

# Unequal Intermediation: Wealth Inequality and the United States' Capital Markets

Emily Winston\*

*Wealth in the United States is very unequally distributed and has been growing more so for the last 40 years. During the same 40 years that wealth inequality has been growing, investment intermediaries have also grown. Investment intermediaries manage the wealth of U.S. households. This Article argues that the simultaneous growth of wealth inequality and investment intermediaries is not coincidental. Rather, wealth inequality feeds the growth of investment intermediaries and investment intermediaries, in turn, feed the growth of wealth inequality.*

*The growth of wealth inequality in the last 40 years is not unique to the United States, though the inequality of the distribution of wealth in the United States has long been greater than that in other advanced economies, including Germany and Japan. Comparing corporate finance policy preferences in Germany and Japan to those in the United States sheds light on how the growth of investment intermediaries in the United States relates to the distribution of wealth.*

*Unlike their counterparts in Germany and Japan, U.S. policymakers have long favored capital market financing for U.S. businesses. Regulation has focused on supporting the markets while protecting investors. One unforeseen result of this policy focus has been the development of a unique ecosystem of public market intermediaries—mutual funds and hedge funds—that are unequally available to investors depending on the investor's wealth. The unequal availability of investment intermediaries ties the capital markets to the distribution of wealth.*

|                                                                          |      |
|--------------------------------------------------------------------------|------|
| I. INTRODUCTION .....                                                    | 1280 |
| II. CORPORATE FINANCE IN COMPARATIVE PERSPECTIVE .....                   | 1285 |
| A. United States, Japan, and Germany: Historical Market Structures ..... | 1286 |
| 1. Germany and Japan: Bank-Based Financial Systems.....                  | 1287 |
| a. Germany .....                                                         | 1287 |
| b. Japan.....                                                            | 1289 |
| 2. United States: Market-Based Financial System .....                    | 1290 |
| 3. Comparing Bank-Based and Market-Based Systems .....                   | 1290 |

---

\* Assistant Professor, University of South Carolina, Joseph S. Rice School of Law. This paper has been substantially improved by the excellent research assistance of Luca Neuhaus. I am grateful for comments and suggestions on this or prior versions of this paper to Laura Beny, Abe Cable, Carliss Chatman, Nakita Cuttino, Lisa Fairfax, Jill Fisch, Joseph Frumkin, Claudine Gartenberg, Joan Heminway, Andrew Jennings, Ben Means, Geeyoung Min, Elizabeth Pollman, Cary Martin Shelby, Greg Shill, Natalya Shnitser, Leo Strine, Etienne Tous-saint, Shelley Welton, as well as the participants in the University of Pennsylvania Institute for Law & Economics Junior Faculty Business and Financial Law Workshop, the Richmond Junior Faculty Forum, the National Business Law Scholars Conference, and the Law & Society Association's Corporate and Securities Collaborative Research Network. All errors are my own.

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| B. <i>Changes Over Time in Germany, Japan, and the United States</i> ..... | 1292 |
| 1. <i>Germany and Japan: Movement Toward Market-Based Systems</i> .....    | 1292 |
| 2. <i>United States: Development of Influential Intermediaries</i> .....   | 1294 |
| 3. <i>Market Commitment, Not Convergence</i> .....                         | 1295 |
| III. THE GROWTH OF INTERMEDIARIES IN THE UNITED STATES .....               | 1296 |
| A. <i>Early Policy Choices to Avoid Influential Intermediaries</i> .....   | 1296 |
| B. <i>Markets, Retirement Savings, and the Rise of Mutual Funds</i> .....  | 1299 |
| 1. <i>The 1940s Acts</i> .....                                             | 1299 |
| 2. <i>Financial Theory and Mutual Funds</i> .....                          | 1300 |
| 3. <i>Retirement Savings and Mutual Funds</i> .....                        | 1302 |
| 4. <i>Result: The Extraordinary Growth of (Passive) Mutual Funds</i> ..... | 1304 |
| C. <i>Hedge Funds</i> .....                                                | 1307 |
| 1. <i>History and Growth of Hedge Funds</i> .....                          | 1307 |
| 2. <i>Hedge Funds Do What Mutual Funds Can't</i> .....                     | 1308 |
| 3. <i>Legal Basis for the Growth of Hedge Funds</i> .....                  | 1310 |
| IV. INTERMEDIATED MARKETS AND THE DISTRIBUTION OF WEALTH .....             | 1313 |
| A. <i>Intermediated Markets are Unequal Markets</i> .....                  | 1313 |
| 1. <i>Unequally Distributed Wealth Prefers Market Financing</i> .....      | 1313 |
| 2. <i>Unequal Participation and Unequal Returns</i> .....                  | 1315 |
| 3. <i>Unequal Participation and Unequal Distribution</i> .....             | 1318 |
| a. <i>Wealth Inequality Fuels the Growth of Intermediaries</i> .....       | 1319 |
| b. <i>Intermediated Markets Exacerbate Wealth Inequality</i> .....         | 1320 |
| B. <i>Implications</i> .....                                               | 1322 |
| 1. <i>The Benefit of Higher Interest Rates</i> .....                       | 1323 |
| 2. <i>Increasing Participation in the Capital Markets</i> .....            | 1323 |
| 3. <i>Shrinking the Hedge Fund Industry</i> .....                          | 1325 |
| 4. <i>The Limits of Growth</i> .....                                       | 1326 |
| 5. <i>Implications Beyond the Capital Markets</i> .....                    | 1328 |
| V. CONCLUSION .....                                                        | 1328 |

## I. INTRODUCTION

Wealth inequality in the United States has been growing steadily for approximately 40 years. Most of the wealth owned by American families is held in the form of financial assets.<sup>1</sup> The most well-known and broadly available financial assets are publicly traded securities, like shares of corporate stock. Over the same 40 years that wealth inequality has been growing in the United States, another trend has been developing in the markets for publicly traded securities: the growth of market intermediaries like mutual funds and hedge

---

1. Edward N. Wolff, *Household Wealth Trends in the United States, 1962 to 2019: Median Wealth Rebounds. . . But Not Enough*, 51 tbl.5 (Nat'l Bureau of Econ. Rsch., Working Paper No. 28383, 2021) (showing that, as of 2019, unincorporated business equity, pension accounts, financial securities, corporate stock and mutual funds constituted 51.9% of all household wealth in the United States).

funds.<sup>2</sup> Through a comparative study of corporate finance in Germany and Japan, this Article explores the connection between these two trends. It finds that the simultaneous growth of wealth inequality and public market intermediaries is not coincidental. While wealth inequality has diverse causes, the growth of intermediaries contributes to its growth. This is because access to intermediaries is unequal. Wealthier investors have access to intermediaries that offer higher returns on investment. As more wealth becomes concentrated in fewer households, demand for investment intermediaries grows, perpetuating the markets' contribution to wealth inequality. Policy choices designed to protect ordinary Americans from the risks of market investing have inadvertently facilitated this system of unequal intermediation.

In 2019, the average U.S. family in the top 1% of the wealth distribution had approximately 274 times the wealth of the median American family.<sup>3</sup> This differential has more than doubled over the last 40 years.<sup>4</sup> In 1983, 66,500 American households had a net worth over \$10 million.<sup>5</sup> In 2019, that number had grown to 692,800.<sup>6</sup> At the same time that the count of multi-millionaires has grown, the percentage of households with zero or negative wealth has also grown.<sup>7</sup> Black and Hispanic households are more than twice as likely as White households to have zero or negative wealth.<sup>8</sup> Thus, the distribution of wealth has been shifting over the last 40 years. Families at the low end of the distribution have less, and families at the high end of the distribution have more.

Economists have warned that growing inequality not only means some families have many more resources than others today, but that this unequal distribution could become entrenched.<sup>9</sup> Indeed, the persistent racial wealth divide in the United States is evidence of how an unequal distribution of wealth tends to be sticky.<sup>10</sup>

Over the same 40 years during which wealth inequality has been growing, another change has occurred in the U.S. securities markets. Americans who want to invest in the public securities markets have increasingly done so via investment intermediaries like

---

2. The terms "securities markets" and "capital markets" are used interchangeably herein. These markets are places where businesses sell securities to raise capital. Thus, the two terms refer to the same financial markets but focus on different aspects of that market.

3. See Wolff, *supra* note 1, at 47 tbl.1, 50 tbl.4 (showing that, as of 2019, the median household net worth was \$100,800 while the mean net worth of the top 1% was \$27,602,000).

4. In 1983, the average family in the top 1% owned 131 times the wealth of the median American family. See *id.* (showing that, in 1983, the median net worth was \$81,700, while the top 1% had a mean net worth of \$10,733,000).

5. In constant 1995 Dollars. *Id.* at 49 tbl.3.

6. *Id.*

7. See *id.* at 47 tbl.1 (showing that in 1983, 15.5% of households had zero or negative net worth. That percentage peaked in 2010 at 21.8%. By 2019, it had come down slightly to 19.6%).

8. Wolff, *supra* note 1, at 59–60 tbl.13. Data is unfortunately not available for other racial/ethnic groups.

9. See, e.g., Olivier Blanchard & Dani Rodrik, *We Have the Tools to Reverse the Rise in Inequality*, PETERSON INST. FOR INT'L ECON. (Nov. 20, 2019), <https://www.piie.com/commentary/speeches-papers/we-have-tools-reverse-rise-inequality> [<https://perma.cc/6LZ6-23F2>] ("Inequality is widening, posing major moral, social, and political challenges to which policymakers must react."); Emmanuel Saez & Gabriel Zucman, *The Explosion in U.S. Wealth Inequality Has Been Fuelled by Stagnant Wages, Increasing Debt, and a Collapse in Asset Values for the Middle Classes*, LSE (Oct. 29, 2014), <https://blogs.lse.ac.uk/usappblog/2014/10/29/the-explosion-in-u-s-wealth-inequality-has-been-fuelled-by-stagnant-wages-increasing-debt-and-a-collapse-in-asset-values-for-the-middle-classes/> [<https://perma.cc/2VEF-MWL4>].

10. From 1983 to 2019, the figures for the median Black and median Hispanic net worth have consistently stayed at or below 10% of the White median net worth. Wolff, *supra* note 1, at 59 tbl.13.

mutual funds and hedge funds.<sup>11</sup> The growth of these intermediaries has garnered substantial attention from legal scholars, who have predominantly focused on the effects of these intermediaries on corporate governance.<sup>12</sup> This Article examines the growth of investment intermediaries from an under-explored angle: its relationship with the simultaneous growth of wealth inequality.

