Innovative Enterprise and Sustainable Prosperity*

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Abstract

We want an economy that generates stable and equitable growth—or what I call “sustainable prosperity.” We want productivity growth that makes it possible for the population to have higher living standards over time. We want an equitable sharing of the gains from productivity growth among those whose work efforts and financial resources contribute to that growth. And we want sufficient job stability to enable workers to remain in productive employment for some four decades at work while providing them with enough savings to provide them with adequate incomes over some two decades of retirement.

We need innovative enterprise to achieve sustainable prosperity. Innovation, defined as a higher-quality product at a lower unit cost than had previously been available, generates the productivity that underpins stable and equitable growth. The innovative enterprise is the linchpin of investment in productive capabilities through the interaction of households, governments, and businesses—or what I call “the investment triad.” In this essay, I outline The Theory of Innovative Enterprise (TIE) as a conceptual framework for analyzing how an economy can achieve sustainable prosperity.

TIE transforms our understanding of how the economy functions and performs. TIE exposes the absurdity of the neoclassical economics concept of “perfect competition,” taught to millions of students every year, which posits that the unproductive firm is the foundation of the most efficient economy. I put forward TIE as a relevant and rigorous replacement for neoclassical theory. TIE can explain how the U.S. economy (as a foremost example among the rich nations of the world) displayed a tendency toward stable and equitable growth in the immediate post-World War II decades but then, from the last half of the 1970s, entered into an era of unstable employment, inequitable income, and sagging productivity.

Driving this epochal change was the transformation of the dominant regime of corporate resource allocation from “retain-and-reinvest” to “downsize-and-distribute.” Under a retain-and-reinvest regime, companies retain corporate revenues and reinvest in productive capabilities, including those of the labor force, that can generate innovative products. Under a downsize-and-distribute regime, senior corporate executives—incentivized by stock-based pay and pressured by financial predators—focus on downsizing the labor force (laying off workers, cutting their pay, neglecting training) and distributing corporate revenues to shareholders in the forms of cash dividends and stock repurchases.

The corporate proclivity to downsize-and-distribute has become so extreme in the United States that it can now be termed the (largely legal) looting of the business corporation. It bears prime responsibility for extreme concentration of income among the very richest households and the ongoing erosion of middle-class employment opportunities.

Legitimizing this looting of the business corporation is the neoclassical theory of the market economy and its particular “agency theory” application, with its mantra that, for the sake of economic efficiency, business enterprises should be run to “maximize shareholder value” (MSV). In this essay, I explain why, far from being a theory of value creation, MSV is an ideology of predatory value extraction. I conclude by arguing that the eradication of MSV ideology is a necessary condition for enabling an economy’s business enterprises to contribute to, rather than undermine, the achievement of sustainable prosperity. To provide us with a rational intellectual foundation for specific policy proposals to stop the looting of the business corporation—including a ban on stock buybacks, radical changes in incentives for senior corporate executives, representation of workers and taxpayers on corporate boards, and reform of the tax system to support the investment triad—I call for innovation theory to replace agency theory in our conceptualization—and teaching—of how a successful economy operates and performs.
1. **Investment in productive capabilities**¹

We want an economy that generates stable and equitable growth—or what I call “sustainable prosperity.” We want productivity growth that makes it possible for the population to have higher standards of living. We want stable employment opportunities that enable people to remain productive for some four decades of their working lives while providing them with enough savings for adequate incomes over some two decades of retirement. And we want an equitable sharing of income among those whose work efforts and financial resources contribute to the nation’s productivity.

Since the 1980s, the U.S. economy has experienced unstable employment, inequitable income, and sagging productivity—the opposite of sustainable prosperity. The purpose of this essay is to argue that a critical first step in attaining sustainable prosperity in the United States, or any other national economy, is to change the intellectual understanding of academics, policy-makers, and the informed public about how a modern economy operates and performs. I argue that we cannot pursue a coherent set of public policies to generate stable and equitable economic growth unless we reject the neoclassical theory of the market economy and replace it with an economic theory that focuses on how organizations, including households, governments, and businesses, invest in productive capabilities, with a theory of innovative enterprise at its core.

Sustainable prosperity requires innovative enterprise. The essence of innovative enterprise is investment in productive capabilities that can generate goods and services that are higher quality and/or lower cost than those that had previously been available. The innovative enterprise tends to be a business enterprise—a unit of strategic control that over time must make profits to survive. But, in a modern society, business enterprises are not alone in making investments in the productive capabilities required to generate innovative goods and services. Household families and government agencies also make investments in productive capabilities upon which business enterprises rely. Working in a harmonious fashion, I call these three types of organizations—household families, government agencies, and business enterprises—“the investment triad.”

*Household families* invest in the education of the young with a view to providing them with the knowledge that they will need to function as productive adults, who will then use the income from productive employment to have families of their own. Critical determinants of household investments in productive capabilities are the relation between spouses as providers of household care and income, the quality of education that the young are able to receive, and the number of years over which they receive their education. A productive society requires the presence of the *supportive family.*

*Government agencies* support the investments in productive capabilities by household families by providing schooling that households, each acting on its own, could not afford. A well-financed primary, secondary, and tertiary education system is a necessary condition for a modern society to embark on a path of sustained development through which most of the population can attain given the overarching perspective on innovative enterprise and sustainable prosperity that I provide in this essay, most of the bibliographic references are to my own publications, in which the reader can find the sources for my arguments.

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higher standards of living. Government agencies can also be charged with investing in the creation, through basic and applied research, of new scientific and engineering knowledge that would otherwise not come into existence. As a critical component of investment in productive capabilities, government agencies are involved in providing services for public and personal health. In addition, we rely on government agencies to invest in physical infrastructure such as transportation systems, communication systems, energy systems, and water and waste systems. Taken together, the investments in productive capabilities, both human and physical, by government agencies manifest the presence of the developmental state.

Business enterprises make use of the knowledge and infrastructure provided by government agencies and the human capabilities provided by household families as foundations for making further in-house investments in human and physical capabilities that can generate goods and services that these businesses can sell on product markets. In high-tech fields, business enterprises may have to make specialized investments in in-house capabilities to absorb the high-tech knowledge that investments by government agencies have created. In many cases, government agencies make strategic investments in knowledge-creation through business enterprises in the forms of research contracts and subsidies. Of particular importance, it is typically through on-the-job experience in business enterprises as well as government agencies that masses of individuals, building on their formal educations, accumulate the productive capabilities that enable them to contribute to the innovation process. The development and utilization of these productive capabilities are the essence of the innovative enterprise.

The investment triad enables innovative enterprise to function as a foundation for sustainable prosperity. Stable and equitable growth occurs when the investment strategies of households, governments, and businesses interact as supportive families, developmental states, and innovative enterprises. Households and governments interact through investments in education. Governments and businesses interact in the development of the high-tech knowledge base. Businesses and households interact through the employment relation. The quality of these interactions in the development and utilization of productive capabilities is of critical importance to the productivity of resources that are invested in the innovative enterprise.

Business enterprises provide adults in household families with employment that, with sufficient productivity, should enable them to support their families. Through formal and on-the-job training, business enterprises also invest in the knowledge of some or all of the people whom they employ. These enterprises then have an incentive to retain the people whom they have trained. They generally do so through pay increases and promotions to jobs that require superior functional capability and greater hierarchical responsibility. Indeed, it is primarily through in-house pay increases and promotions for valued employees in stable employment relations in innovative enterprises that households’ living standards increase over time. It is through the employment relations of productive enterprises, not labor-market supply and demand, that we get the thriving middle class that is the social substance of stable and equitable growth.

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In short, the investment triad puts in place the productive capabilities that are essential to a prosperous economy. Investments in the knowledge base by household families, government agencies, and business enterprises must be financed. Investments in educating the labor force are funded by some combination of after-tax household incomes supplemented by household debt and government tax revenues supplemented by debt issues at local, state, and federal levels. To some extent business enterprises finance the education of the labor force through corporate taxes, philanthropic contributions based on business fortunes, and direct payments to employees for the education of themselves or their children as part of the employment relation.

Ultimately, however, the ability of household families and government agencies to afford investments in productive capabilities requires the utilization of the knowledge and skills that have been developed through these investments. And in a modern society, to ensure the utilization of the knowledge base that has been developed, we rely primarily on its employment by business enterprises that, to survive, must produce and sell competitive—that is, high quality, low cost—products. The innovative enterprise is central to the triadic social system that enables the attainment of sustainable prosperity.

In the next section of this essay, I contrast the investment-triad perspective, with its focus on organizations—supportive families, developmental states, and innovative enterprises—as the microfoundations of sustainable prosperity, with the neoclassical economics theory that views the operation of markets as the microfoundations of the most efficient economy. I show that the neoclassical perspective, which is taught by tens of thousands of economics PhDs to millions of students around the world every year, rests on the absurd proposition that the most unproductive firm is the foundation of the most efficient economy—an ideal of economic organization known as “perfect competition.” Indeed, the neoclassical theory of markets as omnipotent in the allocation of economy’s resources depends on a theory of the firm that portrays the ideal business enterprise as impotent. As we shall see, the neoclassical theory of perfect competition has as its roots a firm that has the characteristics of an overcrowded sweatshop in which workers are unable and unwilling to be productive.

Economics is in need of a theory of innovative enterprise to replace the neoclassical theory of the firm, and thereby recognize the centrality of organizations to the economy’s operation and performance, while exploding “the myth of the market economy.”3 The third section of this essay outlines the Theory of Innovative Enterprise (TIE) as a conceptual framework for analyzing whether, how, and under what conditions the investment triad supports or undermines the attainment of stable and equitable growth. Drawing on the experience of the U.S. economy over the past 70 years, I make use of TIE to analyze how during the first three decades of this period, the United States moved toward stable and equitable growth under a “retain-and-reinvest” corporate resource-allocation regime whereas from the late 1970s, under a “downsize-and-

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distribute” regime, unstable employment, inequitable income, and sagging productivity have characterized the U.S. economy.⁴

In the fourth section of this essay, I place intellectual blame for the U.S. failure to achieve sustainable prosperity since the 1970s on a particular brand of neoclassical economics known as agency theory, with its ideology that the business corporation should be run to “maximize shareholder value” (MSV). Far from being a theory of value creation, MSV has legitimized predatory value extraction from U.S. business corporations. Effected through massive distributions of corporate cash to shareholders and incentivized by the stock-based pay of senior corporate executives, MSV has resulted in the (largely legal) looting of the U.S. business corporation. I argue that MSV has undermined innovative enterprise and the operation of the investment triad, and with it the possibility of achieving sustainable prosperity in the United States.

