past two centuries. I suspect there are many writers, in both the academic and journalistic worlds, who will find his research immensely valuable when forming their own theories of acceptable—or exemplary—corporate conduct.

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The Value of Everything
Mariana Mazzucato
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Mariana Mazzucato's *The Value of Everything* is premised upon her previous research into debunking myths about lone entrepreneurs and startups and ignoring a key actor of "first resort"—the state. Because of this "glaring omission," she believes that our economic theory of value creation is flawed, and this conceptual flaw is a major reason for the growing problem of wealth inequality in Western nations. Her question? Are we sure that much of what is passing for "value creation" is not just "value extraction" in disguise? She argues that this blurring of two different economic concepts is precisely what has occurred in post-World War II industrial economies.

Mazzucato, director of the Institute for Innovation and Public Purpose at University College London, defines value as "the production of goods and services" and focuses her narrative on the "wealth creators" and the forces that produce it ("the process"). By value extraction, Mazzucato identifies the "rent seekers": those industries that charge above the competitive price or where oligopolies block other companies from industry entry and thus retain their monopolistic advantage. Critics view this "predatory capitalism"—combining weak government antitrust enforcement and monopolistic practices—as the primary driver of why the 1 percent of the wealthiest in the United States have risen to power over the remaining 99 percent.

According to Mazzucato, understanding the history of the "production boundary"—and specifically what lies inside this boundary and outside of it—is critical to understanding how theories of value have evolved over the last 300 years. Inside this boundary has included all productive activities generated by the wealth creators, while outside the boundary lay the rent seekers. Such rent seekers benefit due to their monopolistic behavior or because wealth from the productive side is redistributed to them ("wealth extractors"). As Mazzucato explains in the early part of her book (Chapters 1 and 2), the boundary ("production frontier") between the "makers" and "takers" has not been fixed but has shifted due to social, political, and economic forces. These forces have influenced the development of government measures of growth of the economy. More important, Mazzucato argues that the production boundary began to blur in the latter half of the 19th century so that almost anything that could attract a price in the marketplace could successfully claim value, including financial services (but, interestingly, not government).

Chapter 3 reviews the arcane world of national income accounts. Today's national accounts include decisions about what constitutes value by blending any goods and services priced and exchanged legally. Mazzucato's criticism of this approach is that it now includes "politically pragmatic decisions" such as accommodating technological change in the information and communications technology (ICT) industry or new services and products offered in the overinflated financial sector. This, however, leads to a flexible production boundary that allows former nonmembers of the "wealth creators" to lobby ("rent-seek") to move from the "unproductive" to the "productive" side, and their formerly value-extracting activities are then counted in national gross domestic product (GDP) (with few noticing this transition).

In Chapters 4, 5, and 6, Mazzucato evaluates the rapid growth in the financial services sector in the late 20th century. For example, economists viewed this sector as rather "unproductive"—simply transferring existing value—through the 1960s. Yet, by the later part of the century, it had evolved to a "productive" status. Today, in its 21st century reincarnation, the financial services sector is widely recognized as earning profits from a wide variety of services. Mazzucato, however, remains unconvinced that this transformation is inherently productive rather than the result of political expediency and the success of rent-seeking activities by this industry. Moreover, she questions how the expansion of financial intermediaries (the asset management industry) and the actual risks they have taken on justify the lucrative financial rewards they accrue. Her analysis finds that fund management and private equity have contributed far less to the productive economy than what the industry asserts.

Mazzucato argues that, until activities in the financial sector are accurately accounted for in national income accounts (are they rents or profits?), no serious debate on financial reform can take place. She believes that, if we can properly address this issue, society can better understand the dynamics of value destruction in the 2008–09 world financial crisis. Mazzucato also evaluates the financialization of the whole economy. She drills down on the concept of maximizing shareholder value (MSV), a short-term perspective that arose in the 1970s as a way to revitalize floundering corporate profits. Allegedly, following the Friedman maxim, MSV invoked the main purpose of the firm: creating value for shareholders. Mazzucato argues that MSV has been detrimental to long-term economic growth, rewarding shareholders (identified as the biggest risk takers) with short-term gains (and increasing the influence of fund managers) at the long-term expense of companies (who should be reinvesting in research and development and employee skills development). Alternatively, Mazzucato proposes a stakeholder management approach sharing risks and rewards among multiple company risk takers over the long term.

