CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

1 Productive Capabilities and Sustainable Prosperity

"Sustainable prosperity" denotes an economy that generates stable and equitable growth for a large and growing middle class. From the 1940s into the 1970s, the United States appeared to be on a trajectory of sustainable prosperity, especially for white-male members of the US labor force.[1] Since the 1980s, however, an increasing proportion of the US labor force has experienced unstable employment and inequitable income, while growing numbers of the business corporations upon which they rely for employment have experienced anemic productivity growth.[2]

Stable and equitable growth requires innovative enterprise. The essence of innovative enterprise is investment in productive capabilities that can generate higher-quality, lower-cost goods and services than those previously available. The innovative enterprise tends to be a business corporation – a unit of strategic control that, by selling products, must make profits over time to survive. In a modern society, however, business corporations are not alone in making investments in the productive capabilities required to generate innovative goods and services. Household units and government agencies also make investments in productive capabilities upon which business corporations rely for their own investment activities. When they work in a harmonious fashion, these three types of organizations – household units, government agencies, and business corporations – constitute "the investment triad."[3]

[1] William Lazonick, Philip Moss, Hal Salzman, and Öner Tulum "Skill Development and Sustainable Prosperity: Collective and Cumulative Careers versus Skill-Biased Technical Change," Institute for New Economic Thinking Working Group on the Political Economy of Distribution Working Paper No. 7, December 2014, https://www.ineteconomics.org/research/research-papers/skill-development-and-sustainable-prosperity-cumulative-and-collective-careers-versus-skill-biased-technical-change; William Lazonick, "Labor in the Twenty-First Century: The Top 0.1% and the Disappearing Middle Class," in Christian E. Weller, ed., *Inequality, Uncertainty, and Opportunity: The Varied and Growing Role of Finance in Labor Relations*, Cornell University Press, 2015: 143–192; William Lazonick, Philip Moss, and Joshua Weitz, "How the Disappearance of Unionized Jobs Obliterated an Emergent Black Middle Class," Institute for New Economic Thinking Working Paper No. 125, June 15, 2020, https://www.ineteconomics.org/research/research-papers/how-the-disappearance-of-unionized-jobs-obliterated-an-emergent-black-middle-class.

[2] William Lazonick, "The New Normal is 'Maximizing Shareholder Value': Predatory Value Extraction, Slowing Productivity, and the Vanishing Middle Class," *International Journal of Political Economy*, 46, 4, 2017: 217–226; William Lazonick, and Jang-Sup Shin, *Predatory Value Extraction: How the Looting of the Business Corporation Became the US Norm and How Sustainable Prosperity Can Be Restored*, Oxford University Press, 2020, Ch. 1; William Lazonick, Philip Moss, and Joshua Weitz, "'Build Back Better' Needs an Agenda for Upward Mobility," *Institute for New Economic Thinking*, January 25, 2021, https://www.ineteconomics.org/perspectives/blog/build-back-better-needs-an-agenda-for-upward-mobility.

[3] William Lazonick "The Investment Triad and Sustainable Prosperity," in Peter Creticos, Larry Bennett, Laura Owen, Costas Spirou, and Maxine Morphis-Riesbeck, eds., *The Many Futures of Work: Rethinking Expectations and Breaking Molds*, Temple University Press, 2021: 120–151.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

The Biden administration's Build Back Better agenda to restore sustainable prosperity in the United States has focused on investment in productive capabilities by two of the three types of organizations in the triad: *government agencies*, implementing the Infrastructure Investment and Jobs Act of 2021, supplemented by the CHIPS and Science Act of 2022 as well as the Inflation Reduction Act of 2022,[4] and *household units,* envisioned by the American Families Act, which, blocked in the Senate, fell by the wayside during the first two years of Joe Biden's presidency.[5] Largely absent, from the Build Back Better agenda have been policy initiatives to ensure that, given government and household investment in productive capabilities, the executives who control resource allocation in major US *business corporations* have both the abilities and incentives to invest in innovation.