In the final section of this essay, I argue that, as a conceptual guide to formulating policies to get the U.S. economy on a sustainable-prosperity trajectory, innovation theory must replace agency theory. I contend that the eradication of MSV ideology is a necessary condition for enabling an economy’s business enterprises to contribute to, rather than thwart, the achievement of sustainable prosperity. To provide the intellectual rationale for specific proposals (elaborated elsewhere⁵) to stop the looting of the business corporation—including banning stock buybacks, compensating senior executives for their contributions to the value-creating enterprise, placing representatives of households as workers and taxpayers on corporate boards, and reforming the tax system so that it recognizes and supports the investment triad—I call for innovation theory to replace agency theory in our conceptualization of how the economy operates and performs.

2. The theory of the firm and economic performance

The investment-triad perspective views organizations, not markets, as the microfoundations of sustainable prosperity. Comparative-historical study reveals that developed markets in products, finance, labor, and land are outcomes, not causes, of economic development.⁶ Product competition assumes the existence of business enterprises that have developed the capabilities to produce goods and services of a quality that buyers want and need that can be sold at prices that buyers are willing or able to pay. Developed markets in stocks and bonds depend on the existence of business enterprises with the capability to issue and pay yields on these securities. Employment opportunities that can be accessed via labor markets assume the existence of business enterprises and government agencies that have developed the capability to employ

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labor productively. A market for land exists because households, governments, and businesses have invested in the infrastructure of a particular locality.

For the sake of continued innovation, the organizations on which the economy depends for investments in productive capabilities need governments to regulate these developed markets once they have emerged. As demonstrated repeatedly in the history of American capitalism, in the absence of regulation, developed markets tend to disrupt and undermine the organizational processes that enable investment in productive capabilities. Here are just a few examples from the history of the United States:

- In the 1920s, industries such as textiles, coalmining, and agriculture, characterized by large numbers of competitors, were “sick” because of cut-throat competition, even though the firms in these industries had access to the most advanced technologies in the world. A major role of 1930s New Deal government intervention was to implement regulations and programs that helped to make these industries healthy.
- Today, with the prices of medicines largely unregulated in the United States despite government-funded research, government-granted monopoly patents, and government-subsidized demand, pharmaceutical companies have become prime sources for predatory value extraction, undermining their capabilities to engage in drug innovation.
- The 1982 deregulation of the practice of stock repurchases by the U.S. Securities and Exchange Commission through Rule 10b-18 has resulted in more than three decades of looting of corporate treasuries by well-positioned stock-market traders, including senior executives, resulting in the concentration of income at the top and the destruction of middle-class employment opportunities.
- Inadequate minimum wages that result from overcrowded labor markets have left hardworking families in poverty, even when the heads of households are holding down two full-time jobs.
- The “free-market” approach to college tuitions and student loans have made higher education unaffordable to most working-class households, in a nation that had once been in the forefront of free or low-cost public higher education.
- We need only look back to the financial crisis of 2008-2009 for the vast devastation visited on household families by government failure to regulate housing markets.
- Devastating destruction occurs through “natural” disasters caused by the failure to regulate industries whose processes and product contribute to climate change.

The TIE approach to understanding the operation and performance of the economy, including the interactions of households, governments, and businesses as investors in productive capabilities, stands in stark contrast to the neoclassical focus on market coordination of economic activity. The neoclassical theory of the market economy poses a profound intellectual barrier to analyzing and understanding the organizational foundations of economic development. Neoclassical economists assume that an advanced economy is a market economy in which millions of household decisions concerning the allocation of the economy’s resources are

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aggregated into prices for inputs to and outputs from production processes. Any impediments to this process of market aggregation are deemed to be “market imperfections,” and any undesirable social outcomes from the process are deemed to be “market failures.”

Developed markets are of utmost importance to our economy and society; they can allow us as individuals to choose the work we do, for whom we work, where we live, and what we consume. Insofar as we have market choices, however, it is because the economy is wealthy, and it is wealthy because of the household, government, and business organizations that constitute the investment triad. If market processes cannot explain investment in productive capabilities, then the theory of the market economy cannot explain the wealth of nations. If economists want to devise public policies to shape the processes and influence the outcomes of investment in productive capabilities, we need to construct an economic theory of “organizational success.” At its center is a theory of innovative enterprise.

Yet it is the theory of the market economy that dominates the teaching of economics and the “well-trained” economist’s mindset on how the economy operates and performs. The theory of perfect competition, which is the neoclassical economist’s ideal of economic efficiency, views the firm as impotent and the market omnipotent in allocating the economy’s resources. By the neoclassical theory’s key assumptions, the firm in perfect competition is, as I will explain, an unproductive firm. Yet neoclassical theory posits the firm in perfect competition as the microfoundation of an economy in which the allocation of resources results in the ideal of economic efficiency, even if that ideal is difficult or impossible to attain.

If, thus put, neoclassical logic concerning the relation between firm productivity and economic performance sounds absurd, that is because it is. Seventy-five years ago, Joseph Schumpeter, with his focus on innovation as the fundamental phenomenon of economic development, confronted the myth of the market economy when he argued that “perfect competition is not only impossible but inferior, and has no title to being set up as a model of ideal efficiency.” The reason: Large-scale enterprise is “the most powerful engine of [economic] progress and in particular of the long-run expansion of total output.”

The neoclassical theory of the firm in perfect competition cannot explain why for well over a century very large firms have dominated the U.S. economy. In 2012 (the most up-to-date statistics that include revenues), 964 companies that had 10,000 or more employees in the United States, with an average workforce of 33,542, were only 0.017 percent of all U.S. businesses. But these 964 companies had 9 percent of all establishments, 28 percent of employees, 31 percent of payrolls, and 36 percent of receipts. For 1,909 companies with 5,000 or more employees, these shares were 11 percent of establishments, 34 percent of employees, 38 percent of payrolls, and 44 percent of receipts. How these large companies allocate the

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10 United States Census Bureau, “Statistics of U.S. Businesses,” Data on “U.S., NAICS sectors, larger employment sizes” at https://www.census.gov/data/tables/time-series/econ/susb/susb. Unlike the data for 2012, the latest data on firm size for 2014 do not include receipts (collected only every five years).
resources under their control has profound implications for employment opportunities, income distribution, and productivity growth in the United States.

The neoclassical answer must be that these large firms represent market imperfections, also known as monopolies or oligopolies. But that does not explain the productive power of these large firms. Nor does it explain, intuitively at least, why, as the neoclassical theory posits, an economy dominated by very large numbers of small unproductive firms would yield the most efficient economy. This intellectual puzzle is solved when we realize that the neoclassical theory is utterly illogical. The theory of the unproductive firm as the foundation of the most efficient economy dominates the thinking of economists because it serves to make the market omnipotent and the firm impotent in the allocation of the economy’s resources. In effect, this ideological tenet, which is held dear by both liberal and conservative economists, obviates the need to consider the role of the investment triad, including the innovative enterprise, in achieving superior economic performance—that is, stable and equitable growth.

Let’s go back to basics to see why “perfect competition” is illogical. As conventionally defined, perfect competition exists when a very large number of identical firms in an industry each has such a small share of total industry output that each firm, acting on its own, can choose to produce its profit-maximizing output without influencing the price of the industry’s product. Each of these identical firms is constrained to be very small by the assumption that at a very low level of the firm’s output relative to industry output increasing average variable costs (AVC) overwhelm decreasing average fixed costs (AFC), so that the firm faces a U-shaped cost curve in deciding how much output to produce. It follows mathematically that the firm maximizes profits at the output at which marginal revenue equals marginal cost. Thus, we have the theory of the optimizing firm that holds center stage (and generally the only stage) in virtually every introductory economics textbook used worldwide.11

The model for the modern “principles” textbook was created by Paul Samuelson, Economics: An Introductory Analysis, first published in 1948 and reissued in 18 subsequent editions (with Samuelson as the sole author through the 12th edition, published in 1985). The large corporation was not unknown to Samuelson. In the first edition, he observed that “a list of the 200 largest nonfinancial corporations reads like an honor roll of American business, almost every name being a familiar household word...In manufacturing alone, the 100 most important companies employed more than one-fifth of all manufacturing labor and accounted for one-third of the total value of all manufactured products.”12 After commenting that “their power did not grow overnight,” Samuelson states: “Large size breeds success, and success breeds further success.”

How did these large corporations attain these dominant positions, and why did the top 100 manufacturers achieve high labor productivity relative to all manufacturers? The existence of very large, highly productive firms should have led economists to search for a theory of innovative enterprise as a foundation of economic analysis.13 Yet Samuelson’s scientific papers (which are

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11 I would be pleased to be informed of any microeconomics textbook that contradicts this statement on the theory of the firm.
13 In the 1940s, economists could have built on Schumpeter’s focus on innovation as the fundamental phenomenon of economic development, a proposition that he put forward in Joseph A. Schumpeter, The Theory of Economic Development,
virtually all mathematical, devoid of empirical content) and his famous “principles of economics” textbook in its successive editions promulgated the theory of the unproductive firm in perfect competition as the ideal of economic efficiency.

Perfect competition idealizes the very small firm, its growth constrained by rising AVC as it expands output. It is assumed that at a very low level of output (for the firm to remain very small), the increase in AVC outweighs the decline in AFC so that average total costs rise, giving the firm’s cost curve its U shape. But why do AVC rise to such an extent that they outweigh declining AFC? Current textbooks do not supply an explanation. For example, N. Gregory Mankiw, Principles of Microeconomics simply states that the cost curve is U-shaped—representing “cost curves for a typical firm”14—and illustrates this “principle” with made-up numbers for a hypothetical coffee shop in which AVC increase from $0.30 for one cup of coffee to $12.00 for 10 cups, with rising AVC surpassing declining AFC after 6 cups.15 Similarly, Paul Krugman and Robin Wells, Essentials of Economics argues that a “realistic marginal cost curve has a ‘swoosh’ shape,”16 and gives the example of a salsa maker whose AVC rise from $12.00 for one case of salsa to $120.00 for ten cases, with rising AVC surpassing declining AFC after three cases.17 In both the Mankiw and Krugman/Wells textbooks, the “explanation” for the U-shaped cost curve—and hence the unproductive firm that is the ideal of economic efficiency—is simply the made-up numerical example!

We can, however, find an explanation for the U-shaped cost curve in the early editions of Samuelson’s textbook.18 In the first through fifth editions of Economics, Samuelson explained the U-shaped cost curve by assuming that (as is typically the case) labor is the firm’s main variable-cost input and that as the employment of labor increases as the firm expands output, the average productivity of labor falls because of, in Samuelson’s words, “limitations of plant space and management difficulties.” As the professor put it (with my emphasis) in the fifth edition of Economics, published in 1961 (with wording only slightly different from that in the first edition): “After the overhead has been spread thin over many units, fixed costs can no longer have much influence on average costs. Variable costs become important, and as average variable costs begin to rise because of limitations of plant space and management difficulties, average costs finally begin to turn up.”19

There it is: The explanation of the most important “principle” of the neoclassical theory of the firm—and I would argue, of neoclassical economics more generally—buried away on page 524 of


15 Ibid., p. 254.
17 Ibid., p. 185.
18 I am grateful to Wynn Tucker for searching through the first edition of Samuelson, Economics, to locate the explanation.
as an 853-page textbook. The theory of the firm in perfect competition in turn provided the foundation for Samuelson’s “grand neoclassical synthesis” of microeconomics and macroeconomics, which continues to dominate economics teaching and thinking. But Samuelson’s two cryptic sentences provide far more of an explanation for the U-shaped cost curve than Mankiw and Krugman/Wells (as but two examples from the crowded field of Samuelson-clone introductory economics textbooks) have to offer.

