

# Stock buybacks: From retain-and-reinvest to downsize-and-distribute

By William Lazonick

## 1. THE “BUYBACK” ECONOMY



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For a century, the large publicly listed corporation has been a dominant form of business enterprise in the U.S. economy.<sup>1</sup> In 2007 (the latest complete data available), 1,927 firms with 5,000 or more employees had an average of 405 establishments per firm and employed 33 percent of all employees in the business sector of the U.S. economy while accounting for 37 percent of payrolls and 43 percent of sales revenues.<sup>2</sup> In 2012, the 500 largest publicly listed U.S. companies by revenues (the Fortune 500) had a combined \$12.1 trillion in revenues, \$804 billion in profits, and 26.4 million employees worldwide.<sup>3</sup>

A cogent analysis of the operation and performance of the U.S. economy must explain how these companies have grown to be so large and what impacts their resource-allocation decisions have on the U.S. economy as a whole. How does corporate decision-making affect the growth of per-capita income and its distribution among taxpayers, workers, and financiers who contributed to that growth? Given the importance of the business corporation in the economy, one would expect that academic economists would provide insightful answers to these questions.

In the 1970s and 1980s agency theorists trained in the free-market economics tradition of the University of Chicago purported to do just that. They propounded the theory that a corporation would maximize the efficiency of the economy as a whole if it maximized the value of the company's shares. The problem, as they saw it, was that, left to their own devices, salaried managers,

<sup>1</sup> Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business*, Harvard University Press, 1977.  
<sup>2</sup> Census Bureau, <http://www.census.gov/epcd/susb/2007/us/US--.HTM#table0>. There are about 3,300 companies listed on the New York Stock Exchange (NYSE) and 2,800 on NASDAQ, so we can assume that the vast majority of these largest employers were publicly listed companies.  
<sup>3</sup> Fortune, “Fortune 500, 2013,” at [http://money.cnn.com/magazines/fortune/fortune500/?iid=F500\\_sp\\_header](http://money.cnn.com/magazines/fortune/fortune500/?iid=F500_sp_header).

in control of the allocation of corporate resources, had a tendency to build empires and invest in wasteful projects.<sup>4</sup> The agency-theory solution: Induce these executives as “agents,” through either the stick of a hostile takeover or the carrot of stock-based pay, to distribute corporate cash to public shareholders. These “principals” would then have the incentive to reallocate resources to their most efficient economic uses.

Since the late 1980s, in the name of “maximizing shareholder value” (MSV), U.S. corporate distributions to shareholders have exploded. Dividends are the traditional mode of providing a stream of income to shareholders who, as the name says, hold on to a company’s stock, thus supporting stock-price stability. In contrast, stock repurchases, in which a company buys back its own shares from the marketplace, thus reducing the number of outstanding shares, provide short-term boosts to a company’s stock price, thus contributing to stock-price volatility. Until the mid-1980s dividends were the overwhelmingly predominant form of distributing cash to shareholders. Since then, however, even with dividends on the rise, stock buybacks have added substantially to distributions to shareholders.

Over the decade 2004-2013, 454 companies in S&P 500 Index in March 2014 that were publicly listed over the ten years did \$3.4 trillion in stock buybacks, representing 51 percent of net income. These companies expended an additional 35 percent of net income on dividends.<sup>5</sup> And buybacks remain in vogue: According to data compiled by Factset, for the 12-month period ending December 2014, S&P 500 companies spent \$565 billion on buybacks, up 18 percent from the previous 12-month period.<sup>6</sup>

Stock buybacks are an important part of the explanation for both the concentration of income among the richest households and the disappearance of middle-class employment opportunities in the United States over the past three decades.<sup>7</sup> Over that period the resource-allocation regime at many, if not most, major U.S. business corporations has transitioned from “retain-and-reinvest” to “downsize-and-distribute.” Under retain-and-reinvest, the corporation retains earnings and reinvests them in the productive capabilities embodied in its labor force. Under downsize-and-distribute, the corporation lays off experienced, and often more expensive, workers, and distributes corporate cash to shareholders.<sup>8</sup> My research suggests that, with its downsize-and-distribute resource-allocation regime, the “buyback corporation” is in large part responsible for a national economy characterized by income inequity, employment instability, and diminished innovative capability – or the opposite of what I have called “sustainable prosperity.”<sup>9</sup>

In the next section of this paper, I provide an overview of the rise of the “buyback” economy, including the role of the Securities and Exchange Commission (SEC) from the early 1980s in enabling, and even encouraging, corporations to do large-scale open-market repurchases. Then, after outlining how, through MSV ideology, agency theory legitimized the massive distributions of corporate cash to shareholders, I expose agency theory’s two fundamental flaws: a) the assumption that among all the participants in the corporate economy, it is only shareholders who bear

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<sup>4</sup> Michael C. Jensen and William H. Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure,” *Journal of Financial Economics*, 3, 4, 1976. See also Eugene F. Fama and Michael C. Jensen, “Separation of Ownership and Control,” *Journal of Law and Economics*, 26, 2, 1983: 301-326; Eugene F. Fama and Michael C. Jensen, “Agency Problems and Residual Claims,” *Journal of Law and Economics*, 26, 2, 1983: 327-350; Michael C. Jensen, “Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers,” *American Economic Review*, 76, 2, 1986: 323-329.

<sup>5</sup> Research by Mustafa Erdem Sakinç of the University of Bordeaux for The Academic-Industry Research Network ([www.theAIRnet.org](http://www.theAIRnet.org)).

<sup>6</sup> Factset, “Buyback Quarterly, March 16, 2015, at [http://www.factset.com/websitefiles/PDFs/buyback/buyback\\_3.16.15](http://www.factset.com/websitefiles/PDFs/buyback/buyback_3.16.15)

<sup>7</sup> William Lazonick, “Labor in the Twenty-First Century: The Top 0.1 Percent and the Disappearing Middle Class,” in Christian E. Weller, ed., *Financial Market Development and Labor Relations*, Labor and Employment Research Association, 2015

<sup>8</sup> William Lazonick and Mary O’Sullivan, “Maximizing Shareholder Value: A New Ideology for Corporate Governance,” *Economy and Society*, 29, 1, 2000: 13-35.

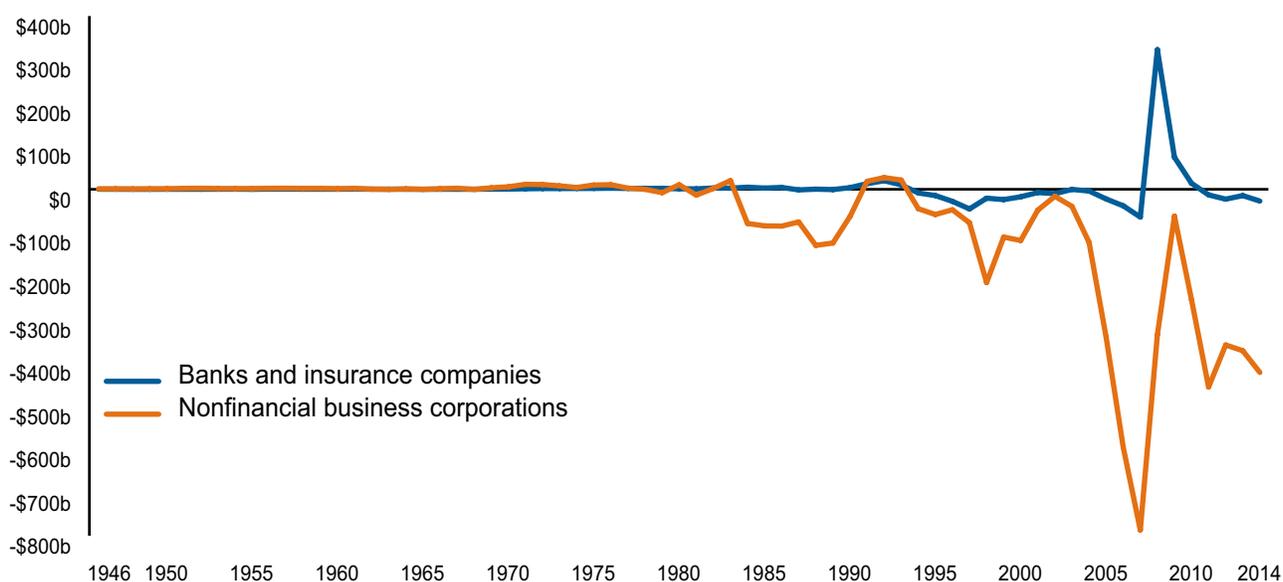
<sup>9</sup> William Lazonick, *Sustainable Prosperity in the New Economy? Business Organization and High-Tech Employment in the United States*, Upjohn Institute for Employment Research, 2009.

risk and hence have a claim on a company's profits if and when they accrue; and b) the assumption that the stock market provides an important source of funds for corporate investment in productive assets. Then, to replace agency theory, I outline "the theory of innovative enterprise." It is an analytical approach to the role of the corporation in the economy that can comprehend both the growth of the large-scale enterprise as a value-creating organization and the damage inflicted on the innovation process by large distributions of corporate cash, especially stock buybacks, to shareholders. Finally, given my arguments concerning the destructive impact of stock repurchases, I call for policy reform that can transform the buyback corporation into the innovative enterprise that the economy desperately needs.

## 2. THE RISE OF THE BUYBACK ECONOMY

Buybacks have come to define the "investment" strategies of many of America's biggest businesses. Figure 1 shows net equity issues of U.S. corporations from 1946 to 2014. Net equity issues are new corporate stock issues minus outstanding stock retired through stock repurchases and M&A activity. Since the mid-1980s, in aggregate, corporations have funded the stock market rather than vice versa (as is conventionally assumed).<sup>10</sup> Over the decade 2005-2014 net equity issues of nonfinancial corporations averaged minus \$399 billion per year.<sup>11</sup>

**Figure 1: Net equity issues, U.S. nonfinancial and financial companies, 1946-2014**



**Source:** Board of Governors of the Federal Reserve System, Federal Reserve Statistical Release Z.1, "Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts," Table F-213: Corporate Equities, March 12, 2015.

