	51	9.5	46
2007	354	428	1.21	59.4	69	27.3	58	14.5	50	9.3	45
2008	291	356	1.22	39.1	62	16.5	48	8.3	38	5.0	33
2009	227	307	1.35	29.6	44	13.9	27	7.7	17	5.0	12

S&P 500 Index and the NASDAQ Composite Index set to 100 in 1992 for purposes of comparison. Total compensation (TDC2 in the Compustat database) is defined as “Total compensation for the individual year comprised of the following: Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Net Value of Stock Options Exercised, Long-Term Incentive Payouts, and All Other Total”).

%SO means the percent of total compensation that the whole set (100, 500, 1,500, or 3,000) of highest-paid executives derived from gains from exercising stock options.

Note that company proxy statements (DEF 14A SEC filings) report the compensation of the company’s CEO and four other highest paid executives. It is therefore possible that some of the highest-paid executives who should be included in each of the “top” categories are excluded. The mean compensation calculations are therefore lower bounds of actual average compensation of the highest paid corporate executives in the United States.

Sources: Standard and Poor’s Compustat database (Executive Compensation, Annual); Yahoo! Finance at <http://finance.yahoo.com> (Historical Prices, Monthly Data).

Also included in Table 1 are the S&P 500 Index (with over 80 percent of its component stocks being NYSE) and NASDAQ Composite Index to illustrate the positive correlation of stock-price performance with both the level of executive pay and the proportion of that pay derived from stock-option exercises. The impact of NASDAQ on executive pay was especially strong in the late 1990s when speculation drove stock

prices, whereas companies listed on NYSE as well as NASDAQ were engaged in large-scale stock repurchases that helped to push up the S&P 500 Index from 2003 to 2007.

As shown in Table 1, the average annual real compensation in 2009 dollars of the 100 highest paid corporate executives named in company proxy statements was \$20.6 million in 1992-1995, \$77.8 million in 1998-2001, and \$61.8 million in 2004-2007. As can also be seen in Table 1, large proportions of these enormous incomes of top executives have come from gains from cashing in on the ample stock option awards that their boards of directors have bestowed on them.¹ The higher the “top pay” group, the greater the proportion of the pay of that group that was derived from gains from exercising stock options. For the top 100 group in the years 1992-2008, this proportion ranged from a low of 57 percent in 1994, when the mean pay of the group was also at its lowest level in real terms, to 87 percent in 2000, when the mean pay was at its highest. In 2000 the mean pay of the top 3000 was, at \$10.8 million in 2009 dollars, only ten percent of the mean pay of the top 100. Nevertheless, gains from exercising stock options accounted for 67 percent of the total pay of the top 3000 group (Lazonick 2010b).

Note in Table 1 how the average pay of the highest paid corporate executives has risen and fallen with the fluctuations of major stock market indices. In the 1980s and 1990s, as shown in Table 2, high real stock yields characterized the US corporate economy. These high yields came mainly from stock-price appreciation as distinct from dividends yields, which were low in the 1990s despite high dividend payout ratios.² With the S&P 500 Index rising almost 1,400 percent from March 1982 to August 2000, the availability of gains from exercising stock options became almost automatic. Given the extent to which the explosion in US top executive pay over the past three decades has been dependent on gains from exercising stock options, there is a need to understand the drivers of the stock-price increases that generate these gains. In the 2000s the stock-option gains of these executives have come primarily through manipulation, with the stock buyback as the key instrument of stock-market manipulation.

¹ A stock option award gives an employee the non-transferable right to purchase a certain number of shares of the company for which he or she works at a pre-set “exercise” price between the date the option “vests” and the date it “expires”. Typically in US option grants, the exercise price is the market price of the stock at the date that the option is granted; vesting of the option occurs in 25 percent installments at each of the first four anniversaries from the grant date; and the expiration date of the option is ten years from the grant date. Unvested options usually lapse 90 days after termination of employment with the company.

² In the 1980s dividends paid out by US corporations increased by an annual average of 10.8 percent while after-tax corporate profits increased by an annual average of 8.7 percent. In the 1990s these figures were 8.0 percent for dividends (including an absolute decline in dividends of 4.0 percent in 1999, the first decline since 1975) and 8.1 percent for profits. The dividend payout ratio – the amount of dividends as a proportion of after-tax corporate profits (with inventory evaluation and capital consumption adjustments) – was 48.9 percent in the 1980s and 55.0 percent in the 1990s compared with 39.5 percent in the 1960s and 41.6 percent in the 1970s. From 2000 to 2009 the dividend payout ratio was 61.5 percent, including a record 70.4 percent in 2007.