So what do those sentences mean? When I used the fifth edition of Samuelson, *Economics* in my very first economics course in 1964, I was told that what Professor Samuelson was arguing was that as more workers are added to the workplace as variable inputs as the firm expands output their average productivity falls because of overcrowding that causes them to bump into one another (“limitations of plant space”) and because the increase in the number of workers to be supervised makes it more difficult for the employer to prevent workers from shirking (“management difficulties”). The resultant decline in labor productivity as output increases causes AVC to rise. In other words, Samuelson’s explanation for the U-shaped cost curve was that a rise in AVC occurs because workers can’t work and won’t work.

Moreover, the cost curve gets its U shape when the rise in AVC is so large that it overwhelms the fall in AFC. The rise in total unit costs, reflecting declining productivity as the firm expands its output, then constrains the growth of the firm, and rather than confront “limitations of plant space” and “management difficulties,” the neoclassical employer just optimizes subject to these “given” constraints. In sharp contrast, the innovative enterprise would confront “limitations of plant space” by investing in more spacious plant and “management difficulties” by creating incentives for workers to supply higher levels of productivity. These investments and incentives would add to the firm’s costs, but if the innovating firm can increase its productivity sufficiently by making these expenditures, it could possibly outcompete the optimizing firm, as shown in Figure 1. So much for the neoclassical ideal of economic efficiency!

Just a minute (I can hear the well-trained neoclassical economist saying). What about the neoclassical theory of monopoly that one can also find in virtually every introductory economics textbook, with its demonstration that, compared with perfect competition, the monopolist, maximizing profits subject to a downward-sloping demand curve, restricts output and raises the product’s price? Isn’t that proof of perfect competition as the ideal of economic efficiency?

No, it is not. There is a logical flaw in the neoclassical monopoly model that yields the “results”—restricted output, higher price—that neoclassical ideology requires. As shown in Figure 2, it is assumed that the monopolist maximizes profits subject to the same cost structure as the perfect competitors. But then how did the monopolist become a monopolist? In the Theory of Innovative Enterprise, the firm grows large, and outcompetes perfect competitors, by transforming the cost structure—by, for example, investing in more spacious plant to prevent overcrowding, creating positive incentives for employees to expend more work effort, or launching an R&D initiative that may yield a higher quality product. Compared with perfect competitors, who follow the neoclassical directive to optimize subject to given constraints, the innovating firm increases output and, by driving down AFC as it expands output, can lower prices to consumers while still
increasing its profits. For the prosperity of the economy, that’s a big plus. For neoclassical theory, however, that’s a big minus.

**Figure 1:** The innovating firm transforms the cost structure that the optimizing firm takes as a “given” constraint

<table>
<thead>
<tr>
<th>Comparing optimizing and innovating firms</th>
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<tbody>
<tr>
<td>$p$ = price; $q$ = output; $c$ = perfect competitor</td>
</tr>
<tr>
<td>$p_{\text{min}}$ = minimum breakeven price; $q_{\text{max}}$ = maximum breakeven output</td>
</tr>
</tbody>
</table>

How does the innovating firm transform high fixed costs into low unit costs?

Technological and market conditions are given by cost and revenue functions. The “good manager” optimizes subject to technological and market constraints.

Through strategy, organization, & finance, innovating firm transforms technologies and markets to generate higher quality, lower cost products. There is no “optimal” output or “optimal” price.

**Figure 2:** The logical flaw in the neoclassical monopoly model that seeks to prove that “perfect competition” is the ideal of economic efficiency

<table>
<thead>
<tr>
<th>Monopoly and competition: ILLLOGICAL COMPARISON</th>
<th>Innovating and optimizing firms LOGICAL COMPARISON</th>
</tr>
</thead>
<tbody>
<tr>
<td>$p_m$ = monopoly price; $q_m$ = monopoly output</td>
<td>$p_{\text{min}}$ = lowest breakeven price, optimizing firm</td>
</tr>
<tr>
<td>$p_c$ = competitive price; $q_c$ = competitive output</td>
<td>$q_{\text{min}}$ = lowest breakeven output, optimizing firm</td>
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Note also that, in his explanation of the U-shaped cost curve, Samuelson writes (with my emphasis) that because of limitations of plant space and management difficulties, “average costs finally turn up.” Samuelson inserted (probably instinctively) the word “finally” because if average costs do not turn up, the firm will grow larger and destroy the possibility of “perfect competition” as an ideal and “constrained optimization” as the decision rule for the “profit-maximizing” firm. Samuelson’s theory requires that the firm that is the “ideal of economic efficiency” remain small and unproductive. If the economy is dominated by firms in which, to use Samuelson’s own words, “large size breeds success, and success breeds further success,” then perfect competition as the “ideal of economic efficiency” disappears and “constrained optimization” may not be the management practice that achieves superior economic performance.

Yet even Paul Samuelson was aware that the real-world economy can be dominated by large firms that are highly productive. In Chapter 2 (“Central Problems of Every Economic Society”) of the fifth edition of Economics, Samuelson first discusses “Increasing Costs” and “The Famous Law of Diminishing Returns” (both subheadings) and provides a table with a numerical example that bears the heading “Diminishing returns is a fundamental law of economics and technology” and the caption “Returns of corn when units of labor are added to fixed land.” On the next page, however, he has the subheading “Economies of Scale and Mass Production: A Digression,” with the explanation: “Economies of scale are very important in explaining why so many of the goods we buy are produced by large companies...They raise questions to which we shall return again and again in later chapters.”

Samuelson made his “honor role of American business” remark, cited above, 100 pages later. But it would be an exaggeration to say that the professor kept his promise to “return [to this central problem of every economic society] again and again.” After all, for Samuelson the actual importance of economies of scale to the productive economy was just “a digression” from his obsession with “the famous law of diminishing returns” as a “fundamental law of economics and technology.”

It may be, however, that, in the course of revising Economics in the early 1960s, Professor Samuelson gave this glaring contradiction between neoclassical ideology and economic reality some deeper thought and came to realize the absurdity of arguing that the unproductive firm is the ideal of economic efficiency. If so, he resolved the problem, not by renouncing the neoclassical theory of the firm and calling for the construction of a theory of innovative enterprise—drawing upon, for example, Edith Penrose’s seminal contribution, published in 1959, and Alfred Chandler’s pioneering historical research documented in his 1962 book Strategy and Structure—but rather by simply excising from the sixth and subsequent editions of Economics the sentences quoted above about overhead being spread thin, limitations of plant space, and management difficulties. Henceforth, Samuelson would just refer to the “famous law of diminishing returns” to justify the nonsense that the unproductive firm is the ideal of economic efficiency. And, over the subsequent generations, economists such as N. Gregory Mankiw and Paul Krugman, among other PhD economists, have published textbooks that reproduce this
nonsense as a principle of economics, taught routinely to students and requiring neither introspection nor explanation.

The problem with perfect competition as the ideal of economic efficiency is not just that millions upon millions of economics students have been and continue to be miseducated about the role of the business enterprise in the economy. The bigger problem is that the “well-trained” PhD economists who are supposed to be the educators (included those to whom so-called Nobel prizes in economics have been meted out) spout the inanity that the unproductive firm is the ideal of economic efficiency, and in so doing portray the “ideal” firm as a powerless entity that does not, and should not, interfere with the market coordination of the allocation of resources. In my own teaching, I call this view of the world “sweatshop economics” because the overcrowded and unmotivated firm that Samuelson describes as the microfoundation of ideal efficiency has the characteristics of a sweatshop. I make the point that if such firms actually dominated the economy, we would, in a nation such as the United States, all be living in poverty.  

Meanwhile, the “well-trained” economist views the highly productive firms that grow large, and perhaps even dominate the industries in which they operate as massive “market imperfections” that impede the purported efficiency of market resource allocation. In the real economic world, however, the innovative enterprise is a powerful entity that, by transforming the technological, market, and competitive conditions that it faces, succeeds in generating the higher-quality, lower-cost goods and services that raise productivity. Far from being a market imperfection, by confronting and transforming the “neoclassical constraints,” the innovative enterprise provides the productive foundations for achieving sustainable prosperity.

As I argue in the next section of this essay, through the very process of developing and utilizing productive capabilities, the innovative enterprise tends to provide more stable employment, more equitable incomes, and higher productivity than the “uninnovative” enterprises with which neoclassical economists are enamored. For the society as a whole, the innovative enterprise is the linchpin of the investment triad, making it possible for household families, through stable and equitable employment, to be supportive, and for government agencies, through access to tax revenues from households and businesses and by servicing the needs of households and businesses, to be developmental.

For the sake of sustainable prosperity, the academic discipline known as economics needs to rid itself of the myth of the market economy—from the Samuelson-clone introductory textbooks to the ubiquitous mathematical models that typically bear no relation to reality (and which often reflect utter ignorance of how an actual economy functions and performs). It is high time to take up the Schumpeterian challenge, and build a useful analysis of economy and society around a theory of innovative enterprise. We will then understand how and why the ideology that companies should be run to “maximize shareholder value” subverts innovative enterprise and, with that subversion, our quest for stable and equitable economic growth.

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21 Lazonick, “Innovative Enterprise or Sweatshop Economics?”.
3. From retain-and-reinvest to downsize-and-distribute

The Theory of Innovative Enterprise (TIE) that I have constructed through decades of research and teaching provides an analytical perspective on the microfoundations of sustainable prosperity. There is no way in which an economy can attain stable and equitable growth unless its major business enterprises focus on investing in productive capabilities for the sake of generating innovative products. Beginning with a characterization of the innovation process as uncertain, collective, and cumulative, TIE articulates three “social conditions of innovative enterprise”—strategic control, organizational integration, and financial commitment—that can support the innovation process. Armed with TIE, we can then consider the impacts of the innovation process on employment stability, income equity, and business productivity. We can ask whether the dominant characteristics of the nation’s major business enterprises support or undermine the attainment of stable and equitable growth in the economy as a whole.

TIE is an analytical framework for understanding how a business enterprise can generate a product that is higher quality and/or lower cost than products previously available, and thus be a source of productivity growth. The innovation process that can generate a higher-quality, lower-cost product is uncertain, collective, and cumulative.  

- **Uncertain:** When investments in transforming technologies and accessing markets are made, the product and financial outcomes cannot be known; if they were it would not be innovation. Hence the need for strategy.
- **Collective:** To generate higher-quality, lower-cost products, the enterprise must integrate the skills and efforts of large numbers of people with different hierarchical responsibilities and functional capabilities into the learning processes that are the essence of innovation. Hence the need for organization.
- **Cumulative:** Collective learning today enables collective learning tomorrow, and these organizational learning processes must be sustained continuously over time until, through the sale of innovative products, financial returns can be generated. Hence the need for finance.