This lacuna is problematic because many of the largest industrial corporations in the United States place a far higher priority on distributing cash to shareholders in the form of dividends and share repurchases for the sake of higher stock yields than on investing in the productive capabilities of their workforces for the sake of innovation. Based on analyses of the "financialization" of major US business corporations, I argue that, unless the Biden administration includes an effective policy agenda to ensure corporate investment in innovation, its program for attaining stable and equitable growth will fail.

What does the investment triad do?

- *Household units* invest in the education of the young with a view toward providing them with the knowledge and aptitudes that they will need to function as productive adults. Later, these younger adults may use the income from productive employment to raise families of their own. Critical determinants of household investments in productive capabilities are the employment incomes earned by parents, their provision of household services, the quality of education available to the young, and the number of years over which they receive their education. Household units also invest in critical

[4] US House of Representatives, "H.R. 3684 – Infrastructure Investment and Jobs Act," 117th Congress (2021–2022), *Congress.gov*, November 15, 2021, https://www.congress.gov/bill/117th-congress/house-bill/3684; US House of Representatives, "H.R. 4346 – Chips and Sciences Act," 117th Congress (2021–2022), *Congress.gov*, August 9, 2022, www.congress.gov/bill/117th-congress/house-bill/4346. (Note: Technically, the Chips-Plus package, or what is often called the CHIPS and Science Act, combines "CHIPS Act"; "Research and Development, Competition and Innovation Act"; and "Supreme Court Security Funding Act"); US House of Representatives, "H.R. 5376 – Inflation Reduction Act of 2022," 117th Congress (2021–2022), *Congress.gov,* August 16, 2022, www.congress.gov/bill/117th-congress/house-bill/5376/text.

[5] US House of Representatives, "H.R. 928 – American Family Act of 2021," 117th Congress (2021–2022), *Congress.gov,* February 8, 2021, https://www.congress.gov/bill/117th-congress/house-bill/928.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

physical infrastructure in the form of homes. A productive society requires these investments from the *supportive family.*

- *Government agencies* support investments in productive capabilities made by household units by providing schooling that households could not afford on their own. A well-financed primary, secondary, and tertiary education system is a necessary condition for society to embark on a path of sustained development that can enable most of the population to attain higher living standards.[6] By supporting basic and applied research, government agencies can also be charged with investing in the creation of new scientific and engineering knowledge that would otherwise not come into existence. As a critical component of investment in productive capabilities, government agencies provide services for public and personal health. In addition, government agencies invest in physical infrastructure such as transportation systems, communication systems, energy systems, and water and waste systems. Government investments in productive resources, both human capabilities and physical infrastructure, manifest the presence of the *developmental state.*
- *Business corporations* make use of the capabilities and infrastructure provided by government and household investments as foundations for further in-house investment in human resources in combination with expenditure on plant and equipment. Their purpose is the generation of goods and services to be sold in product markets at prices that exceed costs. In high-tech fields, business corporations may need to make specialized in-house investments in capabilities to absorb the advanced knowledge resulting from investments by government agencies. In many cases, government agencies make strategic investments in knowledge creation through business corporations in the form of research contracts, procurement contracts, and financial subsidies. It is typically through on-the-job experience in business corporations and government agencies that individuals build on their formal educations and 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 *innovative enterprise.*

The fundamental weakness of the neoclassical theory of the market economy, which dominates the conventional view of how an advanced economy should function to achieve superior economic performance, is that it lacks a theory of

[6] William Lazonick, *Sustainable Prosperity in the New Economy? Business Organization and High-Tech Employment in the United States*, Upjohn Institute for Employment Research, 2009, Ch. 5, https://research.upjohn.org/up_press/13/.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

innovative enterprise.[7] Indeed, the conventional "theory of the firm" that posits "perfect competition" as the ideal, even if unattainable, foundation for superior economic performance is based on the obviously absurd argument that the more unproductive the firm, the more efficient the allocation of the economy's resources.[8] This view of the world promotes government policies that seek to make "the market" omnipotent and "the firm" impotent in the resource-allocation process.[9]

If a society wants to attain higher living standards, it needs highly productive, and powerful, business corporations that transform technologies and access markets to generate higher-quality, lower-cost products – the definition of innovative enterprise. The most successful of these corporations inevitably gain substantial power over the allocation of the economy's resources and the operation of its markets. If left unchecked, these powerful corporations can fall prey to "predatory value extraction," as certain parties, including senior executives and activist shareholders who extract far more value from the corporations than they contribute to value creation by the corporation, exercise strategic control over the allocation of the corporation's vast resources.[10] For the sake of attaining stable and equitable growth, these large and powerful corporations must be governed for the common good. The centrality of the investment triad to innovative enterprise provides an economic as well as moral basis for the implementation of institutions of corporate governance for achieving these social objectives.[11]

With appropriate governance institutions in place, 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 relationship.