In Chapter 7, Mazzucato directly addresses risk taking and the process of capturing radical technological innovation. While innovation is one of the riskiest and uncertain activities in capitalism, she acknowledges such efforts often fail. Mazzucato identifies the prevailing biased view of public-sector risk taking as generally ignored in the technological innovation narrative, with the state seen as merely facilitating and reducing risk for private-sector initiatives. This narrative has resulted in ongoing policy reforms strengthening the existing intellectual property rights (IPR) system, which in turn has strengthened the power of incumbents, thereby limiting innovation and creating what Mazzucato calls "unproductive entrepreneurship." She further argues against the false presentation of entrepreneurs and venture capitalists as the most dynamic actors in modern capitalism and as wealth creators. Offering their platform technologies in the sharing economy, the tech giants claim value in their innovation, but Mazzucato argues that they are less about genuine innovation and much more to do with facilitating value extraction through rent capture.

Chapter 8 focuses on what Mazzucato calls the "underestimated" public sector. She argues that, in the same way and in the same period (the 1980s) that finance emerged as productive, the public sector shifted to an unproductive status. According to modern neoclassical economic theory, government's role is to fix private-sector market failures rather than actively creating and shaping markets. This fundamentally affects how government views itself—that is, inefficient, ineffective, and careful of not being accused of crowding out innovation or of "picking winners." Mazzucato notes that government remains unaccounted for in GDP accounting, and she suggests a societal debate of a "new and deeper understanding of public value." Such public value, she argues, should be a product of the whole society and is a goal useful to "shape markets." Mazzucato wants public institutions to "think big" and play a major role in the transformations to come, including the "issues of climate change, ageing populations, and the need for twenty-first century infrastructure and innovation."

Chapter 9 concludes the book with the "economics of hope." Triggered by criticisms of the modern, "dysfunctional" capitalist systems—ranging from it is too "speculative," to it rewards "rent seekers" over "wealth creators," to encouraging rampant growth of finance over job creation—has led to a series of proposed reforms. These reforms include focusing the financial sector on long-run investments, new corporate governance structures less focused on quarterly returns, taxing speculative trades more heavily, and curbing excess executive pay.

Mazzucato, however, offers her own set of policy prescriptions. First, policymakers should be "emboldened" to negotiate symbiotic public-private partnerships, such as in the financial services sector, where new mission-oriented, state investment banks can provide strategic, long-term finance necessary for high-risk investments required for the R&D for real value creation. Second, patent law should be encouraged to foster research into needed essential drugs rather than for blocking competition and innovation through the application of strong and wide patents. Mazzucato further suggests granting fewer patents upstream, allowing the tools for biopharmaceutical research to be open access for all competitors. Third, more thinking in the ICT and digital sectors is necessary concerning the appropriate tax system for companies like Uber and Airbnb, which Mazzucato argues would never have existed without publicly funded technologies such as GPS and the Internet. Fourth, public investment cannot be limited to traditional infrastructure projects and should be extended to "green transformation." Says Mazzucato: "A green revolution will require deliberate and conscious changes in social values; a redirection of the entire economy, transforming production, distribution and consumption in all sectors."

Crucially, it is imperative that the reader understands that Mazzucato takes issue with the modern neoclassical economics position that price is the determinant of the value of products and services. She believes that the modern price system distorts the historically traditional view of value creation where specifically identified human, physical, and intangible resources produce new goods and services, rather than by individuals who decide what is valuable to them (and signaling such "wealth-creating value" by paying the price for such products or services). In other words, socially constructed value results in a price, rather than price designating value. To this end, Mazzucato spends little time emphasizing individual liberty and market freedom. Instead, most of her intellectual efforts are geared to explaining institutional examples of societal collective choice.

She argues that many activities, such as many of those found in the financial services sector, simply move existing resources around without creating any new value, resulting in value extraction. Is there evidence of this in the financial services sector? Certainly, but the financial services market has been adjusting in recent years, specifically with the growth in low-cost asset management services (now accelerating with the emergence of fintech) capturing an increasing share of this market. Moreover, Mazzucato's view of venture capitalists as being far from real risk takers is strangely naïve. The data show that venture capitalists are likely to invest in a successful venture once or twice among every 10 invested projects. On average, a 15 percent success rate still leaves an 85 percent failure rate—a high-risk endeavor in most people's opinion.