Table 2: Average annual US corporate stock and bond yields (%), 1960-2009

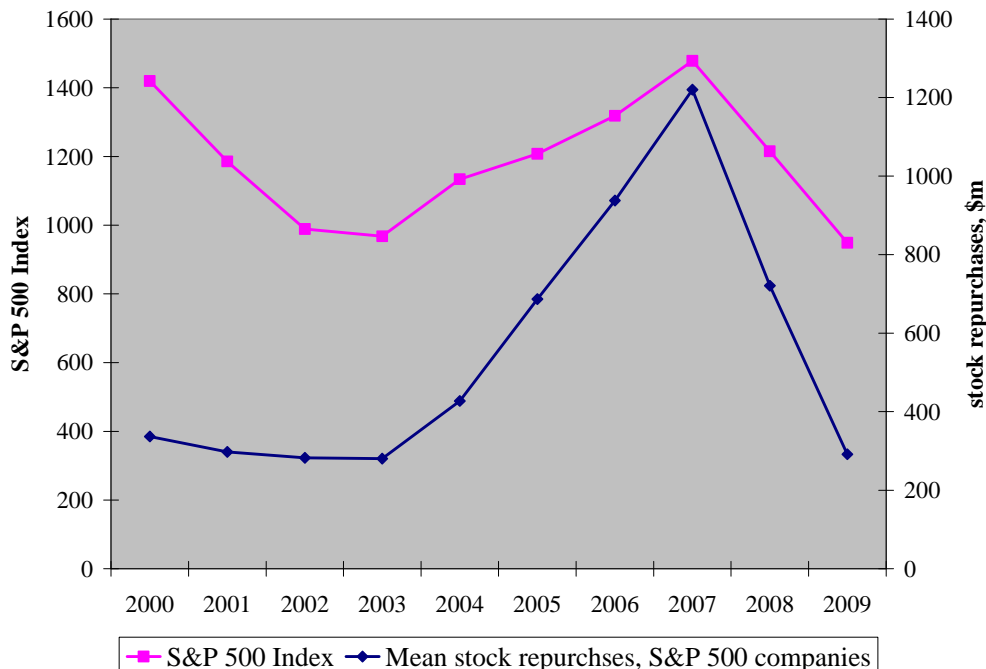
	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009
Real stock yield	6.63	-1.66	11.67	15.01	-3.08
Price yield	5.80	1.35	12.91	15.54	-2.30
Dividend yield	3.19	4.08	4.32	2.47	1.79
Change in CPI	2.36	7.09	5.55	3.00	2.57
Real bond yield	2.65	1.14	5.79	4.72	3.41

Stock yields are for Standard and Poor's composite index of 500 US corporate stocks. Bond yields are for Moody's Aaa-rated US corporate bonds.

Sources: Updated from Lazonick and O'Sullivan 2000, 27, using US Congress 2010, Tables B-62, B-73, B-95, B-96.

Figure 1 shows how the escalating stock repurchases from 2003 through 2007 helped to boost the stock market, driving the S&P 500 Index even higher in 2007 than its previous peak in 2000 before the 2008 financial debacle. In 2008 repurchases fell substantially for these 438 companies, constrained by a dramatic decline in combined net income from \$583 billion in 2007 to \$132 billion in 2008. Nevertheless, their combined repurchases only declined from \$523 billion to \$369 billion. In addition, these companies paid out \$5 billion more in dividends in 2008 than in 2007. Allocated differently, the billions spent on buybacks could have helped stabilize the economy. Instead, collectively, these companies spent 108 percent of their net profits on repurchases in 2008.

Figure 1. Stock repurchases by the S&P 500 (456 companies) and the movement of the S&P 500 Index, 2000-2009



Sources: Standard and Poor's Compustat database (North America, Fundamentals Annual); Yahoo! Finance at <http://finance.yahoo.com> (Historical Prices, Monthly Data).