[7] William Lazonick, *Business Organization and the Myth of the Market Economy*, Cambridge University Press, 1991; William Lazonick and Mary O'Sullivan, eds., *Corporate Governance and Sustainable Prosperity*, Palgrave, 2002; Lazonick, *Sustainable Prosperity*; Lazonick and Shin, *Predatory Value Extraction.*

[8] William Lazonick, "Is the Most Unproductive Firm the Foundation of the Most Efficient Economy? Penrosian Learning Confronts the Neoclassical Fallacy," *International Review of Applied Economics*, 36, 2, 2022: 1–32.

[9] William Lazonick, "The Theory of the Market Economy and the Social Foundations of Innovative Enterprise," *Economic and Industrial Democracy*, 24, 1, 2003: 9–44.

[10] Lazonick and Shin, *Predatory Value Extraction*.

[11] See William Lazonick, "Maximizing Shareholder Value as an Ideology of Predatory Value Extraction," in Knut Sogner and Andrea Colli, eds., *The Emergence of Corporate Governance*, Routledge, 2021: 170–186.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

Business corporations provide adults in household units with employment that, with sufficient productivity, should enable them to support their families. Through formal and on-the-job training, business corporations also invest in the capabilities of people whom they employ. A corporation has an incentive to retain the people whom it has trained. It generally does so through pay increases and promotions to jobs that require superior functional capabilities and greater hierarchical responsibilities. Indeed, households' living standards rise over time primarily through augmented pay and promotions for valued employees in stable employment relations at innovative enterprises. It is through the employment relations of innovative enterprises, not labor-market supply and demand, that a nation such as the United States can generate the stable and equitable growth that supports a thriving middle class.[12]

In short, the investment triad puts in place the productive capabilities that are essential to a prosperous economy. Investments in human capabilities and physical infrastructure by household units, government agencies, and business corporations must be financed. Investments in educating the labor force and the housing stock in which families reside are generally funded by some combination of after-tax household incomes supplemented by household debt, along with government tax revenues supplemented by debt issues at the local, state, and federal levels. To some extent, business corporations finance the education of the labor force through corporate taxes, philanthropic contributions, and direct payments to employees for their own educations or their children's schooling as part of employment benefits. Corporate taxes can also be important for funding government investments in physical infrastructure.

Ultimately, the ability of household units and government agencies to afford investments in productive resources requires that business corporations utilize and further develop those investments in human capabilities and physical infrastructure. These business corporations must produce and sell competitive – high-quality, low-cost – products to survive. The innovative enterprise generates these competitive products, making it central to the triadic investment system that can put a society on a path to sustainable prosperity.

The business corporations that dominate the US economy are very large. Table 1 shows the distribution of US business-sector civilian employment by firm size for 2019. Business-sector employment is about 85 percent of total civilian employment in the US economy. In 2019, 2,230 corporations with 5,000 or more employees in the United States, with an average of 21,223 people on the payroll, accounted for 35.6 percent of all US business-sector employees and 40.7 percent of payrolls. Just 540 corporations with 20,000 or more

[12] Lazonick, "Labor in the Twenty-First Century"; Lazonick, "Is the Most Unproductive Firm."