The biopharmaceutical industry is also a target for Mazzucato. As an example of value extraction, she points to Gilead's Harvoni, an effective treatment for hepatitis C first commercially available in 2014. According to Mazzucato, the drug's $94,500 initial list price for a 12-week treatment plan had no basis in the true cost of developing and manufacturing this pharmaceutical (regardless of the astronomical commercial failure rates in this industry). Most important, says Mazzucato, given the high public subsidies in basic research for this industry, "drug prices are not falling." In fact, competitors of Gilead had driven the drug list price for Mavyret, a comparably effective treatment, down to $26,400 for an eight-week treatment plan in 2017, a 72 percent decline in cost to the consumer or health insurance provider. Moreover, annual growth in U.S. retail prescription drug spending did slow in 2016 (to 1.2 percent), following two years of strong growth: 11.1 percent in 2014, and 9.2 percent in 2015. By 2018, U.S. consumers were purchasing 90 percent of their pharmaceuticals as low-cost, price competitive generic drugs—a major contributor to holding the line on pharmaceutical price increases.

Mazzucato's progressive approach to "solving" the maladies of modern capitalism suffers from many of the same weaknesses exhibited in previous attempts at state central planning. For example, the R&D state investment bank concept harkens back to the good old days of industrial policy. This contrasts with presenting a more realistic, market-based approach to encouraging development of an industrial strategy—one where basic, nonappropriable R&D funding by government meets the constitutional needs of critical national security and economic competitiveness (including that of protecting domestic IPRs from foreign infringement and widespread industrial espionage). Moreover, her support for a "green revolution" all but dooms fossil fuels (regardless of how "clean"), as this redirection of the economy will employ the coercive power of the state regulatory apparatus imposing its transformative will on all industrial sectors. Likewise, growing national budget deficits are of little long-term economic concern to Mazzucato. Such public "investments," however, need to be effectively spent by government on proper "wealth-creating" activities.

Mazzucato does concern herself with a lack of competition among certain industries, but surprisingly does not recognize recent competition policy scrutiny of tech giants' alleged anti-competitive business practices in Europe, as well as recent antitrust scrutiny in the U.S. For example, since 2010, the European Union (EU) has launched three separate antitrust investigations into Google for violating the EU's competition law. By encouraging greater competition (and investment in technological innovation), such policies will go a long way in creating wealth, rather than diverting company resources into (societally) unproductive rent-seeking lobbying activities and legal strategies in the public policy arena.

Yet, while the tech giants are painted by Mazzucato as 21st century rent seekers and wealth extractors, Amazon.com in July 2019 unveiled plans to retrain a third of its U.S. workforce—or 100,000 workers—by 2025 to help its employees move into more advanced jobs or find new careers. The planned program is among the biggest corporate retraining initiatives ever announced, at a cost of roughly $7,000 per worker, or a voluntary $700 million expenditure into human resource training.

Nevertheless, while Mazzucato recognizes the importance of education to society, she spends little time on how effective public education has been in many Western societies. An assessment of this important publicly mandated “wealth-creating” activity (especially in the United States, which is perpetually globally ranked in the mediocre middle among Western countries in science, math, and reading comprehension in grades K-12—and not for a lack of per pupil expenditure) would have provided a more balanced approach to understanding real long-term value creation for society. Yet examples of such gaps in the analysis are what ultimately defines this book and leaves the reader intellectually unfulfilled with more questions than answers.

For example, it’s an oversimplification to say that “corporate leaders are not telling the whole truth when they say that shareholders are the only risk takers and hence deserve the lion’s share of the gains from doing business.” Anyone familiar with a basic balance sheet knows that labor expenses make up the largest category of cost to a modern service business. Employee salaries and benefits are paid before shareholders receive dividends. “Investments” made by schools, public agencies, etc. are funded by these same businesses through taxes and fees. Taxes to various levels of government are paid before shareholders are compensated. Corporate investment in capital equipment and new information technology systems are a requisite for long-term success of firms. This helps to satisfy market analysts who are interested in the long-term viability of firms. Mazzucato’s accusation that companies put “financial markets and shareholders first” and “offer as little as possible to other stakeholders” reveals a lack of true understanding of how important other stakeholders are to the long-term success of private firms. Perhaps a better understanding of how firms actually operate in the real world would better inform Mazzucato’s insights and recommendations.

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