In work reported elsewhere, I have examined how buybacks have adversely affected the delivery of higher quality, lower cost products in a range of industries from oil refining to health insurance (Lazonick 2009b; 2010; 2011b; Lazonick and Tulum 2011). Some brief examples:

- Exxon Mobil, the world's largest petroleum refiner, did \$163.7 billion in buybacks during 2000-2009 – the most of any company – even as there is a need for large-scale investments in energy alternative. Among the top 50 stock repurchasers in 2000-2009 were two other petroleum refiners: Chevron at #18 with \$26.8 billion and ConocoPhillips at #33 with \$18.1 billion.
- Leading ICT companies do massive buybacks even as they shift high-tech jobs from the United States to low-wage countries and pressure the US government to make larger investments in the high-tech knowledge base. Yet the \$46.5 billion that Intel spent on buybacks in 2001-2009 was more than four times the total of \$10.1 billion that, over the same period, the US government allocated to the National Nanotechnology Initiative.
- Pharmaceutical drug prices are at least double in the United States compared with other countries. The industry benefits from government-funded life sciences research under the National Institutes of Health, the total annual budget of which was \$30.2 billion in 2009 and \$30.9 billion in 2010. In opposing Congressional regulation of drug prices, the industry argues that high prices fund R&D expenditures in the United States. Yet among leading pharma biopharma companies, in 1997-2010 Amgen did repurchases equal to 103 percent of R&D expenditures, Pfizer 64 percent, Johnson & Johnson 56 percent, and Merck 53 percent.
- Among the top 50 repurchasers in the United States for the period 2000-2009 were three of the largest corporate health insurers: UnitedHealth Group at #24 with \$25.2 billion in buybacks (96 percent of net income), Wellpoint at #39 with \$17.5 billion (2 percent), and Aetna at #49 with \$10.4 billion (125 percent). When these health insurers increase their profits by raising premia, excluding people with pre-existing conditions, and capping lifetime benefits, the most likely use of those extra profits is to do more stock buybacks.
- Among the biggest stock repurchasers in the years prior to the financial crisis were many of financial corporations that were responsible for the meltdown, a few of which went bankrupt and many of which were bailed out under the Troubled Asset Relief Program. By spending money on buybacks during boom years, these financial corporations reduced their ability to withstand the crash of the derivatives market in 2008, thus exacerbating the jeopardy that they created for the economy as a whole.

Given the extent to which stock repurchases have become a systematic mode of corporate resource allocation, and given the extent to which through this manipulation of their corporations' stock prices top executives have enriched themselves personally in the process, there is every reason to believe that, in the absence of legislation that restricts both stock repurchases as well as speculative and manipulative gains from stock options,

executive behavior that places personal interests ahead of corporate, and national, interests in innovation and job creation will continue in the future.

4. Policy responses to MSV

A fundamental problem with US-style stock options is that they are unindexed; that is, they rarely carry performance criteria that would only permit gains from the exercise of stock options that are warranted by productive performance (Bebchuk and Fried 2004). When the gains from exercising stock options depend simply on stock-price movements, an executive, or any other employee with stock options, can gain from increases in stock prices that result from speculation or manipulation as distinct from an improvement in the company's productive performance. Indeed, as we have seen, top executives can augment their stock-option gains by allocating corporate resources to do buybacks, the sole purpose of which is to manipulate the company's stock price. Some of the stock-based compensation of US executives is undoubtedly attributable to innovation – that is, real productivity gains from generating higher quality, lower cost products – although even then there is the question of whether the amounts of stock-based compensation that executives secure from their boards of directors are equitable relative to other contributors to the innovation process. Be that as it may, there is strong evidence that since the last half of the 1990s it has been speculation and manipulation that have been the main drivers of the explosion in the pay of US corporate executives.

Under legislation known as “Say-on-Pay”, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 gave public shareholders the right to express their opinion to corporate management on issues related to executive compensation. A case in point is the announcement in April 2011 of the Say-on-Pay modification of the conditions under which Jeffrey Immelt, CEO of General Electric (GE), can receive stock options awarded to him in 2010. Acting on the advice of Institutional Investor Services, Immelt will now get 50 percent of his 2010 option awards if GE's total shareholder return (dividend yield plus stock-price yield) is equal to or better than the return of the S&P 500 Index for the years 2011-2014. Under the modification, Immelt will receive the other 50 percent of those options if GE's industrial businesses generate operating cash totaling at least \$55 billion in 2011-2014 (Crooks and McCrum 2011).