© in this web service Cambridge University Press & Assessment www.cambridge.org

Table 1 Business firms in the US economy, by establishments, employees, and payrolls, 2019

2019	Firms	Establishments	Paid employees	Annual payroll	Number of firms	Average number of employees
	Number	Number	Number	$ Billions		
All firms	6,102,412	7,959,103	132,989,428	7,429	6,102,412	22
Percent of all firms	%	%	%	%		
<5 employees	61.89	47.5	4.5	4.0	3,777,085	1.6
5–19 employees	27.11	21.4	11.5	8.4	1,654,456	9.3
20–99 employees	9.10	9.1	16.4	13.4	555,046	39
100–499 employees	1.56	4.7	14.0	13.6	94,957	196
500+ employees	0.34	17.2	53.6	60.6	20,868	3,416
5,000+ employees	0.04	11.5	35.6	40.7	2,230	21,223
10,000+ employees	0.02	9.7	29.8	33.8	1,122	35,346
20,000+ employees	0.01	7.7	23.7	26.1	540	58,357

Source: US Census Bureau, "2019 SUSB Annual Data Tables by Establishment Industry," Data and Maps, February 2022, https://www.census.gov/data/tables/2019/econ/susb/2019-susb-annual.html.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

employees, averaging 58,357 employees, represented 23.7 percent of all business-sector employees and 26.1 percent of all payrolls.

The resource-allocation decisions of these large corporations have a preponderant influence on the operation and performance of the US economy, including investment in the productive capabilities of the labor force that are integral to the investment triad. In Section 2, drawing on the experience of the US economy over the past seven decades, I summarize how the United States moved toward stable and equitable growth from the late 1940s through the 1970s under a "retain-and-reinvest" corporate resource-allocation regime at major US business corporations. Companies retained a substantial portion of their profits to reinvest in the productive capabilities under their control, including those of employees, who (unlike plant and equipment) could at any point in time take their "human capital" elsewhere but who had the realistic expectation of a stable, well-paid career with one company (CWOC).

In contrast, since the early 1980s, under a "downsize-and-distribute" corporate resource-allocation regime, unstable employment, inequitable income, and sagging productivity have characterized the US economy.[13] In the transition from retain-and-reinvest to downsize-and-distribute, many of the largest, most powerful corporations have adopted a "dominate-and-distribute" regime: Based on the innovative capabilities that they have previously developed, they dominate their industries but prioritize shareholders in the allocation of corporate resources.

The practice of open-market share repurchases – aka stock buybacks – at major US business corporations has been central to the dominate-and-distribute and downsize-and-distribute regimes. Since the mid-1980s, stock buybacks have become the prime mode for the legalized looting of the business corporation. I call this looting process "predatory value extraction"[14] and contend that it is the fundamental cause of the increasing concentration of income among the richest household units and the erosion of middle-class employment opportunities for most Americans.

I conclude the Element by outlining a policy framework that, by directly confronting predatory value extraction, could stop the looting of the business corporation and put in place social institutions that support sustainable prosperity. The agenda includes (a) a ban on stock buybacks done as open-market repurchases, (b) changes in incentives for senior corporate executives that disconnect their compensation from the company's stock yields, (c) representation of workers and taxpayers as directors on corporate boards, (d) reform of the

[13] William Lazonick and Mary O'Sullivan, "Maximizing Shareholder Value: A New Ideology for Corporate Governance," *Economy and Society*, 29, 1, 2000: 13–35.
[14] Lazonick and Shin, *Predatory Value Extraction*.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

tax system to reward innovation and penalize financialization, and, (e) guided by the investment-triad framework, government–business collaborations to support "collective and cumulative careers" of members of the US labor force. Sustained investment in human capabilities by the investment triad, including business corporations, would make it possible for an ever-increasing portion of the US labor force to engage in productive careers that underpin upward socioeconomic mobility, manifested by a growing, robust, and hopeful American middle class.

2 Innovative Enterprise

An economy cannot attain stable and equitable growth unless its major business corporations focus on investing in productive capabilities for the sake of generating higher-quality, lower-cost – that is, innovative – products. Innovative enterprise is a necessary condition for a nation's population to attain higher living standards on a sustainable basis. The innovation process that can generate a higher-quality, lower-cost product is uncertain, collective, and cumulative. Hence, a theory of innovative enterprise must comprehend these characteristics of the innovation process.[15]

- *Uncertain*: When investments in transforming technologies and accessing markets are made, the product and financial outcomes cannot be known in advance. If they were, the result would not be innovation. Hence the need for *strategy.*
- *Collective*: To generate a higher-quality, lower-cost product, the business 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. These organizational-learning processes must be sustained continuously over time until financial returns can be generated through the sale of innovative products. Hence the need for *finance.*