TIE identifies three social conditions—strategic control, organizational integration, and financial commitment—that can enable the firm to manage the uncertain, collective, and cumulative character of the innovation process.

- **Strategic control:** For innovation to occur in the face of technological, market, and competitive uncertainties, executives who control corporate resource allocation must have the abilities and incentives to make strategic investments in innovation. Their abilities depend on their knowledge of how strategic investments in new capabilities can enhance the enterprise’s existing capabilities. Their incentives depend on alignment of their personal interests with the company’s purpose of generating innovative products.

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• **Organizational integration:** The implementation of an innovation strategy requires integration of people working in a complex division of labor into the collective and cumulative learning processes that are the essence of innovation. Work satisfaction, promotion, remuneration, and benefits are important instruments in a reward system that motivates and empowers employees to engage in collective learning over a sustained period of time.

• **Financial commitment:** For collective learning to cumulate over time, the sustained commitment of “patient capital” must keep the learning organization intact. For a startup company, venture capital can provide financial commitment. For a going concern, retained earnings (leveraged, if need be, by debt issues) are the foundation of financial commitment.

The uncertainty of an innovative strategy is embodied in the fixed-cost investments required to develop the productive capabilities that may, if the strategy is successful, result in a higher-quality product. But an innovative strategy that can eventually enable the firm to develop superior productive capabilities may place the innovating firm at a *competitive disadvantage* (as indicated for low levels of output in Figure 1 above) because such strategies tend to entail higher fixed costs than the fixed costs incurred by rivals that choose to optimize subject to given constraints. As an essential part of the innovation process, the innovating firm must access sufficient markets for its products to transform high fixed costs into low unit costs (see Figure 1), and, thereby, convert competitive disadvantage at low levels of output into competitive advantage at high levels of output.

These higher fixed costs derive from both the *size* and the *duration* of the innovative investment strategy. The innovating firm will have higher fixed costs than those incurred by the optimizing firm if, as is typically the case, the innovation process requires the *simultaneous development* of productive capabilities across a broader and deeper range of integrated activities than those undertaken by the optimizing firm. But in addition to, and generally independent of, the size of the innovative investment strategy at a point in time, high fixed costs will be incurred because of the duration of time that is required to transform technologies and access markets until they result in products that are sufficiently high quality and/or low cost to generate returns. If the size of investments in physical capital tends to increase the fixed costs of an innovative strategy, so too does the duration of the investment required for an organization of people to engage in the collective and cumulative—or organizational—learning that, to transform technologies and access markets, is the central characteristic of the innovation process.

The high fixed costs of an innovative strategy create the need for the firm to attain a high level of *utilization* of the productive resources that it has developed—what are generally called “economies of scale.” Given the productive capabilities that it has developed, the innovating firm may experience increasing costs because of the problem of maintaining the productivity of variable inputs as it employs larger quantities of these inputs in the production process. But rather than, as in the case of the optimizing firm, take increasing costs as a given constraint, the innovating firm attempts to transform its access to high-quality productive capabilities at high levels of output. To do so, it invests in the *development* of that productive capability, the *utilization* of which as a variable input has become the source of increasing costs. To overcome the constraint on its innovative strategy posed by reliance on the market to supply it with
inputs—which is what a variable factor of production entails—the innovating firm integrates the supply of that factor into its internal operations.

The development of the productive capability of this now-integrated factor of production adds to the fixed costs of the innovative strategy. Previously this productive resource was utilized as a variable factor that could be purchased incrementally at the going factor price on the market as extra units of the input were needed to expand output. Having added to its fixed costs in order to overcome the constraint on enterprise expansion posed by increasing variable costs, the innovating firm is then under even more pressure to expand its sold output in order to transform high fixed costs into low unit costs.

In effect, to restate Adam Smith’s first principle of economics enunciated in *The Wealth of Nations*, economies of scale are limited by the extent of the market. The firm’s higher-quality product enables it to access a larger extent of the market than its competitors, although learning about what potential buyers want and convincing potential buyers that the firm’s product is actually “higher quality” add to the fixed costs of the innovation strategy. Hence the fixed costs of the innovative strategy depend on investments in not only transforming technology but also accessing markets, with an increase in fixed costs requiring an even larger extent of the market to convert high fixed costs into low unit costs. A potent way for an innovating firm to attain a larger extent of the market is to share some of the gains of this cost transformation with its customers in the form of lower prices.

As, through the development and utilization of productive capabilities, the innovating firm succeeds in the conversion of high fixed costs into low unit costs, it in effect “unbends” the U-shaped cost curve rather than, as in the theory of the optimizing firm, take internal diseconomies of scale as a given constraint (see Figure 1 above). By reshaping the cost curve in this way, the innovating firm creates the possibility of securing competitive advantage over its “optimizing” rivals which, as instructed by the economics textbooks, take increasing costs as a given constraint.

To sum up: In my elaboration of TIE, I use the distinction between fixed costs and variable costs to argue that an innovating firm that experiences rising variable costs as it seeks to expand output will recognize the need to exercise control over the quality of the variable input, the use of which is decreasing productivity. To do so the innovating firm will integrate the production of that input into its internal operations, thus seeking to transform variable costs into fixed costs as part of its innovative strategy. This strategic move will place the innovating firm at a competitive disadvantage at low levels of output (as in Figure 1), increasing the imperative that it attain a large market share to drive down unit costs. Moreover, there are often high fixed costs of accessing that market share (branding, advertising, distribution channels, a salaried sales force, etc.), and indeed in some industries the fixed costs of accessing a large market share are greater than the fixed costs of investing in the transformation of production technologies.

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Along with investments in plant and equipment, investment in productive capabilities entails training and retaining employees. It may also possibly entail sustaining learning relationships with firms that act as suppliers of inputs and distributors of outputs if these services are performed by legally independent enterprises. The theory of the optimizing firm views labor as a variable cost; a commodity that is added to and subtracted from the production process as required by the expansion or contraction of output. In fact, however, when a company enhances the productive capability of an employee, either through formal or on-the-job training, that employee’s capability takes the form of a fixed-cost asset that both can enhance the quality of the product that the innovating firm has to sell and increase the need to attain a large extent of the market to transform high fixed costs into low unit costs. When the firm succeeds in both, it generates a higher-quality, lower-cost product than was previously available. Innovation and the growth of the firm go hand in hand.

Investment in productive capabilities, including those of its labor force, drive innovation and the growth of the firm. To retain and motivate the employees that the firm has hired and trained, the innovating firm generally offers these employees higher pay, more employment security, superior benefits, and more interesting work, all of which add to the fixed cost of the asset that an employee’s labor represents. The innovating firm makes its employees better off, but it can afford, and indeed profit from, the increased labor expense when that labor’s productive capability enables the firm to gain a competitive advantage by generating high-quality, low-cost products.

The innovating firm shares the gains of innovation with its employees by making investments in what I have called their “collective and cumulative careers.” Under such circumstances, increases in labor incomes and increases in labor productivity tend to show a highly positive correlation—an interconnection that, I argue, was prevalent in U.S. business enterprises in the decades after World War II when, for white males at least, the “career with one company” was the employment norm.

When successful, the innovating firm may come to dominate its industry, but its output is far larger and its unit costs, and hence potentially its product price, far lower than they would be if a large number of small firms had continued to populate the industry. Indeed, one might even find this transition from competition to dominance manifested by the transformation of a large number of overcrowded sweatshops with alienated labor into a small number of spacious factories with highly motivated labor! The overall gains from innovation will depend on the relation between the innovating firm’s cost structure and the industry’s demand structure, while...

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the distribution of those gains among the firm’s various “stakeholders” will depend on their relative power to appropriate portions of these gains.  

What is important in the first instance is that, as a result of the transformation of technological and market “constraints,” there are gains to innovative enterprise that can be shared. In expanding output and lowering costs, it is theoretically possible (although by no means inevitable) for the gains to innovative enterprise to permit, simultaneously, higher pay, more stable employment, and better work conditions for employees; a stronger balance sheet for the firm; more secure paper for creditors; higher dividends and stock prices for shareholders; more tax revenues for governments; and higher-quality products at lower prices for consumers. Innovative enterprise provides a foundation for achieving sustainable prosperity.

TIE explains how, in the rise of the United States to global industrial leadership during the twentieth century, a “retain-and-reinvest” allocation regime enabled a relatively small number of business enterprises in a wide range of industries to grow to employ tens, or even hundreds, of thousands of people and attain dominant product-market shares. Companies retained corporate profits and reinvested them in productive capabilities, including first and foremost collective and cumulative learning. Companies integrated personnel into learning processes through career employment. Into the 1980s, the norm of a career-with-one-company prevailed at major U.S. corporations. A steady stream of dividend income and the prospect of higher future stock prices based on innovative products gave shareholders an interest in “retain-and-reinvest.”

In the immediate post-World War II decades, the beneficiaries of a retain-and-reinvest corporate resource-allocation regime were mainly white males. For minorities and women, access to more stable employment and more equitable income was bolstered by the Civil Rights Act of 1964 and the Equal Employment Opportunity Commission launched the following year. As a bellwether of progress in upward mobility, by the 1970s hundreds of thousands of blacks with no more than high-school diplomas were attaining middle-class status through employment in unionized semi-skilled operative jobs in mass-production industries such as automobiles, steel, and electronics manufacturing. White males, however, maintained privileged access to intergenerational upward mobility from blue-collar jobs to white-collar jobs as the sons of blue-collar workers obtained higher educations followed by “career with one company” employment in business corporations. In the 1970s, females (disproportionately white) with college educations also gained significantly increased access to career employment in business corporations, although their upward mobility was impeded by the persistence of the ideology that, when children arrived, they would give up or interrupt their careers to assume the traditional middle-class “stay-at-home-mother” role.

Then, however, from the late 1970s, and continuing to the present, for masses of Americans, including white males, the quantity and quality of employment opportunity that could support upward mobility eroded, while the distribution of income grew increasingly unequal. That despite

26 Lazonick, Competitive Advantage on the Shop Floor; Lazonick, “The Theory of Innovative Enterprise”
the fact that over the past forty years or so, real gross domestic product per capita has doubled in the United States.28 By the first half of the 1980s, some acute observers of blue-collar employment perceived that the U.S. income distribution was taking a “great U-turn.”29 In historical retrospect, we now know that, since that change in direction in the early 1980s, the United States has continued down the road to extreme income inequality and the erosion of middle-class employment opportunities. TIE provides a framework for analyzing this historic change in direction of U.S. economic performance—essentially the end of the national quest for sustainable prosperity—by focusing on the transformation of the dominant regime of corporate resource allocation 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.30 Since the beginning of the 1980s, employment relations in U.S. industrial corporations have undergone three major structural changes, summarized as “rationalization,” “marketization,” and “globalization,” that have eliminated existing middle-class jobs in the United States. The failure of the U.S. economy to replace these jobs with new middle-class employment opportunities cannot, however, be attributed to these changes in employment relations alone. Exacerbating the rate of job loss and limiting investment in new career employment opportunities has been the financialization of the business corporation, manifested by massive distributions of corporate cash to shareholders.