<sup>10</sup> The spike in equity issues for financial corporations in 2009 occurred when they sold stock to the U.S. government in the bailout. The banks that were bailed out had been major repurchasers of their stock in the years before the financial meltdown. See William Lazonick, "Everyone is paying the price for share buy-backs" *Financial Times*, September 26, 2008, p. 25; William Lazonick, "The buyback boondoggle," *BusinessWeek*, August 24 & 31, 2009, p. 96.

<sup>11</sup> Board of Governors of the Federal Reserve System, Federal Reserve Statistical Release Z.1, "Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts," Table F-213, "Corporate Equities", March 12, 2015.

Conventional wisdom contends that the role of the stock market is to channel the savings of tens of millions of households into an exchange process that enables businesses that issue stock to raise capital for investment in productive capacity. Yet the historical evidence shows that only in periods of speculative fervor such as the late 1920s, the late 1950s, and the late 1990s has the stock market provided significant amounts of funding to companies.<sup>12</sup> Historically, corporate retentions are by far the most important sources of new funds for reinvestment in a company.<sup>13</sup> In general the primary role of the stock market has been to permit owner-entrepreneurs and their private-equity associates to exit personally from investments that have already been made rather than to enable a corporation to raise funds for new investment in productive assets.<sup>14</sup>

As applied to the rise of the large industrial corporation in the late 19th and early 20th centuries, it is generally assumed that the increasing capital requirements of companies in high fixed-cost industries such as steel, oil refining, chemicals, electric power, farm equipment, and automobiles outstripped the financial capacity of family proprietors and partnerships, thus necessitating raising capital on the stock market.<sup>15</sup> In their book *The Modern Corporation and Private Property*, published in 1932,<sup>16</sup> Adolf Berle and Gardiner Means accepted this “capital constraint” explanation for the separation of stock ownership from managerial control, and continued to do so in their later writings. For example, in his 1954 book, *The 20th Century Capitalist Revolution*, Berle states that the separation of stock ownership from managerial control “was inevitable, granting that modern organizations of production and distribution must be so large as to be incapable of being owned by any individual or small group of individuals.”<sup>17</sup>

The historical facts do not support this argument. The primary reason for the separation of ownership and control in building the large-scale business enterprise was not to overcome the capital constraint but rather to overcome the managerial constraint. The work of Alfred D. Chandler and other historians of “the managerial revolution in American business”—to quote the subtitle of Chandler’s 1977 book, *The Visible Hand*—shows that the critical constraint on the growth of major industrial enterprises was not access to finance capital but rather the management of organizational capabilities that could develop and utilize productive resources, and thus manage the growth of the firm.<sup>18</sup> The centrality of managerial organization in the growth of the large-scale industrial enterprise was captured abstractly, but cogently, in Edith Penrose’s landmark book, *The Theory of the Growth of the Firm*, first published in 1959.<sup>19</sup>

In the more capital-intensive industries, dominant firms were central actors in the Great Merger Movement of the 1890s and early 1900s. The most successful mergers were in those industries in which continuous product and process innovation and high-speed utilization of production and distribution facilities were most important for sustaining competitive advantage. The most successful firms in those industries were the ones with superior managerial

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<sup>12</sup> Mary O’Sullivan, “The Expansion of the U.S. Stock Market, 1885-1930: Historical Facts and Theoretical Fashions,” *Enterprise & Society*, 8, 3, 2007: 489-542; Mary O’Sullivan, “Funding New Industries: A Historical Perspective on the Financing Role of the U.S. Stock Market in the Twentieth Century,” in Naomi R. Lamoreaux and Kenneth L. Sokoloff, eds., *Financing Innovation in the United States, 1870 to the Present*, MIT Press, 2007, p. 163.

<sup>13</sup> Jenny Corbett and Tim Jenkinson, “The Financing of Industry, 1979-1989: An International Comparison,” *Journal of the Japanese and International Economies*, 10, 1, 1996: 71-96.

<sup>14</sup> William Lazonick and Mary O’Sullivan, “Finance and Industrial Development, Part I: The United States and the United Kingdom,” *Financial History Review*, 4, 1, 1997: 7-29.

<sup>15</sup> For a summary of these views, see O’Sullivan, “Expansion of the U.S. Stock Market.”

<sup>16</sup> Adolf A. Berle and Gardner C. Means, *The Modern Corporation and Private Property*, Macmillan, 1932.

<sup>17</sup> Adolf A. Berle, Jr., *The 20th Century Capitalist Revolution*, Harcourt, Brace and Company, 1954, p. 30. See also Gardiner C. Means, “Hessen’s ‘Reappraisal’” *Journal of Law and Economics*, 26, 2, 1983, p. 2298.

<sup>18</sup> See William Lazonick, “Alfred Chandler’s Managerial Revolution” in William Lazonick and David J. Teece, eds., *Management Innovation: Essays in the Spirit of Alfred D. Chandler, Jr.*, Oxford University Press, 2012.

<sup>19</sup> Edith T. Penrose, *The Theory of the Growth of the Firm*, Blackwell, 1959; See also William Lazonick, “The US Industrial Corporation and The Theory of the Growth of the Firm,” in Christos Pitelis, ed., *The Growth of the Firm: The Legacy of Edith Penrose*, Oxford University Press, 2002: 249-277.

capabilities for the development and utilization of productive resources. With J. P. Morgan taking the lead, Wall Street financed the mergers by selling to the public the ownership stakes of the entrepreneurs who had built up their companies from new ventures into going concerns during the rapid expansion of the U.S. economy in the decades after the Civil War. The result of these initial public offerings was the transfer of ownership of corporate assets from the original owner-managers to an increasingly widely distributed population of shareholders. As a result, as business historians Thomas Navin and Marion Sears show, a market in industrial securities emerged.<sup>20</sup> In short, the rise of the large-scale industrial corporation created the stock market, not *vica versa* as agency theorists assume. Indeed, as the recent work of Mary O'Sullivan demonstrates, it was not until the 1920s, with the emergence of a number of dominant corporations in a number of key industries, that the New York Stock Exchange (NYSE) became liquid enough to be called a well-developed market.<sup>21</sup>

In contrast to the owner-managers who, as direct investors, had built the new public corporations into going concerns, the new shareholders were portfolio investors. Share issues did not in general finance new investments in organization and technology. In newly listed companies, stock issues financed the retirement of the old owners from the industrial scene. Going forward, the stringent listing requirements of NYSE, on which the major U.S. corporations were listed and traded, meant that the firms had a record of profitability and significant capitalization when their shares were made available to the public. The holders of these publicly listed shares could then either get a stream of dividends, if the issuer was able and willing to pay them, or sell the shares on the market to lock in a capital gain or limit a capital loss. Corporate retentions – profits minus cash distributions to shareholders – formed the financial foundation for investing in productive assets. The main role of Wall Street in financing these productive investments was to float long-term bond issues that enabled these corporations to leverage retained earnings.<sup>22</sup>

The separation of ownership from control that occurred in U.S. industrial enterprises at the turn of the century enhanced the managerial capabilities of dominant firms. When these companies went public, they already had in place powerful managerial organizations that could take over strategic control of the allocation of corporate resources from the retiring entrepreneurs. By reducing nepotism in top-management succession, the removal of proprietary control opened up new opportunities for upward mobility for career managers that helped to ensure the commitment of these managers to the long-run performance of their particular firms.<sup>23</sup>

Over the course of their careers, these salaried managers, increasing numbers of whom in the first decades of the 20th century held engineering or advanced business degrees, developed irreplaceable knowledge of their firms' technologies and organizational structures. These managers, their upward mobility unimpeded by family control, increasingly rose to top executive positions in major industrial firms. Not coincidentally, the first decades of the 20th century also saw the dramatic transformation of the U.S. system of higher education away from the elite British model with its aristocratic pretensions to one that served the growing needs of U.S. industrial corporations for professional, technical, and administrative personnel.<sup>24</sup>

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<sup>20</sup> Thomas Navin and Marion Sears, "The Rise of a Market for Industrial Securities, 1887–1902," *Business History Review*, 29, 2, 1955: 105-38.

<sup>21</sup> O'Sullivan, "Expansion of the U.S. Stock Market"; O'Sullivan, "Funding New Industries"; see also Lazonick and O'Sullivan, "Finance and Industrial Development."

<sup>22</sup> See Vincent Carosso, *Investment Banking in America: A History*, Harvard University Press, 1970.

<sup>23</sup> William Lazonick "Strategy, Structure, and Management Development in the United States and Britain" in Kesaji Kobayashi and Hidemasa Morikawa, eds., *Development of Managerial Enterprise*, University of Tokyo Press, 1986: 101-146.

<sup>24</sup> *Ibid.*; David F. Noble, *America by Design: Science, Technology, and the Rise of Corporate Capitalism*, Knopf, 1979; Louis Ferleger and William Lazonick, "Higher Education for an Innovative Economy: Land-Grant Colleges and the Managerial Revolution in America," *Business and Economic History*, 23, 1, 1994: 116-128.