Securities markets are places where businesses can raise money. People with savings purchase securities and that money goes to businesses that can use it to grow.<sup>13</sup> However, securities markets are not the only place where businesses can raise money; bank loans are another option. The public securities markets in the United States are a dominant source of financing for businesses, but that is not true in all countries, and whether more corporate financing comes from markets or banks can impact the distribution of wealth in an economy.<sup>14</sup> For several countries, whether banks or markets prevail can be traced to decisions made in the wake of the stock market crash of 1929.

The stock market crash of 1929 had a catastrophic effect on economies around the world. In the years following the crash, governments made transformative policy decisions to attempt to recover from and avoid in the future the economic pain caused by this crisis. Some governments, like those in Germany and Japan, responded with lawmaking that diminished the role of securities markets in the national economy.<sup>15</sup> Having witnessed the crash and its aftermath, these policymakers decided that securities markets were speculative and dangerous.<sup>16</sup> Policymaking in Germany and Japan therefore empowered banks, rather than securities markets, as a source of corporate finance.<sup>17</sup>

Policymakers in the United States took a different approach. Several banks in the United States had become problematically large and powerful in the decades leading up to the crash.<sup>18</sup> U.S. policymakers therefore sought to diminish the power of banks and avoid the ascendance of powerful financial intermediaries more broadly.<sup>19</sup> In pursuit of this goal, they accepted that the capital markets would continue to have an important role in the U.S. economy, envisioning the markets as being populated by many small, individual investors.<sup>20</sup>

---

11. See *infra* Parts III.B and III.C.

12. See generally Alexander I. Platt, *Index Fund Enforcement*, 53 U.C. DAVIS L. REV. 1453, 1453 (2020) (arguing that concentration among institutional shareholders gives institutions the ability to deter fraud and misconduct in corporations); Edward B. Rock, *Institutional Investors in Corporate Governance*, in THE OXFORD HANDBOOK OF CORPORATE LAW AND GOVERNANCE 363 (Jeffrey N. Gordon & Wolf-Georg Ringe eds., 2015); Jill Fisch, Assaf Hamdani & Steven Davidoff Solomon, *The New Titans of Wall Street: A Theoretical Framework for Passive Investors*, 168 U. PA. L. REV. 17, 18 (2019) (purporting to “provid[e] the first comprehensive theoretical framework for passive investment and its implications for corporate governance” (emphasis omitted)).

13. Only primary market transactions directly fund businesses. The selling investor collects the purchase price of any securities sold on the secondary market. See generally, e.g., SEC. INDUS. & FIN. MKTS. ASS’N, CAPITAL MARKETS: AN OVERVIEW OF CAPITAL MARKETS AND THE ROLE OF FINANCIAL INSTITUTIONS, A DEEPER LOOK AT PRIMARY VS. SECONDARY MARKETS & POST-TRADE INFRASTRUCTURE 4 (2024).

14. See *infra* Part IV.A.

15. See *infra* Part II.A.1.

16. See *id.*

17. See *id.*

18. See *infra* Part II.A.2.

19. See *id.*

20. See *id.*

Many decades later, powerful investment intermediaries have nonetheless arisen in the United States' markets. Modern intermediaries in the U.S. markets are quite different from the banks and cross-holding corporations that characterized the bank-centric German and Japanese systems.<sup>21</sup> The United States' embrace of the capital markets as the central source of corporate finance has sown a different breed of intermediaries: mutual funds and hedge funds.<sup>22</sup>

These intermediaries have arisen as a byproduct of lawmaking designed to protect U.S. investors. Investing in publicly traded securities is inherently risky, substantially more so than depositing money in a bank. The United States' choice of a market-based system meant that more Americans' money would be exposed to those risks. And so, over the years, lawmakers created legal structures that encouraged the use of mutual funds because these intermediaries reduce the risk involved in market investing.<sup>23</sup> The rise of mutual funds left an opening in the market for intermediaries that used riskier strategies. Hedge funds filled that void. In part because hedge funds engage in highly risky investment strategies, they are largely available only to wealthy investors. This unequal access to investment intermediaries contributes to the growth of wealth inequality.

Germany and Japan have had less wealth inequality than the United States for the last several decades.<sup>24</sup> Surely there are many factors that have determined the distribution of wealth in Germany, Japan, and the United States. However, scholars have noted a correlation between market-based systems of finance and economic inequality.<sup>25</sup> This Article closely examines how the U.S. market system relates to the distribution of wealth. It concludes that the way in which the U.S. system has evolved to create unequal opportunities for investment is the thread that ties our market-based system to wealth inequality.<sup>26</sup>

In the United States, a household's opportunities to participate in the capital markets are determined by how much wealth that household has.<sup>27</sup> Households with relatively little wealth do not participate in the capital markets.<sup>28</sup> The first wealth a household accumulates usually, and prudently, will be invested in low-risk assets like bank deposits and a primary residence.<sup>29</sup> Once a household has met a certain threshold of financial stability, they might begin to invest in the capital markets to save for the future—most often via an employer-sponsored retirement account that is invested in mutual funds.<sup>30</sup> Only when a household has accumulated enough wealth to fulfill all these markers of financial stability—bank savings, homeownership, and retirement savings—will they make riskier investments in hedge funds.<sup>31</sup> It only makes sense to make risky investments if you have adequate wealth to cushion the blow if you lose all or part of your investment. So, disparate access to

---

21. *See infra* Part III.

22. *See id.*

23. *See infra* Part III.B.

24. *See infra* Part IV.A.

25. *See id.*

26. *See infra* Part V.

27. *See infra* Part IV.A.

28. *See id.*

29. *See infra* Part IV.A.3.

30. *See infra* Part III.B.

31. *See infra* Part III.C.

investment intermediaries makes sense from an investor protection perspective. However, this unequal market participation both contributes to and is fed by wealth inequality.<sup>32</sup>

Unequal market participation contributes to wealth inequality by allowing the wealthiest investors to earn the highest rates of return. Investments generally reward risk with higher rates of return.<sup>33</sup> So when less-wealthy households make low-risk investments, they will also earn a low rate of return. Once a household has adequate wealth to invest in the capital markets, risk and return increase. Intermediaries have arisen to divide the market into relatively low-risk and relatively high-risk options. Diversified mutual funds are the lower-risk option, with the burgeoning hedge fund industry offering the highest risk, highest return intermediated opportunities. These variations in investment opportunities explain why wealthy investors consistently earn a higher rate of return on their invested wealth than ordinary investors.<sup>34</sup> Thus, unequal markets contribute to wealth inequality by allowing a household's rate of return to correlate with its existing wealth.<sup>35</sup>

Wealth inequality, in turn, facilitates the growth of these unequal markets by creating demand for ever-riskier investment opportunities. If wealth in the United States were equally distributed, some of the money currently invested in hedge funds would instead be in bank accounts, homes, or mutual funds. As wealth shifts increasingly into the hands of a small number of very wealthy investors, a larger proportion of that wealth will be in search of risky investment opportunities like hedge funds. And when regulation favors the hedge fund industry, the industry has no trouble meeting that demand.<sup>36</sup>

The United States' public capital markets are but one investment option for those fortunate enough to have wealth to spare. Any policy prescriptions aimed to more equally allocate the benefits of financial markets must account for investment opportunities beyond the public capital markets. Such a comprehensive analysis, however, cannot be accomplished in one article.<sup>37</sup> Therefore, rather than policy prescriptions, this Article identifies

---

32. See *infra* Part IV.

33. Scott Powell, *Risk and Return in Financial Management*, CORP. FIN. INST., <https://corporatefinanceinstitute.com/resources/career-map/sell-side/risk-management/risk-and-return-in-financial-management/> [<https://perma.cc/4YK9-GBJL>].

34. See Wolff, *supra* note 1, at 57 tbl.11 (showing that the average annual rates of return on gross assets were greater for the top 20% than the middle three quintiles of the wealth distribution for all periods from 1983–2019). The same table shows the trend reversing for the rates of return on *net worth*, with middle-class rates of return generally exceeding those of the top 20%. This is attributable to the middle class's much higher relative debt load. See *id.* at 24 (“The spread in rates of return on net worth between the top one percent and the middle three quintiles reflects the much higher leverage of the middle class.”); see also THOMAS PIKETTY, *CAPITAL IN THE TWENTY-FIRST CENTURY* 545 (Arthur Goldhammer trans., 2014) (“[A]round the world, the largest fortunes (including inherited ones) have grown at very high rates in recent decades . . . —significantly higher than the average growth rate of wealth.”).

35. See *infra* Part IV.A.2 (observing that while nearly half of American households own stock, middle-class investment is primarily limited to homeownership and defined contribution retirement accounts focused on mutual funds, whereas wealthier investors have access to higher-risk, higher-return assets).

36. See *infra* Part III.C.3 (explaining that hedge funds, unlike mutual funds, are private investment vehicles that operate outside the regulatory protections of the Company Act by limiting participation to high-net-worth individuals and institutions, which in turn allows them to engage in higher-risk strategies such as short selling and leveraged investing).

37. The author intends to continue their study of financial markets and wealth distribution in additional future papers. In particular, the United States' vibrant private securities markets raise interesting questions about disparate access to investment opportunities.

policy implications that can inform continued study of the relationship between wealth inequality and finance. Those observations are as follows:

First, when the Federal Reserve raises the interest rates in the United States, this may indirectly reduce wealth inequality because some money will leave the capital markets in favor of higher interest rates available for lower-risk investments. Second, we can reduce the tendency of the U.S. markets to perpetuate wealth inequality by reducing the discrepancies in access to these markets. At the bottom of the wealth distribution, this means granting more households access to the capital markets. At this top of the wealth distribution, this means limiting the availability of exclusive, high-risk, high-return investment opportunities. Existing policy proposals that could accomplish each of these goals are evaluated herein. Finally, implications for policymaking outside of the capital markets are considered.

The remainder of this Article proceeds as follows. Part II lays out the historical and comparative perspective, explaining the United States' choice of a market-based system and comparing that to the choices of Germany and Japan. Part III describes how the public capital markets are unequally available to people at different points of the wealth distribution. It describes the policy choices that led to that outcome and details the mechanisms by which the United States' intermediated markets contribute to and are fueled by wealth inequality. Part IV considers the policy implications of the foregoing analysis. Part V concludes.