From the early 1980s, rationalization, characterized by plant closings, terminated the jobs of high-school educated blue-collar workers, most of them well-paid union members. From the early 1990s, marketization, characterized by the end of a career with one company as an employment norm, placed the job security of middle-aged white-collar workers, many of them college educated, in jeopardy. From the early 2000s, globalization, characterized by the accelerated movement of employment offshore to lower-wage nations, left all members of the U.S. labor force vulnerable to displacement, whatever their educational credentials and work experience.

Initially, these structural changes in employment could be explained as business responses to changes in technologies, markets, and competition. During the onset of the rationalization phase in the early 1980s, the plant closings were a reaction 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. During the onset of the marketization phase in the early 1990s, the erosion of the one-company-career norm among white-collar workers was a response to the dramatic technological shift from proprietary systems to open systems, integral to the microelectronics revolution; a shift that favored younger workers with the latest computer skills, acquired in higher education and transferable across companies, over older workers with many years of company-specific experience. During the onset of the globalization phase in the

28 https://fred.stlouisfed.org/series/A939RX0Q048SBEA
30 Lazonick and O’Sullivan, “Maximizing Shareholder Value.”
early 2000s, the sharp acceleration in the offshoring of jobs was a response to the emergence of large supplies of highly capable, and lower wage, labor in developing nations such as China and India which, linked to the United States through inexpensive communication and transportation systems, could take over U.S. employment activities that had become routine.

Once U.S. corporations transformed their employment relations, however, they often pursued rationalization, marketization, and globalization to cut current costs rather than to reposition their organizations to produce innovative products. Defining superior corporate performance as ever-higher quarterly earnings per share (EPS), companies turned to massive stock repurchases to “manage” their own corporations’ stock prices. Trillions of dollars that could have been spent on investment in productive capabilities in the U.S. economy over the past three decades have instead been used to buy back stock for the purpose of manipulating stock prices.

Figure 3 shows net equity issues (new stock issues less stock taken off the market through stock repurchases and M&A activity) of U.S. nonfinancial corporations from 1946 through 2016. Over the decade 2007-2016 net equity issues of nonfinancial corporations averaged -$412 billion per year. In 2016 net equity issues were -$586 billion. Over the past three decades, in aggregate, dividends have tended to increase as a proportion of corporate profits. Yet in 1997 buybacks first surpassed dividends in the U.S. corporate economy and, even with dividends increasing, have far exceeded them in recent stock-market booms.31

Figure 3. Net equity issues, U.S. nonfinancial corporations, 1946-2016


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Using the data in Figure 3, the first data column of Table 1 shows the amounts of net equity issues by nonfinancial corporations, decade by decade, from 1946 to 2015, in 2015 dollars. For the first three decades after World War II, net equity issues were moderately positive in the corporate economy as a whole. In the following decades, however, net equity issues became increasingly negative (even after adjusting for inflation). As a gauge of their growing importance in the economy, the second data column of Table 1 shows net equity issues as a proportion of GDP.

Table 1. Net equity issues by non-financial corporations in the U.S. economy, by decade in 2015 dollars, and as a percent of GDP

<table>
<thead>
<tr>
<th></th>
<th>Net equity issues, U.S. non-financial corporations 2015$ billions</th>
<th>Net equity issues as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946-1955</td>
<td>143.2</td>
<td>0.56</td>
</tr>
<tr>
<td>1956-1965</td>
<td>110.9</td>
<td>0.30</td>
</tr>
<tr>
<td>1966-1975</td>
<td>316.0</td>
<td>0.58</td>
</tr>
<tr>
<td>1976-1985</td>
<td>-290.9</td>
<td>-0.40</td>
</tr>
<tr>
<td>1986-1995</td>
<td>-1,002.5</td>
<td>-1.00</td>
</tr>
<tr>
<td>1996-2005</td>
<td>-1,524.4</td>
<td>-1.09</td>
</tr>
<tr>
<td>2006-2015</td>
<td>-4,466.6</td>
<td>-2.65</td>
</tr>
</tbody>
</table>

Sources: Net equity issues data is the same as in Figure 4, adjusted to 2015 U.S. dollars, using the consumer price index in Council of Economic Advisors, Economic Report of the President 2017, January 2017, Table B-10, at http://www.presidency.ucsb.edu/economic_reports/2017.pdf.

As shown in Figure 4, since the early 1980s, major U.S. business corporations have been doing stock buybacks on top of (and not instead of) making dividend payments to shareholders. Figure 4 shows dividends and buybacks for 236 companies that were in the S&P 500 Index in January 2016 that were publicly listed from 1981 through 2015. At the beginning of the 1980s, buybacks were minimal, and from 1981 through 1983 buybacks for these 236 companies absorbed only 4.3 percent of net income, with dividends representing 49.5 percent. The buyback proportion of net income increased to 18.8 percent in 1984 and 30.8 percent in 1985, while the dividend proportions were 42.5 percent and 52.4 percent. Thereafter, by ten-year periods, the buyback proportions of net income increased from 25.8 percent in 1986-1995 to 42.9 percent in 1996-2005 and 49.5 percent in 2006-2015, while dividend payouts over these decadal periods were 50.7 percent, 39.0 percent, and 39.1 percent, respectively. Even though dividend payout ratios were lower in 1996-2005 and 2006-2015 than in 1986-1995, total payout ratios to shareholders rose from 76.5 percent to 81.9 percent to 88.6 percent over these three periods. Most recently, the total payout ratios for these 236 companies were 97.0 percent in 2014 and 106.2 percent in 2015.
Over the past three decades, U.S. stock markets, of which the New York Stock Exchange and the National Association of Securities Dealers Automated Quotation (NASDAQ) exchange are by far the most important, have enabled the extraction of trillions of dollars from business corporations in the form of stock buybacks. Of course, some companies do raise funds on the stock market, particularly when they are doing initial public offerings (IPOs). But these amounts tend to be relatively small, swamped overall by stock repurchases, which have been mainly responsible for the hugely negative net equity issues of nonfinancial corporations shown in Figure 1. Moreover, when the most successful startups become major enterprises, often employing tens of thousands of people, they too tend to become major repurchasers of their own shares.

Why are companies doing these massive distributions to shareholders? In an article “Profits Without Prosperity” that I published in *Harvard Business Review* in 2014, I argue that the stock-based remuneration of senior executives who exercise strategic control over resource allocation in these U.S. business corporations incentivizes them to manipulate their companies’ stock prices. That is the only logical explanation for this buyback activity. Standard & Poor’s ExecuComp database provides the numbers needed to determine how much money the highest-paid corporate executives in the United States take home in total and the proportion of their total compensation which is stock based. Figure 5 shows the average total compensation of the 500 highest-paid executives in the ExecuComp database for each year from 2006 through 2015. It ranges from a low of $15.9 million in 2009, when the stock markets had crashed, with stock-
Innovative Enterprise and Sustainable Prosperity

Based pay (realized gains from stock options and stock awards) making up 60 percent of the total, to a high of $32.6 million in 2015, with stock-based gains making up 82 percent of the total. U.S. corporate executives are incentivized to boost their companies’ stock prices and are amply rewarded for doing so. In SEC-approved stock buybacks, they have at their disposal an instrument to enrich themselves. In their massive, widespread, and ubiquitous use of this instrument, they have been participating in the legalized looting of the U.S. business corporation.

**Figure 5. Mean total direct compensation, 500 highest-paid named executives in the United States, for each year, 2006-2015**

![Figure 5](image)


Note: The following extraordinarily highly paid outliers, with $1 billion or more in total compensation, have been removed: 2012, Richard Kinder, Kinder Morgan, $1.1 billion, and Mark Zuckerberg, Facebook, $2.3 billion; 2013, Mark Zuckerberg, $3.3 billion.

This stock-based pay of U.S. corporate executives is a major reason for the extreme concentration of income that has occurred since the 1980s among the richest households in the United States. Based as well on data from household federal tax filings, Figure 6 shows the share of income in the hands of the 0.1 percent of all households with the highest incomes, including capital gains, from 1916 through 2011. In 1975, the share of the top 0.1 percent was 2.56 percent of all U.S. incomes, the lowest proportion over the entire 96-year period. The highest proportion was 12.28 percent in 2007, just before the financial crisis. In the crisis, the share of the top 0.1 percent declined, but with the recovery bounced back. In 2012 (not included in Figure 6), the share of the top 0.1 percent was 11.33 percent, the fourth-highest proportion recorded.\(^\)\(^\text{33}\) Clearly, from the

\(^{33}\) The World Wealth and Income Database, at [http://topincomes.parisschoolofeconomics.eu/#Database](http://topincomes.parisschoolofeconomics.eu/#Database): United States, P99.9 income threshold. For the latest data on the pre-tax share of the top 0.1% not including capital gains, see [http://wid.world/world/#sptinc_p99.9p100_z/US/last/eu/k/p/yearly/s/false/2.9295/12.5/curve/false](http://wid.world/world/#sptinc_p99.9p100_z/US/last/eu/k/p/yearly/s/false/2.9295/12.5/curve/false)
late 1970s, on a dramatic scale, there was a reversal in the trend toward a somewhat falling share of income of the top 0.1 percent that had occurred in the decades after World War II.

**Figure 6: Share of total U.S. incomes of the top 0.1% of households in the U.S. income distribution and its components, 1916-2011**

Note that in Figure 6, a large part of the explosion of the share of the top 0.1 percent has been in the form of “salaries.” As indicated, these “salaries” include realized gains from stock-based pay—stock options and stock awards—that show up in the summary statistics of an executive’s Form 1040 tax returns (the source of these data) as “Wages, salaries, tips, etc.” Since 1976 virtually all of the realized gains from stock-based pay has been taxed at the ordinary income-tax rates and hence is not included in the “capital gains” portion of the incomes of the top 0.1 percent as shown in Figure 6.

Federal tax returns include information on a filer’s occupation and, through an employer identification number (EIN) on Form W-2, the type of business sector that provides the taxpayer with his or her primary employment income. Jon Bakija, Adam Cole and Bradley Heim accessed federal tax return data for selected years from 1979 to 2005 to analyze the occupations of federal taxpayers at the top of the U.S. income distribution. They found that “executives, managers, supervisors, and financial professionals account for about 60 percent of the top 0.1% of income earners in recent years, and can account for 70 percent of the increase in the share of national income going to the top 0.1% of the income distribution between 1979 and 2005.”