Strategy, organization, and finance are generic activities in the operation of any business corporation. But it is the social content of these generic activities, embodied in distinctive social relations, that can transform the interaction of strategy, organization, and finance into innovative performance. Even a relatively

[15] William Lazonick, "The Theory of Innovative Enterprise: Foundations of Economic Analysis," in Thomas Clarke, Justin O'Brien, and Charles R. T. O'Kelley, eds., *The Oxford Handbook of the Corporation*, Oxford University Press, 2019: 490–514.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

small company is a highly complex social organization. What I call the "social conditions of innovative enterprise" framework provides a conceptual guide to empirical company-level investigation of how a business enterprise operates and performs over time. Specifically, in the implementation of the three generic business activities, strategic control, organizational integration, and financial commitment are social conditions that can enable the corporation 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 productive capabilities can enhance the corporation's existing capabilities. Their incentives depend on alignment of their personal interests with the corporation's purpose of generating innovative products.
- **Organizational integration**: Implementation of an innovation strategy requires integration of people working in a complex division of labor into collective and cumulative learning processes. 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 accumulate over time, the sustained commitment of "patient capital" must keep the learning organization intact. For a young company that, because it is a "start-up," has not yet been able to turn a profit, various forms of "venture capital" can provide financial commitment. For a going concern that has achieved sustained profitability, retained earnings – leveraged, if need be, by debt issues – are the foundation of financial commitment.

The uncertainty of an innovation 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. Fixed cost derives from both the size and the duration of the innovation investment strategy. If the size of investment in physical capital tends to increase the fixed cost of an innovation strategy, so too does the duration of the investment required for an organization to engage in the collective and cumulative – or organizational – learning that, by transforming technologies and accessing markets, can result in innovative products.

An innovation strategy that may eventually enable the enterprise to develop a higher-quality product may place that company at a competitive disadvantage if it only attains low levels of output. The high fixed cost of an innovation strategy creates the company's need to attain a high level of utilization of the

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-1-009-41073-1 — Investing in Innovation
Confronting Predatory Value Extraction in the U.S. Corporation
William Lazonick
Excerpt
More Information

productive resources it has developed – that is, "economies of scale." Given its existing productive capabilities, the innovating firm may experience increasing cost to maintain the productivity of variable inputs it buys as needed on the market to expand production. To overcome the constraint on its innovation strategy posed by reliance on the market to supply an input that results in increasing cost, the innovating firm integrates the production of the supply of that input into its internal operations. The development of the productive capability of this newly integrated input, however, adds to the fixed cost of the innovation strategy. The innovating firm is now under even more pressure to expand its sold output to transform high fixed cost into low unit cost.

The company's higher-quality product enables it to access a larger portion of the market than its competitors. The fixed cost of the innovation strategy depends, however, on investments in not only transforming technology but also accessing markets. Besides distribution facilities, accessing a larger market share may entail fixed costs for branding, advertising, distribution channels, and a salaried sales force. Learning about what potential buyers want, and convincing potential buyers that the company's product is actually "higher quality," add to the fixed cost of the innovation strategy.

Indeed, in some industries, the fixed cost of accessing a larger market share is greater than the fixed cost of investing in the transformation of product and process technologies. An increase in fixed cost of accessing the market requires an even larger extent of the market to convert high fixed cost into low unit cost. A potent way for an innovating firm to attain a larger extent of the market is for the company to share some of the gains of this cost transformation with its customers in the form of a lower product price.

Along with investment in plant and equipment, investment in productive resources entails training and retaining employees. When a company enhances an employee's productive capability, through either formal or on-the-job training, the employee's upgraded capability represents a fixed-cost asset that can improve the quality of the innovating firm's product, which in turn can enable the company to attain a larger extent of the market to transform the increased fixed cost of its investment in human resources into low unit cost. When the company succeeds in generating a higher-quality, lower-cost product, innovation drives its growth.

To retain and motivate the employees whom the company has hired and trained, the innovating firm can offer them 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. If these rewards to employees result in innovative products, the gains of employees may represent contributions to value creation that make the company an even more profitable

© in this web service Cambridge University Press & Assessment www.cambridge.org