## II. CORPORATE FINANCE IN COMPARATIVE PERSPECTIVE

Most businesses, at one or more points in their lifecycles, will need to look externally to finance their futures. When founder capital and retained earnings are not enough, a company may seek money from investors who are looking to earn a return on their investment or from banks looking to earn interest on a loan.<sup>38</sup> The combination of these two funding sources—capital markets and bank lending—is referred to as the “markets for corporate finance” in this Article. The markets for corporate finance serve an important economic and, thereby, social function. They are a mechanism for funneling money from individuals, households, and institutions with savings to companies.<sup>39</sup> The ultimate goal of this mechanism is to support quality-of-life-enhancing innovation.<sup>40</sup>

Well-functioning markets for corporate finance will make it easy for promising companies to find capital and for providers of capital to identify promising companies.<sup>41</sup> When companies are large, and looking for a large amount of money, it could be difficult and costly for a company in need of capital to identify enough individual investors to meet its capital needs. Market intermediaries can solve this problem by facilitating the collection of relatively small amounts of money from many savers to satisfy the capital needs of large

---

38. *Sources of Finance*, CORP. FIN. INST., <https://corporatefinanceinstitute.com/resources/accounting/sources-of-funding/> [<https://perma.cc/L4T4-NJPS>].

39. See JOHN ARMOUR ET AL., PRINCIPLES OF FINANCIAL REGULATION 22–24 (2016) (describing the role of the financial system in the economy).

40. The hope is that this innovation will provide benefits to everyone in the economy. The limitations of this mechanism are explained in Part IV.B.

41. ARMOUR ET AL., *supra* note 39, at 22.

companies.<sup>42</sup> Likely because this is a useful function, market intermediaries are quite common in markets for corporate finance around the world.<sup>43</sup> Though, they can take a variety of forms. As Professor Mark Roe has pointed out, “there is more than one way to move savings from households to . . . large enterprises . . . .”<sup>44</sup>

In the United States, a significant amount of this financing takes place in the public capital markets.<sup>45</sup> And, in recent decades, investment intermediaries have grown in size and influence in the public capital markets in the United States.<sup>46</sup> However, prior to the growth of investment intermediaries in the United States, the U.S. markets were notable for being very dispersed, dominated by numerous small investors rather than large institutional intermediaries.<sup>47</sup> Scholars studied the uniquely dispersed U.S. markets and compared them to the economies of Germany and Japan, which had smaller, more concentrated capital markets and a greater role for bank lending.<sup>48</sup> This research has tended to focus on access to capital and corporate governance.<sup>49</sup> The remainder of this Part surveys this research and describes several key differences between these two versions of markets for corporate finance. Part IV below explores how these distinctions can impact the distribution of wealth.

#### A. United States, Japan, and Germany: Historical Market Structures

Modern markets for corporate finance are often sorted into two broad categories: bank-based systems and market-based systems.<sup>50</sup> As their names imply, bank-based

42. MARK J. ROE, STRONG MANAGERS, WEAK OWNERS: THE POLITICAL ROOTS OF AMERICAN CORPORATE FINANCE 3–4 (1994) (describing how market intermediaries are essential for large enterprises to raise capital).

43. See ALEJANDRA MEDIAN, ADRIANA DE LA CRUZ & YUNG TANG, ORG. ECON. COOP. & DEV., OWNERS OF THE WORLD’S LISTED COMPANIES 21 fig.11 (2019) [hereinafter OECD REPORT], <https://doi.org/10.1787/ed7ca2f3-en> [<https://perma.cc/X9EH-C7QG>] (showing the prevalence and growth of investment companies in OECD countries).

44. ROE, *supra* note 42, at xiv.

45. SEC. INDUS. & FIN. MKTS. ASS’N, 2023 CAPITAL MARKETS FACT BOOK 6 (2023), <https://www.sifma.org/wp-content/uploads/2022/07/2023-SIFMA-Capital-Markets-Factbook.pdf> [<https://perma.cc/3T75-LLEF>] (noting that in the United States, capital markets provide “71.9% of equity and debt financing for non-financial corporations”).

46. See *infra* Part II.B.2 (describing the increasing dominance of large institutional investors in U.S. markets).

47. ROE, *supra* note 42, at xiii–xiv (describing the traditionally dispersed ownership of large public companies in the United States, and the widely held view that dispersed ownership was necessary for modern businesses to function).

48. See *infra* Part II.A (explaining how historical regulatory policies in Germany and Japan promoted bank-centered corporate finance systems).

49. See *id.* (discussing historical perspectives on bank and market financing).

50. See, e.g., Sigurt Vitols, *The Origins of Bank-Based and Market-Based Financial Systems: Germany, Japan, and the United States*, 1 (Wissenschaftszentrum Berlin für Sozialforschung [Soc. Sci. Rsch. Ctr. Berlin], Discussion Paper FS 01-302, 2001), <https://www.econstor.eu/obitstream/10419/44081/1/333898079.pdf> [<https://perma.cc/F68L-SMGV>] (“One key difference [between different nations’ financial systems] is the degree to which financial systems are bank-based or market-based.”); Ross Levine, *Bank-Based or Market-Based Financial Systems: Which is Better?*, 1 (Nat’l Bureau of Econ. Rsch., Working Paper No. 9138, 2002), [https://www.nber.org/system/files/working\\_papers/w9138/w9138.pdf](https://www.nber.org/system/files/working_papers/w9138/w9138.pdf) [<https://perma.cc/HE3F-7P54>] (describing the “century old policy debate” between bank-based and market-based systems); Asli Demirgüç-Kunt & Ross Levine, *Bank-Based and Market-Based Financial Systems: Cross-Country Comparisons* 2 (July 31, 1999)



systems rely heavily on banks as intermediaries to funnel capital into business enterprises. Market-based systems, on the other hand, rely more heavily on markets populated by individual investors in search of an investment to grow their savings. These structural choices impact how individuals' wealth makes its way into the markets for corporate finance. These same choices, therefore, impact how that wealth can grow. Since the 1930s, the United States' capital markets have been viewed as a paradigmatic example of a market-based system, while Germany and Japan have long served as prominent examples of bank-based systems.<sup>51</sup> The development of each country's system of corporate finance are described below.

### 1. Germany and Japan: Bank-Based Financial Systems

Since the 1930s–1940s, businesses in Germany and Japan have foremost looked to banks when they need capital to sustain or grow their business.<sup>52</sup> Banks can provide capital either by extending loans to a business or by purchasing stock or other securities from the firm.<sup>53</sup> Banks are not the only providers of capital in these systems. Indeed, the bank-based systems of Germany and Japan both also involve “inter-corporate networks” of firms that own stock across companies.<sup>54</sup> Nonetheless, in this type of “bank-based” system, banks become powerful and influential intermediaries with the ability to influence firm management.<sup>55</sup>

#### a. Germany

The central role of banks in the German economy can be traced back to the first comprehensive banking legislation written in response to a banking crisis in 1931.<sup>56</sup> That legislation enacted a system of binding self-regulation by banking associations.<sup>57</sup> Thus, banks were subject to more rules, but they were still quite autonomous in developing those rules.

---

(unpublished manuscript), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=569255](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=569255) (describing the division among economists in the debate between market-based and bank-based systems).

51. Wolfgang Streeck & Kōzō Yamamura, *Introduction: Convergence or Diversity? Stability and Change in German and Japanese Capitalism*, in *THE END OF DIVERSITY? PROSPECTS FOR GERMAN AND JAPANESE CAPITALISM* 1, 2–3 (Kōzō Yamamura & Wolfgang Streeck eds., 2003) (citing Anglo-American capitalism as prototypical “liberal capitalism” and Japanese and German systems as “nonliberal capitalism”); see, e.g., Vitols, *supra* note 50, at 1 (“The banking systems in Japan and Germany account for the majority of financial-system assets . . . whereas banks in the United States . . . are only one of a plurality of financial institutions.”); cf. *id.* at 10–11 (noting that banks and securities markets in the United States, Japan, and Germany all had very similar, bank-focused characteristics until World War II).

52. Streeck & Yamamura, *supra* note 51, at 31; Sigurt Vitols, *From Banks to Markets: The Political Economy of Liberalization of the German and Japanese Financial Systems*, in *THE END OF DIVERSITY? PROSPECTS FOR GERMAN AND JAPANESE CAPITALISM* 240, 250–51, 254 (Kōzō Yamamura & Wolfgang Streeck eds., 2003).

53. See Streeck & Yamamura, *supra* note 51, at 6–7, 12, 15–16 (describing how banks in Japan and Germany have historically funneled capital to businesses). Banks can make the stock purchases referenced above either for the banks' own accounts or on behalf of brokerage accounts. *Id.*

54. Gregory Jackson, *Corporate Governance in Germany and Japan: Liberalization Pressures and Responses During the 1990s*, in *THE END OF DIVERSITY? PROSPECTS FOR GERMAN AND JAPANESE CAPITALISM* 261, 264 (Kōzō Yamamura & Wolfgang Streeck eds., 2003).

55. See Streeck & Yamamura, *supra* note 51, at 16 (describing how main bank financial systems provide banks with the capacity to monitor debtors and promote long-term interests).

56. Vitols, *supra* note 50, at 12.

57. *Id.*

The central role of banks was undisturbed and even strengthened by regulation adopted by the Nazi government, which distrusted stock markets, considering them dangerously speculative.<sup>58</sup> The Nazi government regulated the stock markets to make them an unappealing source of capital for businesses, increasing the importance of bank loans as a source of capital.<sup>59</sup> In the 1950s, as West Germany unified and recovered from World War II, economic reforms were focused on balancing a number of interests.<sup>60</sup> To do so, the government avoided direct regulation and instead facilitated negotiated compromise among interested parties.<sup>61</sup> The result was firms in which labor was represented in management and capital was largely provided by banks, whether via loans or purchases of securities.<sup>62</sup> Thus, policymaking in the mid-20th century favored and then reinforced the centrality of banks in Germany's markets for corporate finance.

Capital provided by banks tends to be "patient," long-term capital.<sup>63</sup> Securities are not bought and sold in the short term. Instead, banks maintain their financial interest in firms for long periods of time and engage with firm management, rather than sell their interests, if they are displeased with the direction of the firm.<sup>64</sup> German banks could exercise this influence regardless of whether they provided capital via loans or securities. In this way, banks became extremely influential in the German markets for corporate finance.