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For 2005, they found that, of taxpayers whose incomes (including capital gains) placed them in the top 0.1%, executives, managers, and supervisors in non-finance businesses made up 41.3 percent of the total, while financial professionals (including management) were another 17.7 percent. Of the 41.3 percent who were non-finance executives, managers or supervisors, 19.8 percent were salaried and the rest were in closely held businesses.\(^{35}\) Besides the 6.2 percent of the top 0.1% who were “not working or deceased,” the next largest occupational groups were lawyers with 5.8 percent, real estate with 5.1 percent, and medical with 4.1 percent.

We can use the Standard & Poor’s ExecuComp database, which compiles data on executive pay that is in SEC Form DEF 14A—the proxy statement that a company files prior to its annual general meeting of shareholders—to get an idea of the representation of high-paid corporate executives among the top 0.1% of households in the income distribution. In 2012, for example, the threshold income including capital gains for inclusion in the top 0.1% of the income distribution was $1,906,047.\(^{36}\) From the ExecuComp proxy statement data on “named” top executives (the CEO, CFO, and three other highest-paid executives), in 2012, 4,339 executives (41 percent of the executives in the ExecuComp database that year) had total compensation greater than this threshold amount, with an average income of $7,524,168. Of that amount, 64 percent were realized gains from stock-based compensation, with 32 percent derived from the exercise of stock options and the other 32 percent from the vesting of stock awards.

The number of corporate executives who, in 2012, were members of the top 0.1% club was, however, far higher than 4,339 for two reasons. First, total corporate compensation of the named executives does not include other non-compensation income (from securities, property, fees for sitting on the boards of other corporations, etc.) that would be included in their federal tax returns. If we assume that named executives whose corporate compensation was below the $1.91 million threshold were able to augment that income by 25 percent (to pick a plausible number) from other sources, then the number of named executives in the top 0.1% in 2012 would have been 5,095.

Second, included in the top 0.1% of the U.S. income distribution were a potentially large, but unknown, number of U.S. corporate executives whose pay was above the $1.91 million threshold, but who were not named in proxy statements because they were not the CEO, CFO or one of the three other highest-paid executives, as required by SEC regulations. For example, of the highest-paid IBM executives in 2012 named in the company’s proxy statement, the lowest paid had a total compensation of $9,177,663. There were presumably many other IBM executives whose total compensation was between this amount and the $1.91 million threshold for inclusion in the top 0.1%. These “unnamed” executives would have been among the top 0.1% in the income distribution.

https://web.williams.edu/Economics/wp/BakijaColeHeimJobsIncomeGrowthTopEarners.pdf. The quote is from the paper’s abstract.

\(^{35}\) Ibid., p. 38.

Therefore, top executives of U.S. business corporations—industrial as well as financial—are very well represented among the top 0.1% of the U.S. income distribution, with much, and often most, of their compensation income coming from the realized gains from exercising stock options and the vesting of stock awards. When this mode of compensating top executives is combined with the fact that Wall Street has, since the 1980s, judged the performance of corporations by their quarterly stock prices, the importance of stock-based pay in executive compensation is clear. Stock-based pay gives top executives powerful personal incentives to boost, from quarter to quarter, the stock prices of the companies that employ them. In stock buybacks, these executives have found a potent, and SEC-approved, instrument for stock-market manipulation from which they can personally benefit, even if the stock-price boosts are only temporary.

Most household income comes from working in paid employment, with the business sector accounting for about 81 percent of all U.S. civilian employment. Figure 7 shows the relation between the cumulative increase in hourly labor productivity and the cumulative increase in real hourly wages in the business sector of the U.S. economy from 1948 to 2015. From the late 1940s to the mid-1970s, rates of increase in real wages kept up with rates of increase in labor productivity—an indicator of “shared prosperity.” Beginning in the second half of the 1970s, however, the productivity growth rate began to outstrip the wage growth rate, and over the ensuing decades the gap between the two grew wider and wider, as shown in Figure 7.

**Figure 7: Cumulative annual percent changes in productivity per hour and real wages per hour, 1948-2015**

![Cumulative annual percent changes in productivity per hour and real wages per hour, 1948-2015](image)


I submit that the widening gap between productivity increases and wage increases reflects the intensification of the looting of the U.S. business corporation. Figure 8 appeared in a *New York
Times article, “Our broken economy, in one simple chart.” Based on data in household federal tax filings, in 1980, there was a negative correlation between a household’s superior position in the income distribution and its income gains since 1946. In sharp contrast, in 2014, this correlation was positive, and enormously positive for the top 0.1 percent of the income distribution. From the perspective of the Theory of Innovative Enterprise, Figure 8 charts the transition since the 1980s from retain-and-reinvest to downsize-and-distribute as the dominant norm of U.S. corporate resource allocation. And justifying this looting of the U.S. business corporation has been the neoclassical economics ideology, rooted in theory of the unproductive firm as the foundation for the most efficient economy, that, for the sake of superior economic performance, business enterprises should be run to “maximize shareholder value.”

As shown in the next section of this essay, from the 1980s neoclassical economists known as agency theorists, also mired in the theory of the unproductive firm, argued that U.S. business corporations should use stock-based pay to incentivize senior corporate executives to distribute corporate cash to shareholders for the sake of the efficient allocation of the economy’s resources. That is what agency theorists argued; extreme income inequality is what Americans got.

Figure 8: Percent change in income growth during the previous 34 years, 1980 and 2014, by percentile in the U.S. income distribution

But now, the very affluent (the 99.999th percentile) see the largest income growth.

The poor and middle class used to see the largest income growth.
4. **Agency theory and the looting of the U.S. business corporation**

Distributions of corporate cash to shareholders incentivized by the stock-based pay of senior executives are the clearest manifestations of the financialization of the U.S. business corporation. Legitimizing this financialized mode of corporate resource allocation has been the ideology that a business corporation should be run to “maximize shareholder value” (MSV). Through their stock options and stock awards, corporate executives who make the resource-allocation decisions to distribute cash to shareholders are themselves prime beneficiaries of the focus on rising stock prices, earnings per share (EPS), and “total shareholder return” (dividends plus stock-price gains) as the sole measures of corporate performance. While rationalization, marketization, and globalization have undermined stable and remunerative employment structures, the financialization of the U.S. corporation has entailed the distribution of corporate cash to shareholders through stock repurchases, often in addition to generous cash dividends. Over the past decade, at an accelerating rate, hedge-fund activists have joined senior corporate executives in the feeding frenzy in a process that can only be described as the legalized looting of the U.S. business corporation.37

The dramatic change in trajectory from retain-and-reinvest to downsize-and-distribute that has occurred in the United States over the past four decades did not have to happen. Rather, it was imposed upon the U.S. labor force by the adherence to a highly damaging and fallacious ideology of the relation between corporate governance and economic performance. The widespread acceptance of MSV ideology as a guide to U.S. corporate governance from the 1980s that resulted in the financialization of the corporation represents a quintessentially neoclassical response to innovation and competition in the new global economy—a response rooted in adherence to the theory of the unproductive firm as the ideal of economic efficiency. In the name of MSV, U.S. business executives favored living off value created in the past rather than investing in productive capabilities that could create value in the future. The result was the U-turn of the U.S. economy from a movement toward stable and equitable growth to instability, inequity, and stunted productivity.38

We should not underestimate the role of the neoclassical theory of the market economy, as espoused by both the neoclassical conservative Milton Friedman and the neoclassical liberal Paul Samuelson, as well as their academic offspring, in sanctioning (even if out of ignorance and/or naïveté) the policies that, in the name of MSV, have resulted in the looting of the U.S. business corporation. Beginning in the 1970s and with a vengeance in the 1980s, the United States as a society looked to “market forces” to respond to changes in innovation and competition. Deregulation of product markets, financial markets, and labor markets ensued. The neoclassical theory of the unproductive firm as the foundation of the most efficient economy underpinned these free-market policy choices—with, not surprisingly, disastrous results in terms of employment opportunity and income distribution. What enabled these free-market principles to gain political traction and change the socioeconomic trajectory of the United States was the rise

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of a new ideology of corporate governance, rooted in the neoclassical theory of the unproductive firm and propounded by agency theorists, who posited that, for the sake of economic efficiency, businesses should be run to “maximize shareholder value.”

If “the firm” is inherently unproductive, then the vast amounts of cash controlled by large corporations should be “disgorged,” as MSV’s most vocal academic critic, Michael C. Jensen, so crudely but evocatively put it,\(^\text{39}\) to financial markets for reallocation to their most efficient uses. Nevermind that agency theory, rooted in the neoclassical theory of the unproductive firm, has absolutely nothing to say about how business corporations grow large nor how “the most efficient uses” to which the market is supposed to allocate resources come into existence. While the rise of MSV to its status as a hegemonic ideology of U.S. corporate governance by the end of the 1980s represented the triumph of the free-market Chicago School, the East Coast liberal Samuelsonian School shared with Friedman’s Chicago School the same underlying, and intellectually debilitating, view of the unproductive firm as the ideal of economic efficiency. I know of no prominent Samuelsonian neoclassical economist, even the most progressive among them, who has been critical of MSV. Rather they have continued to spin their stories of imperfect markets and market failures while the looting of the business corporation has gone from bad to worse.

That having been said, the promulgation of MSV as a view of how the economy should operate and perform was the work of Milton Friedman’s Chicago School of Economics. In September 1970, the *New York Times Magazine* published an article by Friedman, entitled “The social responsibility of business is to increase profits”—an article which subsequently became viewed as the clarion call for the MSV version of agency theory. Friedman warns:

> In a free-enterprise, private-property system, a corporate executive is an employee of the owners of the business. He has direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom.

Friedman concludes the article by quoting himself from his 1962 book *Capitalism and Freedom*: “There is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.”\(^\text{40}\)

To produce profits, however, the firm must generate competitive—that is, high-quality, low-cost—products. On how a firm generates such products, Friedman’s *Capitalism and Freedom* has nothing to say.\(^\text{41}\) Like Samuelson, Friedman rooted his free-market argument in the ideal of


\(^{40}\) Milton Friedman, “The social responsibility of business is to increase its profits” *New York Times Magazine*, September 13, 1970.

“perfect competition” with its small unproductive firms. How does a business corporation “make as much money as possible...in open and free competition without deception or fraud”? To answer that question, Friedman would have needed a theory of innovative enterprise.

The Theory of Innovative Enterprise argues that, in a world of innovation and competition, if those who exercise strategic control over the allocation of corporate resources fail to invest in the productive capabilities that can generate innovative products, their firms will experience competitive decline. Indeed, Friedman’s own advice to corporate executives that they should avoid “social responsibility” proves this rule. At the top of Friedman’s “social responsibility” article as it appeared in the New York Times Magazine was a photo of General Motors chairman James Roche, standing at the podium at the company’s annual shareholder meeting that had taken place in May 1970, four months before the Times published Friedman’s piece (presumably as a response to ongoing efforts to make General Motors socially responsible). The editorial description of the photo states that Roche was replying to members of “Campaign G.M.,” an organization that demanded that G.M. name three new directors to represent “the public interest” and set up a committee to study the company’s performance in such areas of public concern as safety and pollution. The stockholders defeated the proposals overwhelmingly, but management, apparently in response to the second demand, recently named five directors to a “public-policy committee.” The author [Milton Friedman] calls such drives for social responsibility in business “pure and unadulterated socialism,” adding: “Businessmen who talk this way are unwitting puppets of the intellectual forces that have been undermining the basis of free society.”