From the perspective of sustained industrial innovation, therefore, the key impact of the separation of ownership from control in the United States was to overcome the managerial constraint on the building of organizational capabilities and the growth of the firm. Moreover, the way in which ownership was separated from control enhanced the access of these firms to committed finance, rooted in retained earnings and supplemented by bond issues, to fund investments in organization and technology. The managerial revolution in American business was a powerful engine of economic growth, especially in corporations that invested in deep technological capabilities. Even in the Great Depression, when, for lack of product demand, major industrial corporations laid off production workers, they continued to invest in their research capabilities.<sup>25</sup> During World War II and the post-war decades, these investments enabled U.S. industrial corporations to be integral to what in 1961 President Dwight Eisenhower would call the “military-industrial complex.”<sup>26</sup>

Working with U.S. government agencies and the U.S. system of higher education, itself funded by a combination of taxpayer-financed government budgets along with philanthropic foundations based on business fortunes, the U.S. managerial corporation, with its separation of ownership and control, made the United States the world technology leader.<sup>27</sup> And through its retain-and-reinvest allocation regime, the managerial corporation contributed to greater employment stability and income equity than had been the case before the 1940s and than would be the case after the 1970s.<sup>28</sup>

By the 1980s, however, the retain-and-reinvest investment strategies of many established U.S. industrial corporations had become vulnerable.<sup>29</sup> In the United States, the conglomerate movement of the 1960s, driven by the ideology that a good manager could manage anything and by the reliance on inflated stock prices for buying and selling companies, had by the 1970s and 1980s greatly weakened many established U.S. companies, largely because of a segmentation of strategic decision-making from the processes of organizational learning that are the essence of innovation.<sup>30</sup> Meanwhile, U.S. companies faced new competition from the Japanese in leading industries such as automobiles, consumer electronics, memory chips, machine tools, and steel. Whereas the U.S. business model had largely excluded production workers from organizational learning, the Japanese succeeded through the organizational integration of shop-floor workers into process and product development.<sup>31</sup>

Also in the 1980s, the U.S. Old Economy business model (as I have dubbed it<sup>32</sup>) was facing competition from the New Economy business model, centered in Silicon Valley, for professional, technical, and administrative personnel whose skills and efforts were critical to the processes of organizational learning. The New Economy business model was highly reliant on the stock market to attract both labor, through partial compensation in stock options, and capital, through the promise of a quick exit via an initial public offering (IPO) on the highly speculative NASDAQ

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**25** David C. Mowery and Nathan Rosenberg, *Technology and the Pursuit of Economic Growth*, Cambridge University Press, 1989, chs. 2-4.

**26** Dwight D. Eisenhower, “Military-Industrial Complex Speech” at <http://coursesa.matrix.msu.edu/~hst306/documents/indust.html>.

**27** Matt Hopkins and William Lazonick, “Who Invests in the High-Tech Knowledge Base?” Institute for New Economic Thinking Working Group on the Political Economy of Distribution Working Paper No. 6, September 2014 (revised December 2014), at <http://ineteconomics.org/research-programs/political-economy-distribution/papers/who-invests-high-tech-knowledge-base>.

**28** Lazonick, “Labor in the Twenty-First Century.”

**29** Ibid.

**30** William Lazonick, “Corporate Restructuring,” in Stephen Ackroyd, Rosemary Batt, Paul Thompson, and Pamela S. Tolbert, eds., *The Oxford Handbook of Work and Organization*, Oxford University Press, 2004: 577-601. The need for the integration of strategy and learning in the innovative enterprise is discussed further in Section 4 of this paper.

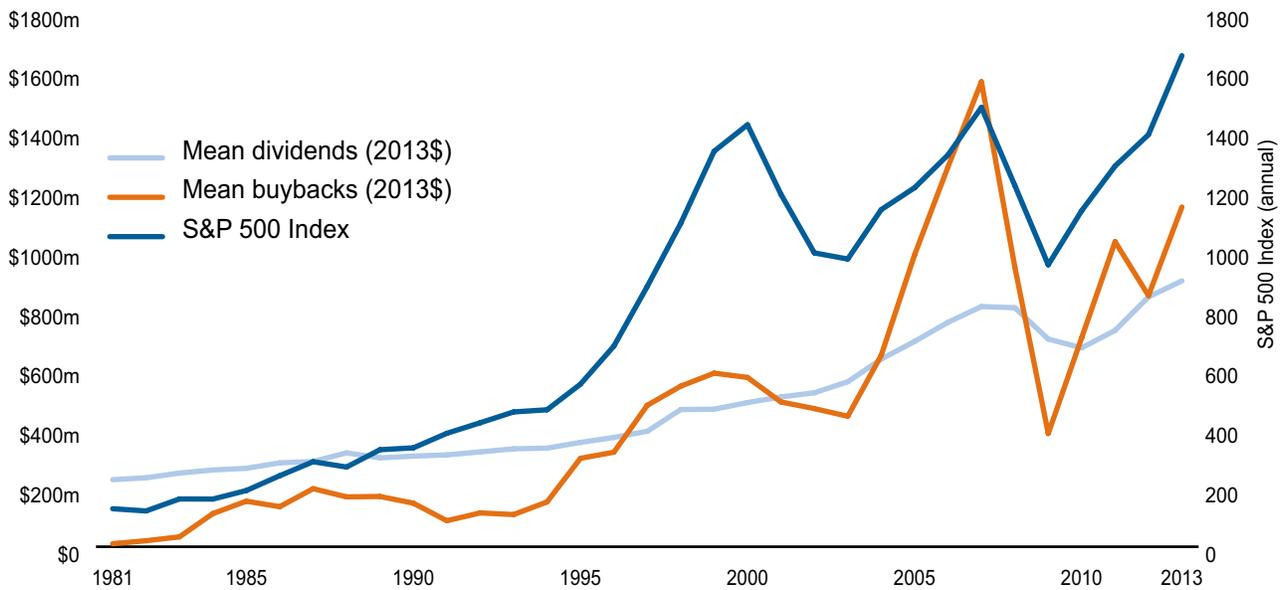
**31** Lazonick, “Competitive Advantage”; Lazonick, “Innovative Business Models.”

**32** Lazonick, *Sustainable Prosperity*.

exchange or a stock-based M&A deal.<sup>33</sup> Stock-based labor competition undermined organizational learning in Old Economy companies, where the employment norm for professional, technical, and administrative employees was still in the 1980s a career with one company, as an individual would move around and up the corporate hierarchy with promotions and salary increases along the way and a defined-benefit pension on retirement.<sup>34</sup>

In sum, by the 1980s, when MSV ideology gained traction, it was a combination of the heightened role of the stock market in the allocation of the economy's resources and the appearance of superior models of organizational learning at home and abroad that made the Old Economy companies vulnerable to value extractors who, buoyed by the academic respectability of agency theory, demanded that these corporations should disgorge their "free" cash flow to shareholders.<sup>35</sup> In effect, by pumping out corporate cash from established companies, the MSV version of agency theory looked to the stock market to fix a problem of Old Economy productivity that the stock market had helped to create.

**Figure 2. Common stock repurchases and cash dividends per company for 248 companies in the S&P 500 Index in March 2014 publicly listed from 1981 through 2013, and the S&P 500 Index (annual averages of monthly data), 1981-2013**



**Sources:** S&P Compustat database, verified and corrected by Mustafa Erdem Saking; S&P 500 Index from Yahoo! Finance, annual averages of monthly data.

Figure 2 shows buyback and dividend expenditures in 2013 dollars per company for the 248 companies in the S&P 500 Index in March 2014 that were publicly listed from 1981 through 2013. The graph also shows the relation of these distributions to the movement of the S&P 500 Index. As can be seen in Figure 2, in the early 1980s repurchases were

<sup>33</sup> William Lazonick, "The New Economy Business Model and the Crisis of US Capitalism," *Capitalism and Society*, 4, 2, 2009: Article 4.

<sup>34</sup> Lazonick, *Sustainable Prosperity*, ch. 3; William Lazonick, Philip Moss, Hal Salzman, and Öner Tulum, "Skill Development and Sustainable Prosperity: Collective and Cumulative Careers versus Skill-Biased Technical Change," Institute for New Economic Thinking Working Group on the Political Economy of Distribution Working Paper No. 7, December 2014, at <http://ineteconomics.org/research-programs/political-economy-distribution/papers/skill-development-and-sustainable-prosperity>.

<sup>35</sup> Jensen, "Agency Costs."

a small fraction of dividends but in 1997 surpassed them as a mode of distributing corporate cash to shareholders. Buybacks have been much more volatile than dividends, and over the past two decades have been done during periods of high stock prices, helping to push the S&P 500 Index to new peaks in 2000, 2007, and 2013.

For these 248 companies, buybacks were only two percent of net income in 1981 while dividends were 45 percent. From 1981 to 1985, 1994 to 1999, and 2003 to 2008, the proportion of net income devoted to buybacks moved up sharply. In 2007, on the eve of the financial crisis, profits of these 248 companies totaled \$478 billion, with 72 percent (or \$345 billion) used to do buybacks. In that year, these companies also distributed \$187 billion as dividends, making the total payout ratio 110 percent.

By decade, for 1984-1993, 1994-2003, and 2004-2013, total distributions to shareholders of these 248 companies were 79 percent, 79 percent, and 84 percent respectively, with the proportion of net income devoted to buybacks rising from 25 percent to 37 percent to 47 percent. High total payout ratios among major U.S. corporations, therefore, are not new, but over the past decade buybacks have predominated in distributions to shareholders.

Table 1 shows the top 25 repurchasers of stock for the decade 2004-2013. These companies' buybacks for the decade totaled \$1.460 trillion, or 60 percent of net income, along with dividend distributions of \$869 billion, another 35 percent of net income. These 25 companies accounted for 42 percent of S&P 500 buybacks over the decade.