The total shareholder return requirement effectively says that Immelt can get the options if GE is just an average performer among the S&P 500 companies. The larger question, however, is what will drive the S&P 500 Index average over the period 2011-2015. If the quadrupling of stock repurchases by S&P 500 companies from 2003 to 2007 is a guide, we can expect that the next four years will witness a massive manipulation of the market through an escalation of buyback activity. GE participated fully in the 2003-2007 buyback mania, increasing its repurchases from \$1.2 billion in 2003 to \$14.9 billion in 2007. Over the decade 2000-2009, GE expended almost \$52 billion on stock buybacks – placing it at #7 among all US corporations – equal to 59 percent of its net income and double its R&D spending. The Say-on-Pay shareholder-return performance criterion is a license to Immelt to manipulate GE's stock price to gain his stock option awards. Indeed, across the board, a proliferation of Say-on-Pay proposals, advocated by the consulting

firm Institutional Shareholder Services, will encourage US business corporations to compete to support high stock prices, using buybacks as their main competitive weapons.

The Say-on-Pay performance condition for the other half of Immelt's options to be exercisable is that over the years 2011-2014 GE must generate at least \$55 billion from its industrial businesses, as distinct from GE Capital Services (GECS). This performance condition creates the impression that shareholders want Immelt to invest in real productive assets to expand GE's industrial businesses. Indeed, at GE's annual general meeting in April 2010, with the company just recovering from GECS's losses in the financial crisis of 2008-2009, Immelt told shareholders: "We're an industrial company first" (Sechler 2010). Meanwhile Immelt was giving speeches around the country about the need to create more manufacturing jobs in the United States, and upon being named chair of President Obama's new Council on Jobs and Competitiveness in January 2011, he declared in a *Washington Post* op-ed piece that "there is nothing inevitable about America's declining manufacturing competitiveness if we work together to reverse it" (Immelt 2011).

But does the Say-on-Pay target of \$55 billion in cash from operations of GE's industrial businesses over 2011-2014 imply an expansion of GE's investments in its non-financial businesses? To the contrary. *The fact is that over the previous four years, 2007-2010, GE's cash from industrial operating activities was almost \$73 billion.* In reality, the Say-on-Pay performance condition expects Immelt to bring about a 25 percent reduction in GE's industrial businesses. So much for working together to reverse the nation's declining manufacturing competitiveness.

If the Dodd-Frank reform legislation had understood what drives executive pay in the United States, it would have recognized that "Say-on-Pay" is part of the problem, not the solution. Through a combination of stock options and stock buybacks, Say-on-Pay reinforces an alignment between the incentives of top executives and the interests of public shareholders that has been undermining investment in America's future. The result over the coming years will be an escalation of stock buybacks to manipulate stock prices until the next financial crisis once gain temporarily slows the practice.

Looking back, the US Securities and Exchange Commission (SEC) has also played a role in encouraging the destructive combination of stock buybacks and stock options. The facility with which US corporations can do large-scale stock repurchases is the result of the relaxation of SEC rules against stock-price manipulation. Under the Securities Exchange Act of 1934, stock repurchases can be construed as an attempt to manipulate a company's stock price. In 1982, however, with the promulgation of Rule 10b-18, the SEC provided companies with a "safe harbor" that manipulation charges would not be filed if each day's open-market repurchases were not greater than 25 percent of the stock's average daily trading volume and if the company refrained from doing buybacks at the beginning and end of the trading day.³

³ In 2003 the SEC amended Rule 10b-18 "to simplify and update the safe harbor provisions in light of market developments since the Rule's adoption." The amendments also required that in their 10-Q filings with the SEC companies report the number and value of shares repurchased in the previous quarter and the average price paid per share. See <http://www.sec.gov/rules/final/33-8335.htm>.

According to a contemporary news report, Rule 10b-18 “made it easier for companies to buy back their shares on the open market without fear of stock-manipulation charges” (Hudson 1982). SEC Chairman John Shad was an advocate of the rule change, arguing that large-scale open market purchases would fuel an increase in stock prices that would be beneficial to shareholders. One of the SEC Commissioners, John Evans, argued that as a result of Rule 10-18b some manipulation would go unprosecuted, but then agreed to make the Commission’s vote for the rule change unanimous.