Likely as a consequence of these moves to center banks in the German economy, the number of German firms listed on stock exchanges declined between 1930 and 1980.<sup>65</sup> German firms did not need the capital markets to raise money, since they had robust access to bank financing. The securities markets in Germany came to be largely populated by government and bank bonds—securities that are generally less risky than corporate stocks.<sup>66</sup> And by the 1960s nearly two-thirds of the large company stock that was circulating on securities exchanges were held by financial institutions.<sup>67</sup>

Thus, the market for corporate finance in Germany has long been dominated by banks. And, while that bank dominance may be subsiding somewhat,<sup>68</sup> it is still a defining characteristic of the German economy.<sup>69</sup> The public markets for corporate stocks and bonds, on the other hand, are smaller and populated largely by low-risk securities. Banks make loans by taking customer deposits and lending based on those deposits. So, in an economy

58. See, e.g., *id.* at 13 ("Stock markets were widely held by the Nazi government to have exacerbated the [1931] financial crisis . . .").

59. *Id.* at 12–13.

60. Streeck & Yamamura, *supra* note 51, at 12.

61. *Id.*

62. *Id.*

63. *Id.* at 13.

64. *Id.* (noting also that the high savings rate in Germany also facilitates the provision of patient capital by banks).

65. Vitols, *supra* note 50, at 13.

66. *Id.*

67. *Id.* at 15; see also ROE, *supra* note 42, at 172–75 (identifying the key players in German firm finance as banks, other industrial firms, and families); Hanno Merkt, *Germany: Internal and External Corporate Governance*, in *COMPARATIVE CORPORATE GOVERNANCE: A FUNCTIONAL AND INTERNATIONAL ANALYSIS* 521, 544 (Andreas M. Fleckner & Klaus J. Hopt eds., 2013) (noting that German corporations are often "controlled by one shareholder or a group of shareholders").

68. See *infra* Part II.B.

69. Merkt, *supra* note 67, at 544–45 (noting that in 2006, only 32.9% of publicly traded company stock was in "free float").

like Germany's individual savings will more often be funneled into bank accounts and low-risk investments.<sup>70</sup>

*b. Japan*

Japan's development of a bank-based system of corporate finance has its origins in a governmental response to a series of bank crises between 1890 and 1930.<sup>71</sup> Japanese policymakers were critical of market capitalism, preferring a robust role for banks in the financial system. Thus, policymaking not only favored banks but also established a close relationship between banks and the state.<sup>72</sup> At the same time, much like in Germany, legal constraints on stock markets made them unattractive sources of capital for firms, further elevating the role of banks.<sup>73</sup> This bank-preferred system was reinforced during Japan's efforts to reinvigorate its economy after World War II.<sup>74</sup> Not believing that market forces alone would allow Japan to catch up with dominant western economies, the Japanese government facilitated the creation of a corporate finance system that it believed would promote the long-term growth of real income in Japan.<sup>75</sup> The result was the *keiretsu* system of corporate finance.

A *keiretsu* is "a group of industrial firms and financial intermediaries that own some of one another's stock . . . ."<sup>76</sup> The *keiretsu* system is centered around a main bank. Banks traditionally provided the largest portion of financing to corporations via loans.<sup>77</sup> Other firms in the *keiretsu* also provide financing by purchasing a corporation's stock.<sup>78</sup> The other firms in the *keiretsu* could include other large firms in different industries or smaller suppliers or distributors.<sup>79</sup> The result was an interconnected web of financing relationships that linked the fates of Japanese businesses to each other.

The *keiretsu* system centered on banks, and those banks had close ties with government, allowing the Japanese government to target bank financing in ways it believed would best facilitate Japan's economic catch up with the rest of the developed world.<sup>80</sup> Between 1920 and 1970, bank loans went from representing half of external financing for industrial firms to 80%.<sup>81</sup> Consequently, much like in Germany, the public stock markets were of substantially less importance. And, though the structure of the Japanese and German markets differ in important respects, they are similar in that without robust capital markets, individual savings are more often directed to bank accounts and low-risk investments.

---

70. Vitols, *supra* note 52, at 244; *but see id.* at 246 (describing an apparent "slow shift" in German middle-income investments towards mutual funds).

71. Vitols, *supra* note 50, at 9–10.

72. *Id.* at 14.

73. *Id.* at 14–15.

74. Streeck & Yamamura, *supra* note 51, at 1, 5 (describing how Japanese institutions created in the 1940s for the war economy were re-purposed for "catching up with and surpassing the advanced economies of the West").

75. *Id.*

76. ROE, *supra* note 42, at 177.

77. Streeck & Yamamura, *supra* note 51, at 6–7.

78. *Id.*

79. *Id.*

80. *Id.* at 5, 11 (describing the post-War Japanese goal of "catching up with and surpassing" the developed world and describing the continued government direction of the economy).

81. Vitols, *supra* note 50, at 15.

## 2. *United States: Market-Based Financial System*

Like Japan and Germany, the United States had little regulation of banking and the securities markets prior to 1930.<sup>82</sup> Also like Germany and Japan, it experienced a number of banking and financial crises leading up to the stock market crash of 1929.<sup>83</sup> The stock market crash spurred substantial legislation affecting the financial markets (among many other topics) in the United States.<sup>84</sup> While legislating in the wake of the 1929 stock market crash, U.S. policymakers were, like their counterparts in Germany and Japan, skeptical of unfettered markets.<sup>85</sup> However, their skepticism of markets was accompanied by a deep distrust of banks, who were believed to have contributed to the crash. This led U.S. lawmakers to take a different approach. Rather than diminish the role of securities markets, New Deal financial legislation focused on setting parameters that would make the markets fairer for all participants.<sup>86</sup> This legislation institutionalized the United States' quintessential "market based" financial system.

A "market-based" financial system refers to a system where shareholder rights to firms are sold in an anonymous public capital market.<sup>87</sup> Because of this policy choice to maintain but improve robust securities markets, the public securities markets were and continue to be a much more integral part of the market for corporate finance in the United States compared to Germany or Japan. However, the United States differed from Germany and Japan not only in the relative size and importance of the capital markets but also with who participated in those markets. Without the involvement of large banks, historically, the United States did not have large, influential intermediaries that owned publicly traded stock in firms, as was the case in Germany and Japan. Instead, the United States had a lot of individual investors and smaller institutions, all of whom tended to own only a tiny fraction of the shares of any publicly traded company.<sup>88</sup> As will be discussed in Part III below, the United States' markets did not remain dispersed forever. However, the capital markets have remained the centerpiece of the markets for corporate finance in the United States.<sup>89</sup> The result is that, in the United States, a larger proportion of wealth held by individuals is invested in the capital markets as compared to bank-based economies.

## 3. *Comparing Bank-Based and Market-Based Systems*

Views about the relative merits of bank-based versus market-based financing have varied over time. "In the 1980s, bank-based systems were widely [viewed as preferable] to market-based systems" because banks were long-term investors seen as well-positioned to protect the long-term interests of firms.<sup>90</sup> In contrast, many viewed the fragmentation of shareholdings in the United States as problematic because it created agency costs by

---

82. *Id.* at 16.

83. *Id.* at 9–10.

84. *Id.* at 16.

85. *Id.* at 11.

86. Vitols, *supra* note 50, at 16.

87. Streeck & Yamamura, *supra* note 51, at 31.

88. ROE, *supra* note 42, at 176.

89. Vitols, *supra* note 50, at 17 ("Since the 1930s the relative importance of banks has shrunk from two-thirds to currently one-quarter of financial-system assets.").

90. Vitols, *supra* note 52, at 240.

separating “ownership and control.”<sup>91</sup> That is, in large corporations with many small, dispersed shareholders, shareholders are inadequately incentivized to actively monitor corporate managers. This, it was feared, would result in corporate managers who pursued their own interests at the expense of the corporation.<sup>92</sup>

The bank-based model of capital markets arguably solves the problem of the separation of ownership and control. Large, controlling shareholders, like the traditional banks of Germany and Japan, have the financial incentives to pay attention to how the company is managed and, if needed, utilize their voting power to press for change. This is especially true when the banks are also financially tied to the companies via loans.

Most of the discussion about the relative costs and benefits of bank-based versus market-based finance has, therefore, centered on the governance implications: how does each system facilitate the supervision of corporate managers? Another, relatively under-explored potential distinction between bank-based and market-based systems is their relationship with the distribution of wealth.<sup>93</sup>

Both bank loans and securities purchases originate with wealth.<sup>94</sup> Wealth that is deposited in savings accounts can be loaned out to businesses. Wealth can also be used to purchase debt or equity securities in the capital markets. Through either of these paths, this money can flow to businesses in need of capital. When wealth is funneled in one of these ways to a business in need of capital, ideally the balance of that wealth will grow over time, either through modest interest payments on bank deposits or a return on investment in securities. With respect to the distribution of wealth, the broad distinction between bank-based and market-based systems is how much of an economy’s aggregate wealth flows into each of these sources of corporate financing. In bank-based systems with relatively small securities markets, household wealth will more often flow into bank accounts and low-risk securities like government bonds. In market-based systems, household wealth will also

---

91. ADOLF A. BERLE, JR. & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* 90–94 (1933).

92. Many scholars continue to be concerned about this today. *See, e.g.*, Lucian A. Bebchuk & Roberto Tallarita, *The Illusory Promise of Stakeholder Governance*, 106 CORNELL L. REV. 91, 91–92 (2020) (criticizing the “stakeholderism” movement because its implementation “mak[es] corporate leaders less accountable and more insulated from shareholder oversight”); Lucian A. Bebchuk, Alma Cohen & Allen Ferrell, *What Matters in Corporate Governance?*, 22 REV. FIN. STUD. 783, 823 (2009) (finding that corporate governance positions that entrench management negatively correlate with firm value); John C. Coffee, Jr., *The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications*, 93 NW. U. L. REV. 641, 642, 705 (1999) (questioning whether dispersed shareholder ownership is an efficient standard governance structure in comparison with cross-shareholder and blockholder systems); Michael S. Rozeff, *Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios*, 5 J. FIN. RES. 249 (1982) (studying the relationship between dividend payouts and agency costs).