In a recent Harvard Business Review article, "Profits Without Prosperity," I argue that the only logical explanation for open-market stock repurchases (which represent about 90 percent of all stock repurchases) is that corporate executives benefit personally from this mode of corporate resource allocation through their ample stock-based pay. In recent years average total remuneration of the highest-paid executives was about three times in real terms its level in the early 1990s, when it was already seen as excessive.<sup>36</sup> By far the largest components of top executive pay have been stock-based in the forms of gains from exercising stock options and gains from the vesting of stock awards. From 2006 through 2013, the total annual remuneration of the 500 highest-paid executives in the ExecuComp database averaged \$24.4 million in 2013 dollars, ranging from a low of \$14.4 million in 2009 to a high of \$32.2 million in 2013. Of these total amounts, the gains from exercising stock options and the vesting of stock awards ranged from 66 percent in 2009 to 84 percent in 2013, with the combination of salaries and bonuses only accounting for a high of 12 percent in 2009 and a low of five percent in 2013.<sup>37</sup>

The vesting of stock awards is often dependent on the company hitting quarterly earnings per share (EPS) targets, for which well-timed manipulative boosts from stock buybacks can be very helpful. The gains from stock options depend on the difference between the market price on the date of the option grant and the market price on the date of the option exercise. Until 1991, Section 16(b) of the 1934 Securities Exchange Act prevented top executives from reaping short-swing profits when they exercised their stock options by requiring that they wait at least six months before selling the acquired shares. In 1991, by arguing that a stock option is a derivative, the SEC determined that henceforth the six-month waiting period would begin at the grant date, not the exercise date. Since the option grant date is always at least one year before the option exercise date, this reinterpretation of Section 16(b) means that top executives, as company insiders, can sell the shares acquired from stock options immediately upon exercise and keep what would have previously been short-swing gains. A senior executive's privileged knowledge of the dates

<sup>36</sup> Graef S. Crystal, *In Search of Excess: The Overcompensation of the American Executive*, Norton, 1991; William Lazonick, "Taking Stock: How Executive Pay Results in an Inequitable and Unstable Economy," Franklin and Eleanor Roosevelt Institute White Paper, June 5, 2014, at <http://www.rooseveltinstitute.org/taking-stock-executive-pay>.

<sup>37</sup> Standard and Poor's ExecuComp database, with calculations by Matt Hopkins, The Academic-Industry Research Network

**Table 1: Common stock repurchases (RP) and cash dividends (DV), in absolute dollars and as percent of net income (NI) of the 25 largest repurchasers for the decade 2004-2013**

Buyback rank	Company name	RP \$b.	DV \$b	RP/NI %	DV/NI %	(DV+RP)/NI %
1	Exxon Mobil	217	84	60	23	<b>84</b>
2	IBM	116	26	92	21	<b>113</b>
3	Microsoft	113	77	71	48	<b>119</b>
4	Cisco Systems	72	5	103	8	<b>110</b>
5	Procter & Gamble	72	47	71	47	<b>118</b>
6	Hewlett-Packard	65	9	148	20	<b>168</b>
7	Wal-Mart Stores	64	40	45	28	<b>73</b>
8	Pfizer	62	65	67	70	<b>137</b>
9	Intel	58	31	70	37	<b>107</b>
10	General Electric	57	87	35	54	<b>89</b>
11	Goldman Sachs Group	49	12	65	16	<b>81</b>
12	SBC Communication	47	81	45	78	<b>123</b>
13	Home Depot	43	15	99	35	<b>134</b>
14	Oracle Corp.	42	7	62	10	<b>72</b>
15	Chevron Corp.	40	53	21	28	<b>49</b>
16	Amgen	39	3	100	8	<b>108</b>
17	ConocoPhillips	38	27	48	34	<b>83</b>
18	Time Warner	37	8	230	50	<b>280</b>
19	Disney	36	7	83	17	<b>100</b>
20	JPMorgan Chase	35	45	26	34	<b>60</b>
21	Bank of America	33	58	36	63	<b>100</b>
22	Johnson & Johnson	33	52	29	46	<b>75</b>
23	Pepsico	32	25	56	45	<b>101</b>
24	UnitedHealth Group	31	3	73	7	<b>81</b>
25	DirectTV Group	30	0	192	0	<b>192</b>

on which the company is actually doing buybacks can be material information for the timing of option exercises. Even with SEC Rule 10b5-1, adopted in 2000 to control such insider trading, top executives can time their option exercises and stock sales to increase their pay—all in the name of “maximizing shareholder value.”<sup>38</sup>

The damage to companies and the economy is the result, however, not of stock-based executive pay per se, but rather the massive stock buybacks that stock-based executive pay incentivizes. And here too the SEC, which is supposed to use its regulatory powers to prevent fraud and manipulation in the operation of financial markets, has

<sup>38</sup> See, for example, Jesse Eisinger, “Repeated good fortune in timing of CEO’s stock sale,” New York Times Dealbook, February 19, 2014, at <http://dealbook.nytimes.com/2014/02/19/repeated-good-fortune-in-timing-of-c-e-o-s-stock-sale/>

since the early 1980s done just the opposite. On November 17, 1982, the SEC promulgated Rule 10b-18, which gives a company a safe harbor against manipulation charges in doing open-market repurchases.<sup>39</sup> The safe harbor states that a company will not be charged with manipulation if, among other things, its buybacks on any single day are no more than 25 percent of the previous four weeks' average daily trading volume (ADTV). Under Rule 10b-18, moreover, there is no presumption of manipulation should the corporation's repurchases exceed the 25 percent ADTV limit.<sup>40</sup>

Rule 10b-18 covers only open-market repurchases because it is in the open market that undetected stock-price manipulation can most easily occur. Private, off-market transactions such as tender offers are not regulated under the Rule. In 1982 the SEC also excluded "block trades" (at or above \$200,000 in value or numbering at least 5,000 shares with a minimum value of \$50,000) from the 25 percent ADTV calculation, apparently because in the early 1980s block trades, although done on the open market, were viewed as exceptional. In a revision of Rule 10b-18 in 2003, however, the SEC included most block trades in the 25 percent ADTV calculation.<sup>41</sup>

A company that intends to do open-market repurchases under the Rule 10b-18 safe harbor informs the public by announcing a stock repurchase program that has been approved by its board of directors.<sup>42</sup> But Rule 10b-18 does not require disclosure of the particular days on which top corporate executives instruct the company's broker to execute actual buybacks. In its lack of disclosure, its 25 percent safe harbor limit, and the absence of a presumption of manipulation even when the 25 percent limit is exceeded, Rule 10b-18 is highly permissive of, and even encourages, stock buybacks.

The adoption of Rule 10b-18 in 1982 has been called a "regulatory about-face" from previous SEC views on the detection and prevention of manipulation through open-market repurchases.<sup>43</sup> This regulatory reversal resulted from the 1980 election of Ronald Reagan as U.S. President on a platform of government deregulation and his appointment in 1981 of John Shad, vice-chairman of the stock brokerage firm E. F. Hutton, to head the SEC. Shad had been the first Wall Street executive to back Reagan for President, and had served as head of fundraising in New York State for the Reagan campaign.<sup>44</sup> Not since Joseph Kennedy had been the inaugural chair of the SEC in 1934-35 had a Wall Street executive led the agency.

A Wall Street Journal article on the adoption of Rule 10b-18 noted that "[t]he new, deregulation-minded commission, with its 3-2 majority of Reagan appointees, has been revamping many SEC policies." It went on to say that

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**39** Securities and Exchange Commission, "Purchases of Certain Equity Securities by the Issuer and Others; Adoption of Safe Harbor," November 17, 1982, Federal Register, Rules and Regulations, 47, 228, November 26, 1982: 53333-53341. This outline of the origins and implications of SEC Rule 10b-18 derives from research that I am carrying out with Ken Jacobson of The Academic-Industry Research Network.

**40** <http://www.sec.gov/divisions/marketreg/r10b18faq0504.htm>. For the safe harbor to be in effect, Rule 10b-18 also requires that the company refrain from doing buybacks at the beginning and end of the trading day, and that it do all the buybacks through one broker only.

**41** Securities and Exchange Commission, "Purchases of Certain Equity Securities by the Issuer and Others," (November 10, 2003), Federal Register, Rules and Regulations, 68, 221, November 17, 2003: 64952-64976. In response to comments on the proposed amendments to Rule 10b-18 that expressed concern that the elimination of the block exception would have an adverse impact on issuers with moderate or low ADTV that relied mainly on block purchases to implement their repurchase programs, the SEC amendment permitted a company to do one block trade per week that would remain an exception to the 25% ADTV calculation so long as no other repurchases were made on that day.

**42** The SEC does not require the public announcement of a stock buyback program, but it has become the practice of companies to make these announcements as a means of making material information public to avoid charges of insider trading on this information.

**43** Lloyd H. Feller and Mary Chamberlin, "Issuer Repurchases," Review of Securities Regulation, 17, 1, 1984: 993-998. See also Douglas O. Cook, Laurie Krigman, and J. Chris Leach, "An Analysis of SEC Guidelines for Executing Open Market Repurchases," Journal of Business, 76, 2, 2003: 289-315.

**44** See Jeff Gerth, "Shad of S.E.C. favors bright corporate image," New York Times, August 3, 1981: D1.

Shad hoped that buybacks would help to fuel increases in stock prices, and thus be beneficial to shareholders. The longest-serving SEC commissioner, John Evans, appointed by President Nixon in 1973, expressed concern that Rule 10b-18 represented deregulation of buybacks that could result in market manipulation.<sup>45</sup> In the end, however, Evans agreed to make the adoption of Rule 10b-18 unanimous.