Michael Olenick, who provided me with the pdf of the article as it originally appeared in the New York Times, with the photo of Roche and the editorializing on it, points out that, in historical retrospect, the demands of Campaign G.M. for safer and less polluting cars were in effect demands for G.M. to engage in automobile innovation. In the 1970s and beyond, the world leaders in producing these “socially responsible” cars would be Japanese and European companies, leaving the “profit-maximizing” General Motors lagging further and further behind. What Friedman (and, quoting him, the New York Times editor) called “pure and unadulterated socialism” proved to be the future of the automobile industry!

Meanwhile Friedman and his MSV followers, themselves indoctrinated with the theory of the unproductive firm, instructed U.S. corporate executives that they should do everything possible to resist such innovative strategies, perhaps making them, to turn Friedman on his head, “unwitting puppets of the intellectual forces” of the absurd Friedman-Samuelson view that the unproductive firm is the ideal of economic efficiency. In effect, the neoclassical economists were

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advising corporate executives to, as Robert Hayes and William Abernathy would put it in a classic 1980 Harvard Business Review article, manage their way to economic decline.43

The neoclassical theory of the unproductive firm as the ideal of economic efficiency infused the agency-theory arguments in Michael C. Jensen and William H. Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure,” the academic journal article published in 1976 that pioneered in applying agency theory to the separation of share ownership from managerial control, a dominant characteristic of the U.S. business corporation since the early twentieth century.44 On the business school faculty of the University of Rochester, an ultraconservative outpost of the Chicago School, Jensen and Meckling assumed that a public corporation should be run for the sake of its shareholders, as owners. They then posed the problem of the “optimal” ownership structure that could get managers, as their agents, to serve the interests of the supposed principals.

Jensen and Meckling view the firm as a legal fiction that can be understood as a nexus of contracts. In this contractual relation, the agency problem for owners as principals is to provide incentives to managers to behave in a way that maximizes profits for the owners. The “agency costs” of the separation of ownership and control derive from the interaction of the parties to the contract as each seeks to maximize his own utility. Jensen and Meckling pose the agency problem as susceptible to a constrained-optimization solution in which an “equilibrium” (that is, an agreed-upon contract) is achieved. There is no notion in Jensen and Meckling that, by pursuing investment strategies to transform technologies and access markets, managers can lead firms that generate gains from innovative enterprise, obviating the need for a constrained-optimization solution. Jensen and Meckling’s “Theory of the Firm” lacks a theory of innovative enterprise.

Yet agency theory would have a profound influence on the real world of corporate resource allocation.45 A critical point of departure46 was the capture in 1981 of the U.S. Securities and Exchange Commission (SEC) by free-market Chicago economists with the election of Ronald Reagan as President of the United States. Reagan’s appointment of E. F. Hutton executive John Shad as chair of the SEC put the agency that was supposed to eliminate fraud and manipulation from the nation’s financial markets under the leadership of a Wall Street banker for the first time since Joseph Kennedy had been the inaugural holder of that position in 1934-1935. Upon taking office, Shad immediately created the new post of “chief economist” at the SEC, and picked for the position a 1975 Chicago economics PhD, Charles Cox, who, in a 1976 article in the Journal of Political Economy had applied the “efficient markets hypothesis” to futures trading. In 1983, Shad

46 The following summary is based on my research in progress with Ken Jacobson of the Academic-Industry Research Network.
managed to oust his nemesis, SEC Commissioner John Evans, a Nixon appointee who believed that financial markets needed to be regulated, and put Cox in Evans’ place. Shad’s new appointee as SEC chief economist, Greg Jarrell, was an outspoken 1978 Chicago business economics PhD who came to the SEC from a junior faculty position at the University of Rochester, home of Jensen and Meckling.

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. 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. The adoption of Rule 10b-18 in 1982 was called a “regulatory about-face” from previous SEC views on the detection and prevention of manipulation through open-market repurchases. Under Rule 10b-18, a publicly listed company can do hundreds of millions of dollars per day in open-market repurchases, trading day after trading day, for the sole purpose of giving manipulative boosts to its stock price.

As it happened, on November 19 and 20, 1982, within days of the adoption of SEC Rule 10b-18, Michael Jensen and Chicago economist Eugene Fama (inventor of the “efficient market hypothesis” for stock-price determination) held a conference, “Corporations and Private Property” at the Hoover Institution at Stanford University, ostensibly to commemorate the fiftieth anniversary of the publication of Adolf Berle and Gardiner Means, The Modern Corporation and Private Property. In fact, with two joint articles by Fama and Jensen on “Ownership and Control” and “Agency Problems and Residual Claims,” the Hoover Institution conference agenda was to make shareholder-value ideology influential in the practice of corporate governance. That influence was assured when, in 1985, the president of Harvard University and the dean of Harvard Business School (HBS) convinced Jensen to leave Rochester to become an HBS professor. Figure 9, taken from a paper that presents research on mentions of “shareholder value” in the Wall Street Journal from 1965 to 2007, suggests that it was only in the mid-1980s that MSV became central to the public discourse on corporate governance.

48 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.
In an article, “Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers” that Jensen published in *American Economic Review* in 1986, he argued:

Free cash flow is 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. 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 cost or wasting it on organization inefficiencies.”

In the 1980s and 1990s, Jensen advocated the use of stock-based pay to incentive senior executives to “disgorge” the so-called “free cash flow” in the forms of buybacks and dividends.54 Yet, it is the MSV argument itself that defines what cash flow is “free”—even if it means laying off thousands of employees to do billions of dollars in buybacks to manipulate the company’s stock price. Jensen’s “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

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company that shares the gains of innovation with taxpayers and workers whose contributions of money and effort help to generate innovative products represents, for Jensen, “wasting [corporate cash] on organizational inefficiencies.”

One way of solving the “agency problem” is through what agency theorists call the “market for corporate control,” which seeks to use voting rights connected with shareholding to oust corporate executives who ignore the interests of shareholders. In practice, “the market for corporate control” takes the form of proxy contests that seek to replace board members and senior executives, a process that, as Jang-Sup Shin and I recount in a forthcoming book, was facilitated by the SEC in the 1990s by the rule that institutional investors (pension funds and mutual funds) must vote the proxies of the companies whose stocks they hold in their financial portfolios. Shin and I analyze the perpetrators of what we call “predatory value extraction” as a concatenation consisting of senior executives as value-extracting insiders, institutional investors as value-extracting enablers, and activist shareholders as value-extracting outsiders.

In short, as articulated by Jensen and others, MSV is a theory of value extraction, posing as a theory of value creation. MSV ideology is rooted in two misconceptions of the role of public shareholders in the U.S. business corporation. The most fundamental error is the assumption that public shareholders invest in the productive assets of the corporation. They do not. They allocate their savings to the purchase of shares that are outstanding on the stock market, and they are willing to do so because the liquidity of the market enables them to sell those financial assets at any time they choose. The erroneous MSV assumption that public shareholders invest in the productive assets of the company is then compounded by the fallacy 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, if and when they occur.

The agency-theory argument raises two critical and related questions: Why are public shareholders deemed to be the “principals” in whose interests the firm should be run? And what contributions do public shareholders make to the value-creation process? The answers to these questions expose agency theory’s logical and factual flaws.

Agency theory’s answer to the first question is that only shareholders invest in the firm, while all other participants in the firm provide marketable inputs for which they are paid market-determined prices. Its answer to the second question is that, having invested in the firm, public shareholders take the risks of whether those investments will yield profits or losses, and hence, for the sake of economic efficiency, only shareholders have a claim on the firm’s profits if and when there is a positive “residual” of revenues over costs.

Public shareholders do not, as a rule, invest in the firm. They invest in shares outstanding by simply purchasing them on the stock market. And in purchasing shares on a liquid stock market

55 Lazonick and Shin, *Rebalancing Value Creation and Value Extraction.*
56 Ibid.
57 Lazonick, “Creating and Extracting Value.”
such as the New York Stock Exchange or NASDAQ, public shareholders take little risk because they enjoy limited liability if they hold the shares while, at any instant and at a very low cost, they can sell the shares at the going market price.

Public shareholders are portfolio investors, not direct investors. The generation of innovative products, however, requires direct investment in productive capabilities. These investments in innovation are uncertain, collective, and cumulative. Innovative enterprise requires strategic control to confront uncertainty, organizational integration to engage in collective learning, and financial commitment to sustain cumulative learning. That is why, to understand the productivity of the firm, we need a theory of innovative enterprise.

When, as in the case of a startup, financiers make equity investments in the absence of a liquid market for the company’s shares, they are direct investors who face the risk that the firm will not be able to generate a competitive product. The existence of a highly speculative and liquid stock market may enable them to reap financial returns—in some cases, even before a competitive product has been produced. It was to make such a speculative and liquid market available to private-equity investors, who were to become known as “venture capitalists,” that in 1971 the National Association of Security Dealers Automated Quotation exchange was launched by electronically linking the previously fragmented, and hence relatively illiquid, Over-the-Counter markets. NASDAQ became an inducement to direct investment in startups precisely because it offered the prospect of a quick IPO; one that could take place within a few years after the founding of the firm.

It is for that reason that venture capitalists call a listing on NASDAQ an “exit strategy.” In effect, they are exiting their illiquid, high-risk direct investments by turning them into liquid, low-risk portfolio investments. If, after an IPO, the former direct investors decide to hold onto their shares, they are in precisely in the same low-risk portfolio-investor position as any other public shareholder: they can use the stock market to buy and sell shares whenever they so choose.

But venture capitalists are not the only economic actors who bear the risk of making direct investments in productive capabilities. 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, households as taxpayers and workers may have, by agency theory’s own logic, “residual claimant” status: that is, an economic claim on the distribution of profits if and when they occur.

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 2016 budget of the U.S. National Institutes of Health (NIH) was $32.3 billion, part of a total NIH investment in life-sciences research spanning 1938 through 2016 that added up to just under $1 trillion in 2016 dollars.\footnote{59 National Institutes of Health, “Budget,” at \url{http://www.nih.gov/about-nih/what-we-do/budget}. See also William Lazonick, Matt Hopkins, Ken Jacobson, Mustafa Erdem Sakiç, and Öner Tulum, “U.S. Pharma’s Financialized Business Model,” Institute for New Economic Thinking Working Paper No. 60, revised September 8, 2017, at \url{https://www.ineteconomics.org/research/research-papers/us-pharmas-financialized-business-model}.} Businesses that make use of life-sciences research benefit from
the public knowledge that the NIH generates. As risk bearers, taxpayers who fund such investments in the knowledge base, or physical infrastructure such as roads, have a claim on corporate profits if and when they are generated. Through the tax system, governments, representing households as taxpayers, seek to extract this return from corporations that reap the rewards of government spending.