As a complement to Rule 10b-18, in 1991 SEC made a rule change that enabled top executives to make quick gains by exercising their stock options and immediately selling their shares. Under Section 16(b) of the 1934 Securities Exchange Act, corporate directors and officers as well as shareholders with more than 10 percent of the corporation’s shares are prohibited from making “short-swing” profits through the purchase and the subsequent sale of corporate securities within a six-month period. As a result, top executives who exercised stock options had to hold the acquired shares for at least six months before selling them. Treating a stock option as a derivative, in 1991 the SEC deemed that the six-month holding period required under Section 16(b) was from the grant date, not the exercise date (Rosen 1991). The new rule eliminated the risk of loss between the exercise date and the sale date, and gave top executives flexibility in their timing of option exercises and immediate stock sales so that they could personally benefit from, among other things, price boosts from buybacks.

Legitimized by MSV ideology, the transition of the US business corporation from innovation to financialization has left the US economy vulnerable to financial crisis. By enabling speculation and manipulation of securities markets, this transition played a major role in permitting the double-digit annual growth rates in stock-price yields in the 1980s and 1990s, as shown in Table 2. This sustained, but ultimately unsustainable, increase in stock prices gave Wall Street the credibility that, in command of “other people’s money”, it could generate persistently high yields on investment portfolios. With the stock-market stagnating in the 2000s, however, portfolio investors looked to the subprime mortgage market as a new source of high yields.

Yet the very existing of a large body of subprime borrowers derived in large part from the failure of US industrial corporations since the 1980s to invest in innovation and value-added job creation while middle-class jobs were permanently lost through rationalization, marketization, and globalization. Through subprime lending, Wall Street in effect sought to exploit the vulnerability of a working class population to which the financialized business corporation no longer delivered middle-class jobs. In the process, US business executives in general, and not just those on Wall Street, saw their personal fortunes balloon through speculation in and manipulation of financial markets, and particularly the stock market. Armed with MSV ideology, they equated their own good fortune with the health of the economy as a whole. The recent financial crisis gave lie to this pretension, but unfortunately in the second decade of the 21st century, executives and politicians have yet to learn the lessons of the destructiveness of the financialized corporation. Meanwhile the base of middle-class jobs in the United States continues to erode.

Any government policy agenda that seeks to recreate the middle class in the United States needs to begin with an attack on the financialized business corporation. This policy agenda then needs to engage in constructive programs in collaboration with a nonfinancialized business community to rebuild the capabilities of the US labor force to engage in innovative enterprise. The policy agenda for sustainable prosperity includes, in brief,⁴ five major reforms:

- *Ban stock repurchases by established US corporations so that corporate financial resources that could be allocated to innovation and job creation are not wasted for the purpose of manipulating a company's stock price.*
- *Index employee stock options to an indicator of innovative performance such as market share, employment, or innovative activity rather than stock-price movements so that executives cannot gain from speculation in and manipulation of their companies' stock prices.*
- *Regulate the employment contract to ensure that workers who contribute to the innovation process share in the gains to innovation.*
- *Create work programs that make productive use of and enhance the productive capabilities of educated and experienced workers whose human capital would otherwise deteriorate through lack of other relevant employment.*
- *Implement taxes on the gains from innovation to fund those government agencies that need to invest in the public knowledge base required for the next round of innovation.*

It will be very difficult to justify these reforms if Americans do not question the ideology that companies should be run to “maximize shareholder value”. It is an ideology that results in inequity and instability and that ultimately undermines the productive foundations of economic growth. While shareholder-value ideology has currency throughout the world, its pervasive and unquestioned acceptance has become an almost uniquely American phenomenon. The United States is engaged in global competition with highly innovative national economies in which shareholder-value ideology does not hold sway. As long as US-based corporations are permitted to be governed by this ideology, the US economy will remain incapable of generating middle-class jobs on the scale that is needed to restore sustainable prosperity. Indeed, judging from the changes in employment that have occurred in the US economy over the past three decades, the achievement of equitable and stable growth will become more and more out of reach.

⁴ Details of these reforms are available in Lazonick 2011a.

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