The 2003 amendment to Rule 10b-18 included block trades within the 25 percent safe harbor because, as the SEC stated in its release, “during the late 1990s, it was reported that many companies were spending more than half their net income on massive buyback programs that were intended to boost share prices—often supporting their share price at levels far above where they would otherwise trade.” The SEC went on to warn that the unregulated use of block trades in doing buybacks could exacerbate “the potential for manipulative abuse” and “mislead investors about the integrity of the securities trading market as an independent pricing mechanism.”<sup>46</sup>

Yet given the escalation of buybacks after 2003, it is clear that the 2003 amendment did nothing to bring “the potential for manipulative abuse” under control. For the 248 major U.S. corporations included in Figure 2 above, the repurchase payout ratio for 2005 through 2008 was 63 percent, far higher than the 45 percent it had been in 1997 through 2000, a period in which the SEC had viewed buybacks as possibly contributing to market manipulation. Compared with 1997-2000, the absolute value of buybacks in inflation-adjusted dollars was 2.2 times higher in 2005-2008 and 1.7 times higher in 2010-2013. If buybacks were being used to manipulate the market during the Internet boom, they were surely being used to do so during the decade after the 2003 Rule 10b-18 modification.

The daily buybacks that are permissible within the 25 percent ADTV limit are sufficiently large to enable a company to manipulate its own stock price. Assuming that block trades are included in the ADTV calculations, under Rule 10b-18 on July 29, 2014 (for example) Exxon Mobil, by far the biggest stock repurchaser with \$217 billion in the decade 2004-2013, could buy back up to \$210 million worth of shares per day without fear of facing manipulation charges. The daily buyback safe-harbor limits for the next nine top repurchasers for 2004-2013 ranged from \$76 million for Hewlett-Packard to \$369 million for Microsoft. Apple Inc., which did \$22.9 billion in buybacks in fiscal 2013 and another \$45.0 billion in 2014 (after having largely refrained from the practice during the reign of Steve Jobs), could do up to \$1.2 billion per day while still availing itself of the safe harbor.<sup>47</sup> Rule 10b-18 permits open-market repurchases of these manipulative magnitudes to be repeated trading day after trading day.

### 3. THE FUNDAMENTAL FLAWS IN MSV

It was undoubtedly a pure coincidence that on November 19 and 20, 1982, just two days after the SEC sanctioned massive open-market repurchases, an academic conference on “Corporations and Private Property” took place at the Hoover Institution, Stanford University. At the conference, marking the fiftieth anniversary of the publication of Berle and Means’ *The Modern Corporation and Private Property*, Eugene Fama and Michael Jensen presented two joint papers, “Separation of Ownership and Control” followed by “Agency Problems and Residual Claims.” In both law and economics in the early 1980s, the movement to “maximize shareholder value” was ready for action.

Over the course of the 1980s, agency theorists, led by Jensen, argued that for the sake of superior economic performance, corporations should disgorge cash to shareholders and incentivize top executives to do so by means of

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<sup>45</sup> Richard L. Hudson, “SEC eases way for repurchase of firms’ stock,” *Wall Street Journal*, November 10, 1982: 2.

<sup>46</sup> Securities and Exchange Commission “Purchases of Certain Equity Securities,” Nov. 17, 2003, p. 64959.

<sup>47</sup> See Lazonick et al., “Apple’s Changing Business Model.”

stock-based pay.<sup>48</sup> The MSV perspective viewed hostile takeovers, or what was more generally known as “the market for corporate control,” as one way in which shareholders could force managers to stop wasting corporate resources and distribute cash to shareholders. They also argued that by making stock-based pay a major proportion of executive compensation, the incentives of corporate managers in the allocation of resources could be aligned with those of public shareholders.<sup>49</sup> Only by disgorging the corporation’s “free cash flow” to shareholders in the forms of cash dividends and stock repurchases, the MSV proponents contended, would the economy’s resources be allocated to their most efficient uses. In short, by “maximizing shareholder value,” corporate resource allocation would result in the best possible performance of the economy as a whole.

The MSV argument is that, of all participants in the business corporation, shareholders are the only economic actors who make productive contributions without a guaranteed return.<sup>50</sup> All other participants such as creditors, workers, suppliers, and distributors allegedly receive a market-determined price for the goods or services that they render to the corporation, and hence take no risk of whether the company makes or loses money. On this assumption, only shareholders have an economically justifiable claim to the “residual” that is left over after the company has paid all other stakeholders their guaranteed contractual claims for their productive contributions to the firm.

By the MSV argument, shareholders are the only stakeholders who need to be incentivized to bear the risk of investing in productive resources that may result in superior economic performance. As the only residual claimants, moreover, shareholders are the only stakeholders who have an interest in monitoring managers to ensure that they allocate resources efficiently. Furthermore, by buying and selling corporate shares on the stock market, public shareholders, it is argued, can directly reallocate resources to more efficient uses. Two major flaws in the argument vitiate MSV.

## FLAW #1: SHAREHOLDERS ARE NOT THE ONLY CORPORATE PARTICIPANTS WHO BEAR RISK.

One fundamental problem with MSV lies in the assumption that shareholders are the only corporate participants who bear risk. They are not. Taxpayers through government agencies and workers through the firms that employ them make risky investments in productive capabilities on a regular basis. From this perspective, both the state and labor have “residual claimant” status; that is, an economic claim on the distribution of profits.

Through government investments and subsidies, taxpayers regularly provide productive resources to companies without a guaranteed return. As an important example, but only one of many, the annual budget of the National Institutes of Health (NIH) is about \$30 billion, with a total NIH investment from 1938 through 2013 of \$875 billion in 2013 dollars.<sup>51</sup> As risk bearers, taxpayers have a claim on corporate profits if and when they are generated. Through the tax system, governments, representing taxpayers in general, can seek to extract this return from individuals and corporations that reap the rewards of government spending. Despite the investment by taxpayers, business may not generate the profits that can be taxed. Through the political process, moreover, tax rates and revenues are subject to change, and hence, even when profits are generated, the returns to taxpayers for these investments are by no means guaranteed.

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<sup>48</sup> Jensen, “Agency Costs”; Michael C. Jensen and Kevin J. Murphy, “Performance Pay and Top Management Incentives,” *Journal of Political Economy*, 98, 2, 1990: 225-264.

<sup>49</sup> Jensen and Murphy, “Performance Pay and Top Management Incentives.”

<sup>50</sup> Lazonick, “Innovative Enterprise and Shareholder Value.”

<sup>51</sup> National Institutes of Health, NIH Budget, at <http://www.nih.gov/about/budget.htm>; see also William Lazonick and Öner Tulum, “US Biopharmaceutical Finance and the Sustainability of the Biotech Business Model,” *Research Policy*, 40, 9, 2011: 1170-1187.

Workers regularly make productive contributions to the companies for which they work through the exercise of skill and effort beyond those levels required to lay claim to their current pay, but without guaranteed returns.<sup>52</sup> In essence, these types of employees are making investments in the firm. Any employer who is seeking to generate a higher-quality, lower-cost product knows the profound productivity difference between employees who just punch the clock to get their daily pay and those who engage in learning to make productive contributions through which they can build their careers and thereby reap future returns in work and in retirement. Yet these careers and the returns that they can generate are not guaranteed. When, in the name of “shareholder value,” a profitable company lays off long-serving employees on the grounds that it no longer needs their services, financial interests, including top executives who implement the downsizing, are often depriving these employees of the current value that their years of prior service helped to create.

As risk bearers, therefore, taxpayers whose money supports business enterprises and workers whose efforts generate productivity improvements have claims on corporate profits if and when they are forthcoming. MSV ignores the risk-reward relation for these two types of economic actors in the operation and performance of business corporations.<sup>53</sup> Instead it erroneously assumes that only shareholders are “residual claimants.” As from the 1980s academic economists articulated the MSV argument, top executives of U.S. corporations, faced by new competitive challenges and incentivized by stock-based pay, embraced the new MSV ideology.<sup>54</sup>

Jensen defines “free cash flow” as “cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital.”<sup>55</sup> Yet it is the MSV argument itself that defines what cash flow is “free.” As Jensen continues: “Conflicts of interest between shareholders and managers over payout policies are especially severe when the organization generates substantial free cash flow. The problem is how to motivate managers to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies.” The “relevant cost of capital” is elevated by the shareholders’ success in claiming that all profits should accrue to them, and the reinvestment of corporate cash is deemed to be “below cost” when taxpayers and workers cannot be excluded from sharing in the gains of the value that they help to create. From the MSV perspective, reinvestment of corporate profits in a company that shares the gains of innovation with taxpayers and workers whose contributions of money and effort help to generate innovative products represents “wasting [corporate cash] on organization inefficiencies.”

MSV is a theory of value extraction that lacks a theory of value creation.<sup>56</sup> Once we debunk the myth that only shareholders take risk, the massive distributions that have been made to shareholders since the mid-1980s in the forms of buybacks and dividends raise questions about how much of the cash flow that both shareholders and managers have deemed to be “free” is the appropriation of funds that should have gone to masses of households, as taxpayers and workers, as returns on the investments of money and effort that they have made in the productive capabilities that have generated corporate profits.

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<sup>52</sup> William Lazonick, *Competitive Advantage on the Shop Floor*, Harvard University Press, 1990; Lazonick et al., “Skill Development and Sustainable Prosperity.”

<sup>53</sup> William Lazonick and Mariana Mazzucato, “The Risk-Reward Nexus in the Innovation-Inequality Relationship: Who Takes the Risks? Who Gets the Rewards?” *Industrial and Corporate Change*, 22, 4, 2013: 1093-1128.

<sup>54</sup> Lazonick and O’Sullivan, “Maximizing Shareholder Value”; Lazonick, “Explosion of Executive Pay”; Lazonick, “Taking Stock.”

<sup>55</sup> Jensen, “Agency Costs,” p. 323

<sup>56</sup> See William Lazonick, “Creating and Extracting Value: Corporate Investment Behavior and American Economic Performance,” in Michael Bernstein and David Adler, eds., *Understanding American Economic Decline*, Cambridge University Press, 1994: 79-113.