In financing investments in infrastructure and knowledge, therefore, taxpayers make productive capabilities available to business enterprises, but with no guaranteed return on those investments. No matter the corporate tax rate, households as taxpayers face the risks that, because of technological, market, and competitive uncertainties, the enterprise will not generate the profits that provide business-tax revenues as a return to households as taxpayers on their investments in infrastructure and knowledge. Moreover, tax rates are politically determined. Households as taxpayers face the political uncertainty that predatory value extractors—financial interests who “take” far more than they “make”\(^\text{60}\) may convince government policy-makers that unless businesses are given tax cuts or financial subsidies that will permit adequate profits, they will not be able to make value-creating investments. Politicians may be put in power who accede to these demands.

\textit{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.\(^\text{61}\) Any employer who is seeking to generate a higher-quality, lower-cost product knows the profound difference in the productivity levels of those employees who just punch the clock to get their daily pay and those who engage in learning that allows them to make productive contributions through which they can build their careers, thereby putting themselves in a position to reap future returns in work and in retirement. Yet these careers and the returns that they can generate are not guaranteed, and under the downsize-and-distribute resource-allocation regime that MSV ideology—legitimized by agency theory—has helped put in place, these returns and careers have, in fact, been undermined.

Therefore, in supplying their skills and efforts to the process of generating innovative products that, if successful, can create value in the future, workers take the risk that, because of technological, market, or competitive uncertainties, the application of their skills and the expenditure of their efforts will be in vain. Far from reaping expected gains in the forms of higher pay, more job security, superior benefits, and better work conditions, workers may face cuts in pay and benefits if the firm’s innovative investment strategy does not succeed, and they may even find themselves laid off. Workers also face the possibility that, even if the innovation process is successful, the institutional environment in which MSV prevails will empower corporate executives to cut some workers’ wages and lay off others in order to extract value for shareholders, including themselves, that those workers 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 occur. MSV ignores the risk-reward relation for these two types of economic actors in the operation and performance of business corporations. Instead, based on agency theory, it erroneously assumes that shareholders are the only “residual claimants.”

The irony of MSV is that the public shareholders whom agency theory holds up as the only risk bearers typically never invest in the value-creating capabilities of the company at all. Rather, they purchase outstanding corporate equities with the expectation that, while they are holding the shares, dividend income will be forthcoming, and with the hope that, when they decide to sell the shares, the stock-market price will have risen to yield a capital gain. Following the directives of MSV, a prime way in which the executives who control corporate resource allocation fuel this hope is by allocating corporate cash to stock buybacks to pump up their company’s stock price.

Those holding onto their shares will receive cash dividends, while those wishing to sell their shares will stand a chance of reaping enhanced capital gains as higher stock prices are achieved through stock repurchases—if they are able to get the timing of the stock sales right. The assumption is that, via financial markets, shareholders will then reallocate at least a portion of their gains from dividends and stock sales to uses that are more efficient than those to which they would have been put had the funds been retained by the company.

MSV implies that shareholders derive their gains by extracting value as a reward for taking the risk of contributing to processes that create value. Thus, when corporations pay dividends or do buybacks, MSV characterizes these distributions as “returning” capital to shareholders. For example, from 2012 through the second quarter of 2017, Apple spent $151 billion on buybacks and $54 billion on dividends under its “Capital Return Program.” Yet the only time in its history that Apple ever raised funds on the public stock market was in 1980, when it collected $97 million in IPO. How can a corporation return capital to parties that never supplied it with capital? The vast majority of those who hold Apple’s publicly listed shares have simply bought outstanding shares on the stock market. They have contributed nothing to Apple’s value-creating capabilities.

Proponents of MSV may accept that a company needs to retain some cash flow to maintain the functioning of its physical capital, but they generally view labor as an interchangeable commodity whose services can be hired, and fired, as needed on the labor market. And they typically ignore the contributions that households as taxpayers make to business-value creation. Rooted in the neoclassical theory of the market economy, MSV assumes that markets, not organizations, allocate resources to their most efficient uses. Yet it is organizations—including not only

businesses enterprises, but also government agencies and household families—that make the investments in productive capabilities that determine both the “most efficient” uses that exist at a given point in time and the extent to which those “most efficient” uses become more productive over time.\(^{65}\)

Once we debunk the myth that only shareholders take risk, therefore, 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” has been 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.\(^{66}\)

Unfortunately, for lack of a theory of innovative enterprise, the vast majority of economists, be they liberal or conservative, adhere to agency theory’s contention that, for the sake of economic efficiency, the purpose of the corporation is to “maximize shareholder value.” Hence, they describe the trillions of dollars in cash flowing out of companies to the stock market as a “return” of capital to shareholders, who will then reallocate financial resources to their most efficient uses. MSV, however, can explain neither how these “most efficient uses” come into existence nor, in particular, the role of organizations in creating value in the economy.\(^{67}\)

As we have seen, for about three decades after World War II, the United States consolidated its position as the world’s leading economic power, driven by business enterprises that engaged in retain-and-reinvest. During these decades, the distribution of income became somewhat more equal and a middle class of both high-school-educated blue-collar workers and college-educated white-collar workers thrived. Over the past four decades, in contrast, the United States has experienced extreme concentration of income among the richest households and the erosion of middle-class employment opportunities for the vast majority of the population.\(^{68}\) These two economic problems are integrally related, as, under the influence of the mantra that companies should be run to “maximize shareholder value,” the resource-allocation regimes of business corporations have shifted from retain-and-reinvest to downsize-and-distribute.\(^{69}\)

5. **Eradicating Shareholder Value as an Ideology of Corporate Governance**

Why have agency theorists gotten it so wrong? Because, like neoclassical economists more generally, they lack a theory of innovative enterprise: a theory of how business organizations transform technologies and access markets to generate products higher in quality and lower in cost than those previously available. Yet these innovative products are the basis of economic growth. Moreover, based on comparative-historical analysis, I contend that the ways in which

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\(^{65}\) Lazonick, “Innovative Enterprise or Sweatshop Economics?” and references therein.


\(^{68}\) Ibid.

\(^{69}\) Lazonick and O’Sullivan, “Maximizing Shareholder Value”; Lazonick, “Stock Buybacks.”
innovative enterprises allocate resources and returns provide microfoundations for not only economic growth but also the employment stability and income equity that are associated with a robust and expanding middle class.\textsuperscript{70}

If agency theorists have a coherent theory of the firm, it is the notion that the small, unproductive firm that optimizes subject to given technological and market constraints provides the microeconomic foundation for the most efficient economy. As we have seen, hypothetical firms of this description play the leading role in the absurd theory known as “perfect competition.” From such a neoclassical perspective, it is markets, not organizations, that allocate resources to their most efficient uses. From this perspective, the large corporations that have dominated the U.S. economy for over 100 years are massive “market imperfections.” In line with this reasoning, if we want a more efficient economy, corporate executives should be incentivized, as Michael Jensen and his acolytes have told us, to “disgorge the free cash flow.”

With its MSV ideology, agency theory is a theory of value extraction without a theory of value creation. It is not surprising, therefore, that Jensen’s 1993 American Finance Association presidential address, “The Modern Industrial Revolution, Exit, and The Failure of Internal Control Systems,”\textsuperscript{71} is, as the title states, all about \textit{exiting} existing industrial investments, not about \textit{entering} new ones. Jensen even interprets Joseph Schumpeter’s notion of “creative destruction” as being about “efficient exit”, i.e., “destruction”,\textsuperscript{72} when in fact Schumpeter’s entire theoretical orientation was toward the conditions for “entry” through entrepreneurship and innovation: that is, toward the “creative” part of the catchphrase, the part that called for making old ways of doing things obsolete (to which Schumpeter’s “destruction” refers).\textsuperscript{73} To understand entry, one needs a theory of innovative enterprise, which is precisely what agency theory lacks.

The Theory of Innovative Enterprise recognizes roles of households acting as taxpayers, workers, consumers, savers, and investors in the value-creation process, and hence provides an economic rationale for their claims on the extraction of value from that process. Through government agencies, households as taxpayers make investments in physical infrastructure and human knowledge without which even, and perhaps especially, the largest business enterprises would not be able to generate competitive products. Hence, through the tax system, the body of taxpayers should get shares of corporate profits if and when they accrue. Through the employment relation, households as workers supply business enterprises with skill and effort that are central to the processes of generating competitive products. Hence, through job stability as well as higher pay and benefits, workers should also share in profits if and when they accrue.


\textsuperscript{72} Ibid., 833.

Through demand for goods and services, households valorize the products that businesses generate. Hence, households should gain from the innovative capabilities of companies through the production of higher-quality, lower-cost products, which is indeed the purpose of the business corporation.

Finally, The Theory of Innovative Enterprise permits the distinction between investors, who participate in the process of value creation, and savers, who derive incomes from the process of value extraction. Investors in value creation provide financial commitment to industrial enterprises to sustain the development and utilization of productive resources, and hence should receive an equitable share of profits from the generation of competitive products if and when they accrue. In contrast, savers who, as value extractors, use their money to purchase outstanding corporate shares without in any way contributing to the value-creation process should get an income in the form of dividends after all other valid claims of value creators have been paid. In providing financial liquidity, the stock market permits this separation of ownership and control, making savers as passive shareholders able and willing to place their savings in securities in the hope that they will be able to obtain dividends or, if they choose to sell their shares, capital gains.

Innovative enterprise solves the agency problem. By incentivizing and rewarding the real value creators, the innovative enterprise can mobilize the skill, effort, and finance that, by generating high-quality, low-cost products, can improve the performance of the economy—defined in terms of stable and equitable economic growth. The application of innovation theory to corporate governance solves the “agency problem” by setting up governance structures that induce individuals with varied hierarchical responsibilities and functional specialties to work together in business organizations toward the achievement of higher levels of productivity, embodied in higher-quality, lower-cost products. These value-creators share in the gains to innovative enterprise, and they collectively support tax payments as returns for governmental contributions to the value-creation process.

As I have argued elsewhere, the United States can start the transition from the value-extracting economy to the value-creating economy by banning stock buybacks, compensating senior executives for their contributions to the value-creating enterprise, placing representatives of households as workers and taxpayers on corporate boards, and reforming the tax system so that it recognizes and supports the investment triad. No progress will be made, however, as long as agency theory with its MSV ideology holds sway. By replacing agency theory with innovation theory, academics can contribute to the process of putting the United States and other nations on a path to achieving stable and equitable growth. The Theory of Innovative Enterprise offers a relevant and rigorous analytical perspective that can educate academics, policy-makers, and the informed public about how a prosperous economy functions and performs. We may then possess the collective intellectual capability to formulate polices that govern business enterprise for the sake of sustainable prosperity.

Lazonick, “The Value-Extracting CEO.”