93. While this connection is relatively under-explored, it has been investigated. *See, e.g.*, *Economic Equity: Inequality and Stock Market Participation*, FED. RES. BANK OF ST. LOUIS (Nov. 4, 2020), <https://www.stlouisfed.org/en/timely-topics/economic-equity-inequality-and-stock-market-participation> [<https://perma.cc/EHG6-2XJ4>]; Saad Azmat et al., *The Inequality Debate: Do Financial Markets Matter?*, 27 J. BEHAV. & EXPERIMENTAL FIN., July 2020, at 1, 1 (“This paper investigates whether economic divergence and wealth inequality could be an outcome of asset price bubbles in financial markets.”); Giovanni Ferri, Leonardo Gambacorta & Michael Brei, *How Finance Affects Income Inequality*, CTR. FOR ECON. POL’Y RSCH. (Mar. 7, 2019), <https://cepr.org/voxeu/columns/how-finance-affects-income-inequality> [<https://perma.cc/PV9P-SLAW>] (studying “the link between an economy’s financial structure . . . and income inequality”); Vitols, *supra* note 50, at 18.

94. As used herein, “wealth” refers to the total value of all the assets a household owns at a particular time, less their debts.

flow into bank accounts and low-risk securities, but the existence of more robust capital markets means a greater proportion of that money will be invested in the riskier capital markets.<sup>95</sup> If market structure affects the availability of risk, it must also affect return on investment and thereby the distribution of wealth.<sup>96</sup> This begs the question of whether the United States' preference for market financing contributes to the fact that wealth in the United States is much more unequally distributed than in Germany or Japan.<sup>97</sup> Part IV of this Article will demonstrate that, indeed, it does.

The Part that follows explores how differences in the markets for corporate finance in the United States, Germany, and Japan have diminished over time as all three economies have grown to rely more on market financing.

### B. Changes Over Time in Germany, Japan, and the United States

While Germany, Japan, and the United States are regularly used as prototypical examples of bank-based systems on the one hand, and a market-based system on the other, the distinctions among these countries' financial systems have diminished in recent years.<sup>98</sup> Germany and Japan have seen a reduction in the influence of banks and crossholdings while the United States has seen the growth of powerful investment intermediaries. This Part argues that this is not a result of convergence between two extremes, but rather a result of all three nations strengthening their commitments to market financing. Subsequent Parts will consider the distributional implications of these commitments.

#### 1. Germany and Japan: Movement Toward Market-Based Systems

While Germany and Japan were exemplars of economic success in the 1970s and 1980s,<sup>99</sup> their economic fortunes began to turn in the 1990s, creating pressure in both countries to move in the direction of market-based capitalism.<sup>100</sup> The markets for corporate

---

95. See Shankha Chakraborty & Tridip Ray, *Bank-based Versus Market-based Financial Systems: A Growth-Theoretic Analysis*, 53 J. MONETARY ECON. 329, 329 (2006) (describing how "[i]nvestment and per capita income are higher . . . under a bank-based system).

96. See *id.* at 332 (discussing the differences in size of investment possible under bank-based and market-based systems, with bank-based systems allowing for larger investments and requiring less minimum wealth for external financing).

97. For example, in 2021, the top 10% of the wealth distribution in the United States owned 70.9% of all national wealth, compared to 58.6% in Germany and 59.3% in Japan. See WORLD INEQUALITY DATABASE, <https://wid.world/world/> [<https://perma.cc/5BD8-9KR9>] (choose "Germany," "Japan," and "USA" from list of countries; then choose "Wealth Inequality—Top 10% share" from list of "Key Indicators"). In 2021, the top 1% of the wealth distribution in the United States owned 36.3% of all national wealth, compared to 28% in Germany and 24.7% in Japan. *Id.* (choose "Germany," "Japan," and "USA" from list of countries; then choose "Wealth Inequality—Top 1% share" from list of "Key Indicators"). Looking to the lower ranks of the wealth distribution, in the United States in 2021, the bottom 50% of the wealth distribution owned only 0.8% of national wealth, compared to 3.4% in Germany and 4% in Japan. *Id.* (choose "Germany," "Japan," and "USA" from list of countries; then choose "Wealth Inequality—Bottom 50% share" from list of "Key Indicators"). These distinctions—between the United States, on the one hand, and Germany and Japan, on the other hand—were consistent over the period for which data is available for all three countries (1995–2021). *Id.*

98. See Vitols, *supra* note 52, at 245–47 (describing a "shift in preferences toward market-based finance in both [Germany and Japan]" among their large firms and, to some extent, among households in Germany).

99. Streeck & Yamamura, *supra* note 51, at 1.

100. *Id.* at 3–4.

finance in both economies subsequently moved in that direction.<sup>101</sup> Some of the shift can be explained by societal factors other than regulatory choice. The governments of both Germany and Japan both began issuing substantially more debt in the 1970s through 1990s, and the existence of government bonds meant the markets for financial securities had more securities in them.<sup>102</sup> Additionally, firms grew in both countries and began to pay down their bank debt, making market financing a more appealing option.<sup>103</sup> However, regulatory choices also worked to increase the relative importance of securities markets in the financial systems of both countries.

In Germany, relevant regulatory changes were spurred by the desire of Germany's largest private banks to enter the investment banking industry and compete with their U.S.-based investment banking counterparts.<sup>104</sup> Bank leaders believed that doing so would require strong national securities markets, so they took the lead in promoting legislation that created a regulatory system that shared characteristics with the United States' Securities and Exchange Commission.<sup>105</sup> Additional legislation increased the availability of mutual funds.<sup>106</sup> The result was growth in the importance of the securities markets in Germany relative to bank lending as a source of corporate finance.

In Japan, a series of financial scandals in the 1990s involving the Japanese Ministry of Finance spurred public support for dramatic change in financial regulation.<sup>107</sup> The result was the series of financial reforms known as the "Big Bang."<sup>108</sup> The Big Bang reforms involved the creation of independent regulatory agencies that operated in a "rule-based manner"—a significant step away from the historical involvement of the Ministry of Finance in allocative decisions.<sup>109</sup>

These changes in Germany and Japan have not resulted in a wholesale shift to a U.S.-style market-based system. In Germany, banks remain central to the process of financial policymaking.<sup>110</sup> In Japan, the severity of the banking crisis of the 1990s required the

101. *Id.*

102. Vitols, *supra* note 52, at 246.

103. *Id.* at 245. As discussed above, larger firms are more likely to raise funds in the securities markets. *Id.* at 247. Vitols also notes that when these large firms began paying down their bank debt, their securities became more marketable. *Id.* at 245.

104. *Id.* at 252.

105. Gesetz Über den Wertpapierhandel und zur Änderung börsenrechtlicher und wertpapierrechtlicher Vorschriften [Zweites Finanzmarktförderungsgesetz] [Second Financial Market Promotion Act], July 26, 1994, BUNDESGESETZBLATT, TEIL I [BGBL I] at 1749 (Ger.); *see also* Vitols, *supra* note 52, at 252 ("The Second Financial Markets Promotion Law (1994) has been the most important step toward establishing U.S.-style regulation of capital markets [in Germany].").

106. Gesetz zur weiteren Fortentwicklung des Finanzplatzes Deutschland [Drittes Finanzmarktförderungsgesetz] [Third Financial Market Promotion Act], Mar. 24, 1998, BUNDESGESETZBLATT, TEIL I [BGBL I] at 529 (Ger.); *see also* Vitols, *supra* note 52, at 253 ("The Third Financial Markets Promotion Law (1997) increased the permissible form of mutual funds, including the establishment of a special private retirement savings option (*Pensionssondervermögen*) . . .").

107. Vitols, *supra* note 52, at 257; *see also* Edward J. Lincoln & Robert E. Litan, *The 'Big Bang'? An Ambivalent Japan Deregulates Its Financial Markets*, BROOKINGS INST. (Dec. 1, 1998) <https://www.brookings.edu/articles/the-big-bang-an-ambivalent-japan-deregulates-its-financial-markets/> [<https://perma.cc/PYC4-Z2R9>] (describing the Japanese Ministry of Finance's lax regulation resulting in "28 trillion yen or some \$230 billion [USD]" worth of non-performing loans).

108. Vitols, *supra* note 52, at 257.

109. *Id.*

110. *Id.* at 253.

government to maintain a significant role in the market for corporate finance.<sup>111</sup> However, in recent decades, both economies have moved in the direction of a greater role for securities markets.<sup>112</sup>

## 2. *United States: Development of Influential Intermediaries*

In the last several decades, the structure of the United States' markets for corporate finance has also evolved. The U.S. markets have ceased to be uniquely dispersed.<sup>113</sup> In fact, as of 2017, retail and other small investors owned only 19% of market capitalization in the United States, compared to approximately 30% in Japan and nearly 40% in Germany.<sup>114</sup> However, small investors in the United States have not ceded their role to banks and crossholding private corporations, as was characteristic in Germany and Japan. Instead, other institutional investors have come to play a dominant role the U.S. markets.<sup>115</sup>

The term "institutional investors" refers to several types of enterprises that invest pooled money, usually on behalf of someone else, with the hopes of earning a return on that money in the future.<sup>116</sup> Institutional investors include insurance companies that invest insurance premiums in anticipation of future claims, endowments that invest donated funds to create income for future charitable endeavors, and investment funds that invest household savings.<sup>117</sup> The rise of institutional investors has dramatically shifted the shareholder landscape in the U.S. markets, drawing the attention of many corporate law scholars.<sup>118</sup> In 1950, institutions held only 6.1% of outstanding equity in the United States.<sup>119</sup> That number grew steadily over the years and by 2001, institutions owned over 50% of outstanding

---

111. *Id.* at 258–59 (“The difficulties in solving the bad-loan situation and in restoring profitability to the banking system are thus likely to continue the current uneasy coexistence of the traditional system of administrative regulation and the nascent liberal regulatory system . . .”).

112. *Id.* at 246, 259.

113. OECD REPORT, *supra* note 43, at 11 (discussing the “strong presence” of institutional investors in the United States).

114. *Id.* at 11–12, 37 tbl.A.3.

115. *See, e.g., id.* at 21 fig.11 (showing the rise of investment funds, pension funds, and insurance companies as institutional investors).

116. *Id.* at 6 (describing “institutional investors” as “mainly profit-maximising intermediaries that invest on behalf of their ultimate beneficiaries”).