## FLAW #2: PUBLIC SHAREHOLDERS DO NOT TYPICALLY INVEST IN THE VALUE-CREATING CAPABILITIES OF THE CORPORATION.

The irony of MSV – and the second major flaw in its argument – is that the public shareholders whom it holds up as the only risk bearers do not typically invest in the value-creating capabilities of the corporation at all. Rather they invest in outstanding shares in the hope that they will rise in price on the market. From the perspective of the productive enterprise, these shareholders are traders, not investors. Following the directives of MSV, a prime way in which corporate executives fuel traders' expectations of stock-price gains is by doing buybacks that disgorge the so-called "free" cash flow. And the positive incentive for corporate executives to allocate resources to shareholders is their own stock-based pay.<sup>57</sup>

Missing from agency theory, as from neoclassical economic theory generally, is a theory of innovative enterprise. The "efficient" firm in neoclassical theory is one that optimizes subject to given technological and market constraints, whereas the innovative enterprise uses its strategic investments in productive resources to transform technologies and access markets.<sup>58</sup> From the neoclassical perspective, the forces of market supply and demand determine the strategy and structure of business enterprises, whereas in the theory of innovative enterprise the strategies and structures of innovative enterprises that come to dominate their industries determine the ways in which markets for labor, finance, and products operate.<sup>59</sup> The intellectual foundation of the neoclassical theory is what I have called the myth of the market economy, whereas the intellectual foundation of the theory of innovative enterprise is the historical experience of economic development, exemplified by the rise to global economic leadership of the United States in the first half of the 20th century.<sup>60</sup>

The MSV version of agency theory is a theory of value extraction without a theory of value creation. Jensen's 1993 American Finance Association presidential address, "The Modern Industrial Revolution, Exit, and The Failure of Internal Control Systems,"<sup>61</sup> is, as the title states, all about exiting existing industrial investments, not about entering new ones. Jensen even interprets Joseph Schumpeter's notion of "creative destruction" as being about "efficient exit", i.e., "destruction",<sup>62</sup> when in fact Schumpeter's entire theoretical orientation was about the conditions for "entry" through entrepreneurship and innovation; the "creative" part of the catchphrase that then made old ways of doing things obsolete (what Schumpeter meant by "destruction").<sup>63</sup> To understand entry, one needs a theory of innovative enterprise, which is precisely what agency theory with its MSV ideology lacks.

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<sup>57</sup> Lazonick, "Taking Stock."

<sup>58</sup> William Lazonick, "Innovative Enterprise and Historical Transformation," *Enterprise & Society*, 3, 1, 2002: 35-54; William Lazonick, "The Chandlerian Corporation and the Theory of Innovative Enterprise," *Industrial and Corporate Change*, 19, 2, 2010: 317-349; William Lazonick, "The Theory of Innovative Enterprise: A Foundation of Economic Analysis," AIR Working Paper #13-05-01, May 2013 at [http://www.theairnet.org/files/research/WorkingPapers/Lazonick\\_InnovativeEnterprise\\_AIR-WP13.0501.pdf](http://www.theairnet.org/files/research/WorkingPapers/Lazonick_InnovativeEnterprise_AIR-WP13.0501.pdf);

<sup>59</sup> William Lazonick. "The Theory of the Market Economy and the Social Foundations of Innovative Enterprise," *Economic and Industrial Democracy*, 24, 1, 2003: 9-44.

<sup>60</sup> William Lazonick, *Business Organization and the Myth of the Market Economy*, Cambridge University Press, 1991.

<sup>61</sup> Michael C. Jensen, "The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems," *Journal of Finance*, 48, 3, 1993: 831-880.

<sup>62</sup> *Ibid.* 833

<sup>63</sup> Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy*, HarperCollins, 2008 (originally published in 1942) pp. 81-85.

## 4. HOW STOCK BUYBACKS UNDERMINE INNOVATIVE ENTERPRISE

Through the work of Alfred D. Chandler, Jr. and its influence on a generation of scholars engaged in business history, we now have deep and extensive knowledge of the “managerial revolution” that transformed “the firm” in the leading economies from the end of last decades of the 19th century through the 1920s.<sup>64</sup> With the United States leading the way, the key characteristics of the managerial revolution in the business enterprise were a) the separation of share ownership from managerial control, with salaried professionals exercising strategic control over the allocation of corporate resources; b) the organizational integration of educated personnel into processes of collective and cumulative learning that were capable of transforming technologies and accessing markets to generate higher-quality, lower-cost products than previously existed; and c) the retention of corporate profits as the foundation for financial commitment that, often leveraged with bank-based finance or long-term bond issues, could sustain the innovation process until through the sale of competitive products the corporation could generate financial returns.

These three social conditions of innovative enterprise – strategic control, organizational integration, and financial commitment – are the fundamental concepts in the theory of innovative enterprise that I have developed through a process that I call the integration of theory and history, based on the comparative-historical study of economic development.<sup>65</sup> The need for these social conditions of innovative enterprise derives from the uncertain, collective, and cumulative characteristics of the innovation process.

1. Strategic control enables executives with the abilities and incentives to invest in innovation to allocate a company’s resources to the inherently uncertain processes of transforming technologies and accessing markets to generate higher-quality, lower-cost products. The identities and motivations of the executives in positions of strategic control are of critical importance to the innovative enterprise.
2. Organizational integration mobilizes the skills and efforts of people in a hierarchical and functional division of labor into the collective and cumulative learning processes that are needed to transform technologies and access markets. In an innovative enterprise, those engaged in collective and cumulative learning processes generate the productivity out of which they can share in the gains.
3. Financial commitment ensures that financial resources are available to sustain the collective and cumulative innovation processes from the time that investments in these productive capabilities are made until the development and utilization of these capabilities can generate competitive products that yield financial returns. In an innovative enterprise, retentions out of profits sustain the growth of the firm.

Given the very different political and cultural environments in which the managerial revolution occurred, the institutional characteristics of strategic control, organizational integration, and financial commitment varied across nations.<sup>66</sup> Take, for example, the U.S.-Japanese comparison as it evolved in the post-World War II decades.<sup>67</sup> In the United States there was a much stronger conception than in Japan that public shareholders remained “owners” not just of shares that they purchased on the stock market but also of the company itself. In the United States, shop-floor

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<sup>64</sup> See William Lazonick, “Alfred Chandler’s Managerial Revolution: Developing and Utilizing Productive Resources,” in William Lazonick and David J. Teece, eds., *Management Innovation: Essays in the Spirit of Alfred D. Chandler, Jr.*, Oxford University Press, 2012: 3-29.

<sup>65</sup> Lazonick, “Innovative Enterprise and Historical Transformation”; Lazonick, “The Chandlerian Corporation”; Lazonick, “The Theory of Innovative Enterprise.”

<sup>66</sup> William Lazonick, “Varieties of Capitalism and Innovative Enterprise,” *Comparative Social Research*, 24, 2007: 21-69.

<sup>67</sup> Lazonick, “Innovative Business Models.”

workers were largely excluded from the processes of organizational learning, whereas in Japan they were included even though, as was the case in the United States, managers and workers were two distinct sets of employees with different educational backgrounds and in-house career paths. In the United States, companies funded investments in productive capabilities by leveraging retained earnings with long-term bond issues, whereas Japanese corporations secured this leveraged financial commitment through relations with “main banks” that permitted much higher debt-equity ratios than were generally tolerated in the United States.

The Japanese challenge to the United States in the last decades of the 20th century came in industries such as automobiles, consumer electronics, machine tools, steel, and microelectronics, in which the United States had been a world leader. The critical source of Japan’s competitive advantage over the United States was “organizational integration”: through the hierarchical integration of shop-floor workers and the functional integration of technical specialists into processes of organizational learning, the Japanese outcompeted the U.S. managerial corporation. Even though unionized blue-collar workers in the United States had a high degree of job security in the post-World War II decades, they had historically been excluded from the processes of organizational learning within the corporation, reflecting a uniquely American hierarchical segmentation between “management” and “labor.”

In sharp contrast, the hierarchical integration of shop-floor workers into the organizational learning processes that generated higher-quality, lower-cost products was the prime source of Japanese competitive advantage. Complementing this hierarchical integration, the collaboration of Japanese technical specialists in solving productivity problems in manufacturing encouraged the functional integration of their skills and efforts, again in contrast to the relatively high degree of functional segmentation of technical specialists in the United States. Supported by strategic control that favored investment in innovation and financial commitment that sustained the process, it was a more powerful system of organizational learning that enabled the Japanese to outcompete the Americans.

The particular impacts of Japanese competition varied markedly across U.S. industries. It virtually wiped out the U.S.-based consumer electronics industry. During the 1980s U.S. automobile manufacturers attempted to learn from the Japanese, but three decades later the U.S. companies were still producing lower-quality, higher-cost cars, and, not surprisingly, had lost significant market share. In the machine-tool industry, the overwhelming success of the Japanese against the major U.S. companies was followed in the 1990s by the emergence in the United States of export-oriented, small- and medium-sized enterprises producing for specialized niche markets. In the steel industry, the innovative response of the United States was the emergence of minimills, using electric arc furnaces and scrap metal, as distinct from the traditional vertically integrated mills that converted iron ore into crude steel before making finished products.

The most perilous, but ultimately successful, U.S. response to Japanese competition was in the semiconductor industry. By the middle of the 1980s, the Japanese had used their integrated skill bases to lower defects and raise yields in the production of memory chips. This development forced major U.S. semiconductor companies to retreat from this segment of the market, with Intel facing the possibility of bankruptcy in the process.<sup>68</sup> Led by Intel with its microprocessor for the IBM PC and its clones, U.S. companies became world leaders in chip design. Indeed, the IBM PC, with its open-systems architecture, was the basis for the rise of a “New Economy business model” that has dramatically altered the conditions of innovative enterprise.