117. Emily Winston, *Managerial Fixation and the Limitations of Shareholder Oversight*, 71 HASTINGS L.J. 699, 717–18 (2020).

118. A leading focus of scholarship in this area is the way in which institutional investors' incentives to engage in corporate governance differ from those of smaller investors. *See, e.g.,* Rock, *supra* note 12, at 374–75 (describing theories on why institutional investors' incentives might differ from those of other shareholders).

119. MATTEO TONELLO & STEPHAN RABIMOV, THE 2010 INSTITUTIONAL INVESTMENT REPORT: TRENDS IN ASSET ALLOCATION AND PORTFOLIO COMPOSITION 22 tbl.10 (2010), <https://ssrn.com/abstract=1707512>.



equity.<sup>120</sup> By 2017, institutions' share of equity was, by various estimations, between 70–80%,<sup>121</sup> and these institutions have come to be quite influential in corporate governance.<sup>122</sup>

Thus, the United States' stock markets no longer serve as the paradigmatic example of dispersed markets.<sup>123</sup> A variety of institutional investors have come to dominate the U.S. markets. Within the broad category of institutional investors, investment funds operating in the public markets have been prominent drivers of concentration in the U.S. securities markets.<sup>124</sup> Investment funds are business entities in the business of pooling and investing others' money.<sup>125</sup> Because households can invest their savings in investment funds, these funds affect the distribution of wealth among households and are therefore the focus of this Article.

### 3. Market Commitment, Not Convergence

Some observers of these changes in the German, Japanese, and U.S. economies have argued that the systems of corporate finance in these three nations are converging.<sup>126</sup> This may be true in the sense that these three nations' systems of corporate governance are today less different than they were in the past. It may also be true in the sense that intermediaries are now important players in all three economies. However, it is not true that they have converged on a mean point between Germany and Japan on one hand, and the United States on the other. Rather, on the spectrum between strongly bank-based and strongly market-based systems, all three nations have moved in the direction of a more market-based

120. *Id.*

121. See *80% of Equity Market Cap Held by Institutions*, PENSIONS & INVS. (Apr. 25, 2017), <https://www.pionline.com/article/20170425/INTERACTIVE/170429926/80-of-equity-market-cap-held-by-institutions> [<https://perma.cc/ETG8-AD9A>] (citing Bloomberg data, showing that institutions owned between 70%–80% of various indexes in 2017); see also OECD REPORT, *supra* note 43, at 11 tbl.3 (showing that, in the United States in 2017, institutional investors owned 72% of market capitalization). Estimates vary from source to source due to differences in defining market capitalization.

122. See generally Jan Fichtner, Eelke M. Heemskerck & Javier Garcia-Bernardo, *Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk*, 19 BUS. & POL. 298 (2017) (describing the combined power of the three largest mutual fund companies in the United States); Leo E. Strine, Jr., *Who Bleeds When the Wolves Bite?: A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System*, 126 YALE L.J. 1870 (2017) (describing how mutual fund companies and activist hedge funds work together to effect governance changes).

123. Though, by many measures, they remain less concentrated than the markets of Germany or Japan. See OECD REPORT, *supra* note 43, at 18 fig.8 (showing that in 2017 the largest three shareholders own more than half of the stock in approximately 50% of German companies, compared to approximately 15% of Japanese companies and approximately 5% of U.S. companies).

124. *Institutional Investors' Indicators*, OECD DATA EXPLORER, [https://stats.oecd.org/viewhtml.aspx?datasetcode=QASA\\_7II\\_INDIC&lang=en#](https://stats.oecd.org/viewhtml.aspx?datasetcode=QASA_7II_INDIC&lang=en#) (on file with the *Journal of Corporation Law*) (showing the financial assets of investment funds in the United States growing from 5.43% of GDP in 1980 to 143.18% of GDP in 2020) (under "Frequency of observation & Time Period" set the parameters to "annual" from 1980–2021; then under "Reference area" select "United States"; under "Measure" select "Financial assets of investment funds"; under "Unit of measure" select "Percentage of GDP"; and then select "Chart"→"Timeline").

125. *Investment Funds: EU Laws and Initiatives Relating to Collective Investment Funds*, EUR. COMM'N., [https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/financial-markets/investment-funds\\_en](https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/financial-markets/investment-funds_en) [<https://perma.cc/M6G3-H2XU>].

126. See Streeck & Yamamura, *supra* note 51, at 4 (introducing how financial crises in Japan and Germany have raised the prospect of a "competitive convergence to an Anglo-American [market-based] pattern of economic organization").

system.<sup>127</sup> So, the space between them may have decreased, but that is not a consequence of the United States embracing a greater role for banks in the markets for corporate finance. The following Part will explain how the United States' ever-strengthening embrace of market financing—and all the risk those markets entail—has resulted in the United States developing a unique ecosystem of market-centered investment intermediaries. Part IV will then explore these intermediaries' relationship to the distribution of wealth.

### III. THE GROWTH OF INTERMEDIARIES IN THE UNITED STATES

Three decades ago, corporate law scholars were exploring what forces made U.S. public capital markets uniquely dispersed. One prominent answer was that U.S. policymakers had made explicit choices to avoid intermediaries.<sup>128</sup> Today, however, U.S. corporate law scholars dedicate substantial attention to the rapid growth of institutional investors in the United States and the resulting concentration of the public capital markets.<sup>129</sup> This raises the question: what changed to allow this type of concentration in spite of the fact that the laws governing these markets were designed to avoid it?<sup>130</sup>

This Part will show that early policy choices sought to avoid intermediation by choosing market financing over bank financing. However, markets are inherently risky, leading to later policy choices aimed at protecting ordinary Americans from this risk while maintaining or strengthening the role of the capital markets in our economy. The result has been the development of a unique ecosystem of powerful, market-based intermediaries that are unequally available to investors depending on an investor's wealth.

#### A. Early Policy Choices to Avoid Influential Intermediaries

Lawmakers in the United States, Germany, and Japan were all motivated by similar concerns when making laws that established their systems of corporate finance in the early part of the 20th century. The common motivation was protecting the public from financial loss.<sup>131</sup> As described above, lawmakers in Germany and Japan went about this by reducing the role of the capital markets in their economies.<sup>132</sup> This is an understandable path. Wealth invested in the capital markets is exposed to greater risk than wealth deposited in banks. Historical circumstances in the United States, however, led U.S. legislators to fear the

---

127. *Id.*

128. See, e.g., ROE, *supra* note 42, at 31–32, 61 (describing hostility toward intermediaries like investment companies and banks in the Progressive era and notably in the SEC's statement of purpose).

129. See generally Madison Condon, *Externalities and the Common Owner*, 95 WASH. L. REV. 1 (2020) (examining the climate-related activism of institutional investors); Rock, *supra* note 12 (examining the corporate governance impact of institutional investors); Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors*, 31 J. ECON. PERSP. 89 (2017) (identifying governance problems arising from the rise of institutional investors). This is but a small sample of the vast legal scholarship on this topic.

130. See ROE, *supra* note 42, at xiv (describing how many American laws were intended to disadvantage institutional investors and the political motivations behind the laws).

131. See Vitols, *supra* note 50, at 10–11 (describing how financial disasters in the 1920s motivated policymakers and their constituents in all three countries to improve financial stability for investors).

132. See *supra* Part II.A.1.

market power of financial intermediaries like banks more than the inherent risks of the capital markets.<sup>133</sup>

The New Deal legislators who embraced a market system of corporate finance for the United States in the 1930s and 1940s were primarily motivated by a desire to avoid the concentration of economic power in a small number of institutions.<sup>134</sup> Indeed, in congressional hearings regarding the Investment Company Act of 1940—the principal federal legislation in the United States regulating investment intermediaries—the Securities and Exchange Commission (SEC) opined that “the national public interest . . . is adversely affected . . . when investment companies [attain] great size.”<sup>135</sup> This distrust resulted in several policy choices that, for a time, hindered the growth of large intermediaries in the U.S. markets.<sup>136</sup> The primary target of this distrust was banks.<sup>137</sup>

Distrust of powerful banks in the United States arose in response to the extraordinary economic and political power that banking titans had amassed around the turn of the century.<sup>138</sup> And, while this distrust peaked following the stock market crash of 1929, it was growing for decades before that. A Supreme Court decision in 1897 prohibited banks from owning stock in corporations.<sup>139</sup> After the stock market crash of 1929, this rule was legislated, albeit less restrictively, in the Glass-Steagall Act in 1933.<sup>140</sup> The Glass-Steagall Act separated investment banking from commercial banking.<sup>141</sup> That is, banks could *either* deal in securities *or* take deposits and offer loans, but they could not do both. This restriction intentionally and effectively disempowered banks and steered the market for corporate finance away from a bank-centered system.<sup>142</sup> While the Glass-Steagall Act

133. See, e.g., ROE, *supra* note 42, at 58 (describing how Andrew Jackson’s veto of the Second Bank of the United States was based on suspicion of concentration of power and how Jackson’s veto was assigned reading in public schools for “decades” thereafter).

134. *Id.* at 22, 94.

135. *Id.* at 32 (quoting Hearings on S. 3580 Before a Subcomm. of the Senate Comm. on Banking and Currency, 76th Cong., 3d Sess. 434, 500–01 (1940) [1940 Act Hearings]).

136. Emily Winston, *An Unlikely Romance: How the United States Fell in Love with the Stock Markets*, 58 RICH. L. REV. 793, 796–98 (2024).

137. See, e.g., ROE, *supra* note 42, at 32 (discussing hearings and reports in America which show a preference for decentralized banking).

138. RON CHERNOW, *THE DEATH OF THE BANKER* 5 (1997) (describing the bankers of this era as “sleek tycoons who held undisputed sway over transcontinental railroads, industrial trusts, investment houses, and estates the size of small duchies. They . . . treated presidents and prime ministers as peers—sometimes even condescended to them as the sovereigns of struggling, inferior states.”).

139. ROE, *supra* note 42, at 55; *Cal. Nat’l Bank v. Kennedy*, 167 U.S. 362, 367, 370 (1897) (holding that “a national bank does not possess the power to deal in stocks” and describing stock trading as “entirely outside of the powers conferred upon the bank”).