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**68** Robert A. Burgelman, “Fading Memories: A Process Theory of Strategic Exit in Dynamic Environments,” *Administrative Science Quarterly*, 39, 1, 1994: 24-56; Daniel L. Okimoto and Yoshio Nishi, “R&D Organization in Japanese and American Semiconductor Firms,” in Masahiko Aoki and Ronald Dore, eds., *The Japanese Firm: The Sources of Competitive Strength*, Oxford University Press, 1994: 178-208.

The principles of strategic control, organizational integration, and financial commitment remained central to the success of companies that pioneered or adopted the New Economy business model.<sup>69</sup> At the same time, however, innovative New Economy companies could eschew investment in integrated skill bases that were as broad and deep as those under the Old Economy business model because of the availability of accumulated knowledge, upon which these younger firms could draw, from the research labs of the Old Economy corporations. As Gordon Moore, founder of Intel, put it in a volume that sought to understand the precipitous decline of Old Economy corporate research labs in the early 1990s:

Running with the ideas that big companies can only lope along with has come to be the acknowledged role of the spin-off, or start-up. Note, however, that it is important to distinguish here between exploitation and creation. It is often said that start-ups are better at creating new things. They are not; they are better at exploiting them. Successful start-ups almost always begin with an idea that has ripened in the research organization of a large company. Lose the large companies, or research organizations of large companies, and start-ups disappear.<sup>70</sup>

While, some two decades after Moore made this statement, technology startups have yet to disappear, there is no doubt that the New Economy business model has been far better commercializing existing technologies than developing new ones. Increasingly, moreover, U.S. corporate executives look to the government and universities rather than corporate research labs to provide them with the new technologies that they need.<sup>71</sup> Yet, as I have shown in my article, “Profits Without Prosperity,” even as the executives of major U.S. companies lobby the government to spend more public funds on R&D, they hew to the precepts of MSV, wasting billions of corporate dollars buying back their own stock.<sup>72</sup>

Many of the companies that have been leaders in the ICT revolution are among the largest repurchasers of stock. As can be seen in Table 1 above, five of the top ten repurchasers for the decade 2004-2013 are ICT companies, including IBM at #2, Microsoft at #3, Cisco at #4, Hewlett-Packard at #6, and Intel at #9, while another ICT company, Oracle, is #14. Among the largest repurchasers are also a number of the leading medical drug companies, including Pfizer at #8, Amgen at #16, Johnson & Johnson (J&J) at #22, and (not shown in Table 1) Merck at #41.<sup>73</sup> Oracle spent 72 percent of earnings on distributions to shareholders and J&J 75 percent, and each of these other high-tech companies over 100 percent.

Does it matter that all of these companies have expensive buyback habits? More specifically, do buybacks affect the capability of these companies to innovate and compete? Answers to these questions require detailed research into companies and industries to try to discern the impacts of a company’s financial behavior on the three social conditions of innovative enterprise – strategic control, organizational integration, and financial commitment – and then relate these effects on innovative capabilities to competitive outcomes. One problem inherent in doing this type of research is that, like the innovation process itself, the deleterious impacts of buybacks on that process only unfold and become apparent over time. In generating competitive products, the three conditions of innovative enterprise

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**69** Lazonick, *Sustainable Prosperity*; Lazonick, “New Economy Business Model.”

**70** Gordon E. Moore, “Some Personal Perspectives on Research in the Semiconductor Industry,” in Richard Rosenbloom and William Spencer, eds., *Engines of Innovation: U.S. Industrial Research at the End of an Era*, Harvard Business School Press, 1996, p. 171.

**71** Hopkins and Lazonick, “Who Invests in the High-Tech Knowledge Base?”

**72** Lazonick, “Profits Without Prosperity,” pp. 54-55.

**73** For 2004-2013, Merck expended \$19.8 billion on buybacks, equal to 35 percent of its net income, and \$39.5 billion on dividends, another 69 percent of net income.

are dynamically interrelated, a process that can only be understood through an in-depth longitudinal case-study approach.<sup>74</sup> Through this research, we have gained a number of important insights that enable us to pose hypotheses into how stock buybacks can undermine a company's innovative capabilities.

## STRATEGIC CONTROL

Senior executives who are willing to waste hundreds of millions or billions of dollars annually on buybacks are likely to lose the judgmental capacity to comprehend the types of investments in organization and technology that are required to remain innovative in their industries. Executives' use of financial tools to determine whether the "relevant cost of capital" (as Jensen put it) justifies investment in innovation reflects, in my view, this loss of judgmental capacity.<sup>75</sup> Instead, the current structure of stock-based executive remuneration creates incentives for senior executives to allocate resources in ways that achieve "timely" boosts to stock prices that help to increase their take-home pay.<sup>76</sup> Stock buybacks are the most powerful tool at their disposal for achieving this objective.

## ORGANIZATIONAL INTEGRATION

Collective and cumulative, or organizational, learning about the technologies, markets, and competitors relevant to a particular industry is the foundation for generating the higher-quality, lower-cost goods and services that result in productivity growth.<sup>77</sup> Productivity is collective because one learns through interaction with others in a hierarchical and functional division of labor. It is cumulative because what the collectivity learns today provides the foundation for what it is capable of learning tomorrow. What I call "collective and cumulative careers" are essential for organizational learning, especially in industries that are technologically and organizationally complex. It is on the basis of higher levels of productivity generated by organizational learning that business enterprises can pay their valued employees higher wages on a sustainable basis. My research into the dynamics of innovative enterprise supports the hypothesis that, as part of a downsize-and-distribute allocation regime, stock buybacks are done at the expense of investments in collective and cumulative careers.<sup>78</sup> The disappearance of this career employment in major business enterprises is central to the erosion of the American "middle class" over the past three decades.<sup>79</sup>

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**74** Marie Carpenter, William Lazonick, and Mary O'Sullivan, "The Stock Market and Innovative Capability in the New Economy: The Optical Networking Industry," *Industrial and Corporate Change*, 12, 5, 2003: 963-1034; William Lazonick and Andrea Prencipe, "Dynamic Capabilities and Sustained Innovation: Strategic Control and Financial Commitment at Rolls-Royce plc," *Industrial and Corporate Change*, 14, 3, 2005: 1-42; Henrik Glimstedt, William Lazonick, and Hao Xie, "Evolution and Allocation of Stock Options: Adapting US-Style Compensation to the Swedish Business Model," *European Management Review*, 3, 3, 2006: 1-21; William Lazonick and Edward March, "The Rise and Demise of Lucent Technologies," *Journal of Strategic Management Education*, 7, 4, 2011; Lazonick and Tulum, "U.S. Biopharmaceutical Finance"; William Lazonick, Mariana Mazzucato, and Öner Tulum, "Apple's Changing Business Model: What Should the World's Richest Company Do With All Those Profits?" *Accounting Forum*, 37, 4, 2013: 249-267; Bob Bell, Marie Carpenter, Henrik Glimstedt, and William Lazonick, "Cisco's Evolving Business Model: Do Massive Stock Buybacks Affect Corporate Performance?" paper presented to the Edith Penrose Centenary Conference, SOAS, University of London, November 15, 2014. For a pioneering work in applying the theory of innovative enterprise to China, see Qiwen Lu, *China's Leap into the Information Age: Innovation and Organization in the Computer Industry*, Oxford University Press, 2000; Qiwen Lu and William Lazonick, "The Organization of Innovation in a Transitional Economy: Business and Government in Chinese Electronic Publishing," *Research Policy*, 30, 1, 2001: 35-54;

**75** Carliss Y. Baldwin, "How Capital Budgeting Deters Innovation – and What To Do About It," *Research Technology Management*, 34, 6, 1991: 39-45; Clayton Christensen, Stephen P. Kaufman, Willy C. Shih, "Innovation Killers: How Financial Tools Destroy Your Capacity to Do New Things," *Harvard Business Review*, January 2008: 98-105.

**76** Lazonick, "Taking Stock."

**77** Lazonick et al., "Skill Development and Sustainable Prosperity."

**78** Ibid.

**79** Lazonick, "Labor in the Twenty-First Century."

## FINANCIAL COMMITMENT

Buybacks represent a withdrawal of internally controlled finance that could be used to support investment in the company's productive capabilities. For many of the largest repurchasers, such as those included in Table 1 above, dominant product-market positions based on past investments in innovation generate the stream of profits that enables these companies to do billions of dollars in buybacks year after year without running low on cash. The ability of some companies to use their cash reserves, often leveraged by borrowed funds,<sup>80</sup> to manipulate their stock prices places pressures to do large-scale buybacks on other companies whose "success" is measured by stock-price performance but whose cash flow is insufficient to support their buyback habits. Every once in a while, as I have documented in my research, a company that has done massive buybacks over a period of years hits a financial wall, at which point the billions of dollars that it wasted on buybacks are not available to support a process to restructure its accumulated capabilities to become innovative once again.<sup>81</sup>

If stock buybacks undermine innovative enterprise, why do U.S. economic institutions permit them? As we have seen, one part of the answer is the dominance of a flawed economic theory that argues that MSV, implemented in part through buybacks, leads to superior economic performance. Another part of the answer is the stock-based incentives of top executives who have embraced the ideology of the economic superiority of MSV. And a third, and critical, part of the answer is that the U.S. government agency that is supposed to regulate the stock markets "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation,"<sup>82</sup> has for over 30 years had a rule in effect that encourages companies to do open-market repurchases to manipulate their stock prices.

## 5. TAKING BACK THE BUSINESS CORPORATION

Buybacks bear a considerable part of the responsibility for a damaged U.S. economy. This mode of resource allocation serves to concentrate income and wealth at the top of the distribution and comes at the expense of investment in the types of stable, remunerative career employment opportunities that support a broad-based middle class. When the most profitable corporations are in a downsize-and-distribute mode, sustainable prosperity in the U.S. economy becomes an impossible goal.