140. Banking Act of 1933, Pub. L. No. 66-73D, 48 Stat. 162 (1933).

141. ROE, *supra* note 42, at 95.

142. This separation was partially repealed by the Gramm Leach Bliley Act of 1999, which removed legal restrictions on affiliations between banks and securities firms. Arthur E. Wilmarth, Jr., *The Transformation of the U.S. Financial Services Industry, 1975–2000: Competition, Consolidation, and Increased Risks*, 2002 U. ILL. L. REV. 215, 219 n.1 (2002) (citing The GLB Act, Pub. L. No. 106-102, 113 Stat. 1338 (1999) (codified in scattered sections of 12, 15, and 19 U.S.C.)). While this partial repeal had the effect of growing many banking and financial institutions, it did not result in banks becoming influential actors in the public capital markets. See *id.* at 230 (describing how banks have no special advantage in investing in capital markets in contrast with their unique advantages in loaning). By 1999, the United States’ market-based system was well-established. See *id.* at 215 (describing the “aggressive expansion strategies” of financial institutions after the passage of Gramm Leach Bliley but noting that firms are more likely to look to capital markets than banks for borrowing).

fragmented and therefore diminished the influence of banks, two other key pieces of legislation sought to make the capital markets less risky for ordinary investors.

The Securities Act of 1933 (Securities Act) established a system for registering securities sold to the public.<sup>143</sup> The registration system is designed to ensure investors receive adequate information before deciding to purchase securities. The Securities Act also regulates how that information reaches investors and provides for liability when issuers provide fraudulent information.<sup>144</sup> The Securities Exchange Act of 1934 (Exchange Act) ensures that investors continue to receive accurate information about securities that have been issued and are trading in the secondary market.<sup>145</sup> It further seeks to ensure the fairness of the markets with prohibitions on fraud and market manipulation.<sup>146</sup> And, crucially, it created the Securities Exchange Commission (SEC) to promulgate and enforce rules to carry out the legislative mandate of the Securities and Exchange Acts.<sup>147</sup> So, the Glass-Steagall Act weakened banks while the Securities and Exchange Acts sought to reduce market risk for investors. The combined effect was to encourage Americans to invest more of their savings in the capital markets.

Then, in an attempt to regulate any investment intermediaries that participated in the capital markets, Congress passed the Investment Company Act of 1940<sup>148</sup> (Company Act) and the Investment Advisers Act of 1940<sup>149</sup> (Advisers Act). These laws were intended to protect the investments of individuals and families who invest in these intermediaries, or “funds.”<sup>150</sup> They were also designed to ensure investment companies did not become too powerful.<sup>151</sup>

As will be discussed in the following Parts, in the end, these policy choices to avoid the concentration of economic power did not prevent the development of powerful investor intermediaries in the U.S. capital markets. However, the intermediaries that did arise came later and were different from the banks and cross-holding corporations that had been influential in Germany and Japan’s markets.<sup>152</sup> The remainder of this Part shows that the policy choices that ultimately allowed investment intermediaries to flourish were largely designed to protect investors from the risk inherent in market investing. The following Part will explore the effect of these policy choices on the distribution of wealth in the United States.

---

143. Securities Act of 1933, 15 U.S.C. §§ 77a–77aa.

144. *See id.* § 77e and related rules promulgated by the SEC. These rules, referred to as the “gun-jumping rules,” control the content and timing of information that reaches investors during an offering of new securities. *See, e.g.*, 17 C.F.R. § 230.135 and § 230.169 (providing rules for gun-jumping); *see also* 15 U.S.C. § 77k.

145. Securities Exchange Act of 1934, 15 U.S.C. § 78a et seq. Specifically, *see* the Exchange Act at § 78m (“Periodical and Other Reports”) (describing required disclosure by issuers); *see also id.* § 78n (“Proxies”) (providing laws for the content and manner of shareholder voting and related communications).

146. *Id.* § 78j (“Manipulative and Deceptive Devices”) (prohibiting manipulative practices).

147. *Id.* § 78d.

148. Investment Company Act of 1940, 15 U.S.C. § 80a et seq.

149. Investment Adviser Act of 1940, 15 U.S.C. § 80b et seq.

150. *See* ROE, *supra* note 42, at 103 (describing SEC concerns that unregulated investment companies could act contrary to the interests of their investors or even fail).

151. *See id.* (describing Congressional intent to prevent investment companies from obtaining “concentrated control” of the nation’s economy).

152. The author has written elsewhere about how and why our modern system of corporate finance came to be dominated by intermediaries despite this very anti-intermediary origin. *See generally* Winston, *supra* note 136 (describing how, following the New Deal legislation, lawmakers’ preference for market financing persisted while their fear of intermediaries subsided).

### B. Markets, Retirement Savings, and the Rise of Mutual Funds

For the reasons discussed in the prior section, U.S. legislators in the 1930s chose to favor market financing over bank financing despite the risks inherent in capital market investing. The Securities and Exchange Acts reduced some of that risk by disincentivizing fraud and reducing asymmetries of information between issuers of securities and investors. However, even with plentiful information and scarce fraud, capital markets are a riskier place to invest money than a savings account. A company that provides ample information to its investors and engages in no fraud can still fail, wiping out the wealth that was invested in its securities.

One benefit of this risk is that it offers a higher rate of return. The average return on investment in the capital markets is much greater than the rate of return on savings in a bank account.<sup>153</sup> The downside, however, is that some of the time, investors in the capital markets will lose the wealth they invested. When the investor has only a modest amount of wealth, that loss can be financially catastrophic. In the decades that followed the passage of the Securities and Exchange Acts, a combination of market forces, academic research, and further legislative action combined to make a portion of the capital markets safer for investors. Those changes are described below.

#### 1. The 1940s Acts

Despite having legislatively diminished the ability for traditional banks to act as capital markets intermediaries, Congress acknowledged that other types of intermediaries could still operate in the capital markets. So, just a few years after passing the foundational legislation that cemented the United States' preference for market financing, Congress passed the Company Act and the Advisers Act. These two statutes regulate investment funds (called "investment companies" under the law)<sup>154</sup> and their advisers,<sup>155</sup> respectively, with the goal of further reducing the risk of investing in the capital markets.<sup>156</sup> Investment funds are intermediary organizations in which individual investors can invest their money, and for a fee, the investment fund makes investment decisions on the individual's behalf.<sup>157</sup> These two pieces of legislation were intended to make the use of investment funds safer for American investors.

The Company Act creates a default rule that investment companies must register with the SEC.<sup>158</sup> Registered investment companies are then subject to rules requiring disclosure

---

153. Wolff, *supra* note 1, at 68 appx. tbl. 1 (showing that the rate of return on liquid assets was less than 1% between 2010–2019).

154. Investment Company Act of 1940, 15 U.S.C. § 80a-1 (summarizing findings that the public interest favors the regulation of investment companies).

155. *Id.* § 80b-4.

156. See, e.g., ROE, *supra* note 42, at 103–05 (describing the intent of the SEC and Congress in 1940).

157. See, e.g., James Chen, Charlene Rhinehart & Timothy Li, *Primary Market: Definition, Types, Examples, ad Secondary*, INVESTOPEDIA (Mar. 18, 2024), <https://www.investopedia.com/terms/p/primarymarket.asp> [<https://perma.cc/EUM7-438V>] (describing how primary markets are where persons first issue securities to investors to "obtain financing" and how secondary markets are where those securities, already purchased off the primary market, are traded between investors).

158. Investment Company Act of 1940, 15 U.S.C. § 80a-7 (stating that investment companies may not engage in any business in interstate commerce unless registered with the SEC). There are ways out of this default registration, which are discussed in Part III.C below.

to investors.<sup>159</sup> Registered investment companies are also subject to restrictions on the amount of risk to which they expose their investors, including requirements that funds must be broadly diversified.<sup>160</sup> Registered investment companies are further restricted from increasing the risk to which they are exposed via leverage and must invest predominantly in highly liquid assets.<sup>161</sup> These requirements are intended to protect the investments of individuals and families who invest in these funds.

Congress's choice to diminish the role of banks in the capital markets was not sufficient to eliminate institutional intermediaries from those markets. Acknowledging that other market-based intermediaries already existed, Congress acted in 1940 to protect investors from the risks that these intermediaries could present—namely excessive speculation, mismanagement, and fraud.

## 2. Financial Theory and Mutual Funds

While non-bank investment intermediaries already existed when the passage of the Securities, Exchange, Companies, and Advisers Acts were passed, developments in financial theory in the decades following their passage made investment funds much more popular.<sup>162</sup> The prominence of the capital markets in the United States economy inspired a great deal of research into financial markets. Economists developed several key theories in the 1950–1970s that had a profound impact on how people invest in the capital markets.

Modern portfolio theory (MPT), which originated in a paper by economist Harry Markowitz in 1952, describes how investment portfolios can be assembled to optimize or maximize expected return given the investor's preferred level of risk.<sup>163</sup> Next, the capital asset pricing model established the tools to measure investment portfolio risk, return, and performance.<sup>164</sup> The result was that professionals with knowledge of these theories could assemble portfolios specific to the needs of individual investors. This led to more and more investors using professional investment intermediaries to invest their savings.<sup>165</sup> Then, around 1970, the Efficient Capital Markets Hypothesis (ECMH) was established in a paper

---

159. Exchange Act, 15 U.S.C. § 78m (describing filing requirements for registered securities); Investment Company Act of 1940, 15 U.S.C. § 80a-35 (describing fiduciary duties of investment companies and investment advisors and providing penalties for violations of those duties); *id.* § 80a-9 (“Ineligibility of certain affiliated persons and underwriters.”) (prohibiting certain persons from working for investment companies and as investment advisors and allowing the SEC to create further restrictions).

160. *Id.* § 80a-5 (describing the diversification requirements that a fund must meet to market itself as a “diversified fund”); 17 C.F.R. § 270.22e-4 (describing liquidity management requirements for investment funds); *see also* Cary Martin Shelby, *Privileged Access to Financial Innovation*, 47 LOYOLA U. CHI. L.J. 315, 318, 346–50 (2015) (describing investment limitations under the Investment Company Act of 1940).

161. Investment Company Act of 1940, 15 U.S.C. § 80a-5; 17 C.F.R. § 270.22e-4; *see also* Shelby, *supra* note 160, at 346–48 (same).

162. *Origins of the Modern Mutual Fund*, BROWN BROS. HARRIMAN, <https://www.bbh.com/us/en/bbh-who-we-are/our-story/200-years-of-partnership/origins-of-the-modern-mutual-fund.html> [https://perma.cc/G47M-HYB2] (noting the early history of investment intermediaries in the United States, as early as 1868).