Underpinning the legitimacy of the buyback corporation is the ideology that companies should be run to maximize the distribution of income to those participants in the corporate economy who matter least to its operation and performance.<sup>83</sup> As we have seen, however, MSV ideology is rooted in two misconceptions of the role of public share-

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**80** Cash-rich companies often incur debt to do buybacks because of a provision in the tax code, dating back to 1960, that only requires U.S. corporations pay U.S. corporate taxes on foreign profits if and when those profits are repatriated. See William Lazonick, "The global tax dodgers: How big business keeps money overseas instead of creating jobs at home," AlterNet, August 31, 2011, at [http://www.alternet.org/story/152235/the\\_global\\_tax\\_dodgers%3A\\_how\\_big\\_business\\_keeps\\_money\\_overseas\\_instead\\_of\\_creating\\_jobs\\_at\\_home](http://www.alternet.org/story/152235/the_global_tax_dodgers%3A_how_big_business_keeps_money_overseas_instead_of_creating_jobs_at_home); Lazonick, "Financialization of the U.S. Corporation," pp. 900-903; See also Dhammika Dharmapala, C. Fritz Foley, and Kristin J. Forbes, "Watch What I Do, Not What I Say: The Unintended Consequences of the Homeland Investment Act," *Journal of Finance*, 66, 3, 2011: 753-87. For cash held abroad by U.S. companies, many of them among the largest repurchasers, see International Strategy and Investment (ISI), "Accounting and Tax Research: Cash & Earnings Parked Overseas," ISI report, March 17, 2014.

**81** Lazonick, "Everyone is paying the price for share buy-backs"; Lazonick, "The buyback boondoggle"; Lazonick, "Labor in the Twenty-First Century," p .24.

**82** U.S. Securities and Exchange Commission, "The Investor's Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation," at <http://www.sec.gov/about/whatwedo.shtml#VJN6FAIA>.

**83** Value extraction by those who have made no contributions to the process of value creation is most obvious in the case of hedge-fund activists who purchase significant amounts of a company's stock on the market and then pressure executives to "unlock" value for shareholders. See, for example, my analysis of the role of the stock market in the history of Apple Inc. and the recent raids on Apple's corporate treasury by hedge fund activists David Einhorn and Carl Icahn. Lazonick et al, "Apple's Changing Business Model"; William Lazonick, "Numbers show Apple shareholders have already gotten plenty," *Harvard Business Review Blog*, October 16, 2014, at [hbr.org/2014/10/numbers-show-apple-shareholders-have-already-gotten-plenty](http://hbr.org/2014/10/numbers-show-apple-shareholders-have-already-gotten-plenty).

holders in the U.S. business corporation. The most fundamental error is the assumption that public shareholders invest in the productive assets of the corporation. That error is then compounded by the assumption that it is only public shareholders who make risky investments in the corporation's productive assets, and hence that it is only shareholders who have a claim on the corporation's profits. Once we recognize the flaws in these assumptions, the factual foundation for MSV ideology falls apart.

The deeper intellectual problem is that agency theory, like the neoclassical theory of the market economy from which it is derived, lacks a theory of innovative enterprise. Strategic control is irrelevant because only the possession of money matters in the investment process, as it flows from one profitable opportunity to another. But liquid money is a commodity that plays no role in generating the high-quality, low-cost products on which economic growth depends. The generation of these products depends on a combination of strategic control that allocates resources in the face of uncertainty, organizational integration that transforms technologies and accesses markets, and financial commitment that sustains the innovation process until it can generate returns. For agency theory, however, the innovative enterprise is a market imperfection from which, for the sake of superior economic performance, cash must be disgorged.

There is no doubt that at certain times and in certain places, with technologies, markets, and competitors undergoing change, a previously innovative enterprise can find it problematic to remain competitive. But MSV exploits and exacerbates the vulnerability of the corporation. Lacking a theory of innovative enterprise, agency theorists have no way of recognizing, let alone analyzing, the sources of a malfunctioning corporation. Disgorging the cash flow to shareholders may cause a business organization to fail, but even when it can be argued that massive distributions to shareholders are responses to organizational failure, this flow of funds does not fix that failure. Rather it contributes to an inequitable income distribution and an eroding middle class.

From the perspective of innovation theory, the MSV-driven policy prescriptions of agency theory yield precisely the economic institutions that must be undone. For starters, the SEC, as the regulator of the stock market, should recognize its mistake in the adoption of Rule 10b-18 and ban open-market repurchases. Then policy reform should be focused on the disincentives to invest in innovation created by the current system of executive stock-based pay, with a new system seeking to ensure that the remuneration of senior executives depends on the innovative success of the business organization as a whole.

Once the problems of strategic control have been addressed, the process of taking back the corporation can turn to the critical role of organizational integration. Productivity in an advanced economy depends on the extent to which members of the labor force have the opportunity to engage in collective and cumulative learning over the course of careers that may span 40 years or more. Under the Old Economy business model, major corporations supported this social condition through the norm of a career with one company, albeit almost exclusively for white males. It is unrealistic to assume that in a world of open-systems technologies and intense global competition the norm of a career with one company could, or should, be restored. That does not, however, lessen the need for collective and cumulative careers as the employment foundation of a highly productive economy. It is reasonable to believe that in the provision of lifelong learning through on-the-job experience, government agencies and civil society organizations, including universities, will have to continue to play important, and perhaps even growing, roles. The business corporation, however, will have to anchor a national system of career employment through a retain-and-reinvest resource-allocation regime. Jettison the downsize-and-distribute ideology of MSV, and U.S. business corporations can focus on becoming learning organizations once again.

If hundreds of billions of dollars annually stop flowing out of the nation's major corporations to do buybacks, then vast amounts of resources will become available to provide the financial commitment that innovation requires.<sup>84</sup> Ban buybacks, and companies will be able to use these funds not only, or even primarily, to finance capital expenditures but more importantly to attract, train, retain, and motivate their career employees. In high-tech companies a significant proportion of these employees will be engaged in R&D, but the innovative enterprise needs experienced and motivated employees in a range of other functions as well. And some of the funds made available by a buyback ban can flow to the government as tax revenues to enable it to invest in physical infrastructure and human knowledge that can underpin the next generation of innovation.

The governance of innovative enterprise requires a dramatic change in the accepted purpose of the corporation and the composition of corporate boards. From the perspective of innovative enterprise, the purpose of the business corporation is to produce high-quality, low-cost, i.e., competitive, goods and services. If the business corporation can perform this role, then profits will follow. The board of directors should be composed of people who have insights into how a company can generate competitive products, including representatives of workers and taxpayers, who collectively invest in the innovation process. These board members should be capable of exercising sound judgment of the types of investment in productive capabilities that the company should make as well as the company's responsibilities to the society of which it is a part.

It is unlikely that the transformation of the U.S. business corporation from downsize-and-distribute to retain-and-reinvest can occur without the leadership of the more visionary of current corporate board members, CEOs among them. In 2001, Jack Welch, upon his retirement as CEO of General Electric, published a book, *Jack: Straight from the Gut*, about his experience as a business leader.<sup>85</sup> But it took Dr. Welch another eight years and a financial crisis to get his gut to speak to the absurdity of the ideology of maximizing shareholder value. In March 2009 Welch told a *Financial Times* reporter: "On the face of it, shareholder value is the dumbest idea in the world. Shareholder value is a result, not a strategy...Your main constituencies are your employees, your customers and your products." Perhaps the interviewer had a shocked look because Welch saw fit to reiterate: "It is a dumb idea. The idea that shareholder value is a strategy is insane. It is the product of your combined efforts – from the management to the employees."<sup>86</sup>

Any business executive, business school professor, or business consultant who understands what it is that makes an enterprise innovative should know that, in this case at least, Jack Welch was right.<sup>87</sup> Where are the U.S. executives, currently running business corporations, who will speak out against MSV ideology and recognize the damage that it is doing to the U.S. economy? Lest such executive visionaries might think that such utterances are un-American, they could take a cue from businessman turned philanthropist Robert S. Brookings who in the late 1920s, in a booming but highly speculative economy, made a very sensible argument that should be central to the U.S. corporate governance debate today:

Capital, not labor, should be treated by management as a commodity in industry, to be fairly compensated in order to retain it in industry in competition with other forms of investment. As labor is

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<sup>84</sup> See, for example, William Lazonick, "What Apple should do with its massive piles of money," Harvard Business Review Blog Network, October 20, 2014, at <http://blogs.hbr.org/2014/10/what-apple-should-do-with-its-massive-piles-of-money/>

<sup>85</sup> Jack Welch with John A. Byrne, *Jack: Straight from the Gut*, Business Plus, 2001.

<sup>86</sup> Francesco Guerrera, "Welch rues short-term profit 'obsession,'" *Financial Times*, March 12, 2009.

<sup>87</sup> See Steve Denning, "The dumbest idea in the world: Maximizing shareholder value," *Forbes*, November 28, 2011, at <http://www.forbes.com/sites/stevedenning/2011/11/28/maximizing-shareholder-value-the-dumbest-idea-in-the-world/>; Roger L. Martin, *Fixing the Game: Bubbles, Crashes, and What Capitalism Can Learn from the NFL*, Harvard Business Review Press, 2011; Lynn Stout, *The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public*, Berrett-Koehler Publishers, 2012.

so largely interested in, and is so largely responsible for industrial results, it should be given the authority of a liberal representation on the board of directors.<sup>88</sup>

Given the ongoing concentration of income at the top and loss of middle-class employment opportunities that have come to characterize the U.S. economy in the era of MSV, there is urgent need for informed public debate on the issues of for whom and by whom the modern business corporation should be governed.

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**88** Robert S. Brookings, *Economic Democracy: America's Answer to Socialism and Communism*, Macmillan, 1929, pp. x-xi.

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