163. *See generally* Harry Markowitz, *Portfolio Selection*, 7 J. FIN. 77 (1952).

164. André F. Perold, *The Capital Asset Pricing Model*, 18 J. ECON. PERSPS. 3, 3 (2004) (“The CAPM was developed in the early 1960s by William Sharpe, Jack Treynor, John Lintner and Jan Mossin.”) (internal citations omitted).

165. Rock, *supra* note 12, at 364 n.3 (citing Robert Charles Clark, *The Four Stages of Capitalism: Reflections on Investment Management Treatises*, 94 HARV. L. REV. 561, 562 (1981)).

by economist Eugene Fama.<sup>166</sup> The ECMH tells us that active securities trading in pursuit of speculative gains is futile.<sup>167</sup> The combined implication of these theories is that a prudent investor will invest in a passively managed, diverse portfolio.<sup>168</sup> There is no point in trying to beat the market by picking and choosing what stocks to buy and sell. A wise investor will spread their investment across a broad array of securities.

Mutual funds allow investors to do just that. Mutual funds take small investments from many investors, pool them, and invest them in an array of assets on behalf of the fund's investor clients.<sup>169</sup> These funds make broad diversification inexpensive and easy for investors because the costs of diversification are shared among many investors.<sup>170</sup> Following the development of these theories, the mutual fund industry in the United States grew rapidly.<sup>171</sup>

In response to this growing popularity of mutual funds, Congress passed the Investment Company Amendments Act of 1970.<sup>172</sup> This piece of legislation included amendments to the Securities, Exchange, Companies and Advisers Acts that were largely intended to increase the protection of the growing number of investors who were investing their money in mutual funds.<sup>173</sup> Some of the protective measures included a requirement that advisors to mutual funds register with the SEC,<sup>174</sup> stricter limitations on conflicts of interest for investment company board members,<sup>175</sup> harsher penalties for violations of the laws governing investment funds,<sup>176</sup> and granting the SEC additional rulemaking authority for anti-fraud related to investment companies.<sup>177</sup>

As our understanding of markets improved, the benefits of intermediaries like mutual funds became increasingly clear. While capital markets are inherently risky, investing in a diversified portfolio is the lowest-risk way to invest in the capital markets. Mutual funds provide a low-cost way for investors to diversify. While this reduces investment risk, it can present the additional risk of agency costs: the risk that the people in charge of the mutual

---

166. Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383 (1970). The ECMH also has its origins in the work of Paul Samuelson. Paul A. Samuelson, *Proof That Properly Anticipated Prices Fluctuate Randomly*, 6 INDUS. MGMT. REV. 41 (1965).

167. ANDREW W. LO, ADAPTIVE MARKETS: FINANCIAL EVOLUTION AT THE SPEED OF THOUGHT 23 (2017).

168. BURTON G. MALKIEL, *A RANDOM WALK DOWN WALL STREET: THE TIME-TESTED STRATEGY FOR SUCCESSFUL INVESTING* 15 (8th ed., 2003).

169. WILLIAM A. BIRDTHISTLE, *EMPIRE OF A FUND: THE WAY WE SAVE NOW* 19 (2016) ("A mutual fund is a financial tool that gathers money from several different investors and uses the combined pool of assets to buy a portfolio of stocks, bonds, or other investments.").

170. Rock, *supra* note 12, at 373 (noting that the economies of scale attained by large institutional investors has allowed them to offer broad diversification at a very low cost to investors).

171. Barry P. Barbash, Director, Div. of Inv. Mgmt., SEC, Remarks at the 1997 ICI Securities Law Procedures Conference (Dec. 4, 1997) <https://www.sec.gov/news/speech/speecharchive/1997/spch199.txt> [<https://perma.cc/F64B-S4BX>] ("From 1960 to 1965, assets of stock mutual funds doubled. From 1965 to 1970 they doubled again.").

172. Investment Company Amendments Act of 1970, Pub. L. No. 91-547, 84 Stat. 1413-36 (1970).

173. Walter P. North, *The Investment Company Amendments Act of 1970*, 46 NOTRE DAME LAW. 712, 720 (1971).

174. *Id.* at 717.

175. *Id.* at 719-20.

176. *Id.* at 720.

177. *Id.* at 722.

funds will not act in the best interest of their investor clients.<sup>178</sup> So, as Americans' wealth flowed increasingly into mutual funds in the mid-20th century, Congress stepped in once again to attempt to reduce these agency costs and protect the savings of Americans investing through mutual funds.

### 3. Retirement Savings and Mutual Funds

An additional development that had an extraordinary impact on the growth of mutual funds in the U.S. markets in the 20th century was the regulation of retirement savings. During the same time that private savings were flowing increasingly into mutual funds, employer-provided retirement plans were becoming increasingly common.<sup>179</sup> At this time, employer-provided retirement plans were predominantly "defined benefit" plans—the type of retirement benefit colloquially referred to as a "pension."<sup>180</sup> In defined benefit retirement plans, a participating employee is promised a fixed monthly payment once the employee retires, usually until their death.<sup>181</sup> Unfortunately, as the availability of employer-provided retirement plans grew, so did their mismanagement.<sup>182</sup> Poor management of employee pension funds resulted in many employees losing their retirement savings in the 1950s and 1960s.<sup>183</sup> In response to these losses, Congress passed the Employee Retirement Income Security Act of 1974 ("ERISA").<sup>184</sup>

ERISA was designed to ensure that employees' promised pension benefits were available and paid upon retirement.<sup>185</sup> To accomplish this, it required that private-sector pensions be fully funded by liquid assets and insured by the Pension Benefit Guaranty Corporation.<sup>186</sup> This change proved costly for employers, who were not accustomed to keeping so many assets on hand to meet their pension obligations.<sup>187</sup> To avoid this cost, employers began transitioning their employee retirement plans to "defined contribution" plans such as those commonly known as 401(k)s.<sup>188</sup> With defined contribution plans, individual employees hold their retirement savings in individual accounts.<sup>189</sup> The value may fluctuate over time, and the money available to the saver at retirement is the balance of the account when the employee retires.<sup>190</sup> So, beyond just avoiding ERISA's regulatory requirements,

---

178. See generally Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. FIN. ECON. 305 (1976) (analyzing how agency costs impact many facets of the firm).

179. PATRICK PURCELL & JENNIFER STAMAN, CONG. RSCH. SERV., RL34443, SUMMARY OF THE EMPLOYEE RETIREMENT INCOME SECURITY ACT (ERISA) 2 (2009).

180. *Id.* at 3.

181. *Id.*

182. *Id.* at 2.

183. *Id.* ("After the Studebaker automobile company terminated its underfunded pension plan in 1963, leaving several thousand workers and retirees without the pensions that they had been promised, Congress began considering legislation to ensure the security of pension benefits in the private sector.")

184. Employment Retirement Income Security Act of 1974 (ERISA), Pub. L. No. 93-406, 88 Stat. 829 (1974) (codified as amended in scattered sections of 26 and 29 U.S.C.).

185. PURCELL & STAMAN, *supra* note 179, at 3.

186. *Id.* at 3.

187. *Id.* at 3–4.

188. *Id.*

189. *Id.* at 3.

190. PURCELL & STAMAN, *supra* note 179, at 3.



a transition to defined contribution retirement plans benefitted employers by shifting the risk of under-funded accounts onto employees.<sup>191</sup> With no guaranteed amount of payout at retirement, retirement accounts could no longer be underfunded. These effects of ERISA dramatically increased the number of defined contribution pension plans in the United States.<sup>192</sup>

Beyond its requirements for defined benefit pensions, ERISA utilizes an array of other tools in its effort to protect employee retirement savers who participate in employer-sponsored retirement plans (“plan participants”). A central regulatory tool of ERISA is disclosure.<sup>193</sup> The statute attempts to ensure plan participants understand where their money is going by requiring several types of disclosure, including a plain language description of how the retirement plan works<sup>194</sup> and periodic statements of the saver’s balances and rights under the plan.<sup>195</sup> ERISA also places fiduciary responsibilities on those who are responsible for the management and operation of retirement plans.<sup>196</sup> These fiduciaries are required to act with prudence in managing the plan assets, meaning that the plan manager must take steps to ensure she is acting with care and not subjecting savers to unnecessary risks.<sup>197</sup> Importantly, plan managers are also statutorily required to diversify the plan assets across investments.<sup>198</sup>

Diversifying plan assets across investments means that “fiduciaries should not invest an unreasonably large proportion of a plan’s portfolio in a single security, in a single type of security, or in various securities dependent upon the success of a single enterprise or upon conditions in a single locality.”<sup>199</sup> The consequence of these fiduciary rules is that plan managers mostly select pooled, diversified investment funds, and in turn that is where retirement savers invest their savings.<sup>200</sup> Consequently, most retirement savings in the

---

191. *Id.*

192. This change was not just a shift away from defined benefit to defined contribution; instead, the total proportion of households with retirement accounts increased between 1989–2013. *See* EDWARD N. WOLFF, A CENTURY OF WEALTH IN AMERICA 320 (2017) (showing that from 1989–2013, the percentage of U.S. households with defined contribution accounts increased from 24.0% to 50.3%, the percentage of households with defined benefit accounts decreased from 45.6% to 39.0%, and the percentage of households with any retirement assets increased from 56.0% to 63.6%).

193. *See id.* at 7–10.

194. 29 U.S.C. §§ 1021(a)(1), 1022(a) (requiring that participants be furnished with a “summary plan . . . written in a manner calculated to be understood by the average plan participant”); Richard J. Link, Annotation, *What Documents Constitute “Summary Plan Descriptions” Under Employment Retirement Income Security Act (29 U.S.C.A. §§ 1001 et seq.)*, 124 A.L.R. Fed. 355 (1995) (“Employers who set up employee-benefit plans governed by [ERISA] . . . are required to provide each participant in the plan with a summary plan description . . . in plain language . . .”).

195. 29 U.S.C. § 1025(a)(1)(A) (requiring that the administrator of a plan regularly provide participants with a “pension benefit statement”).

196. *See* PURCELL & STAMAN, *supra* note 179, at 24–32.

197. 29 U.S.C. § 1104(a)(1)(B); *see* *Donovan v. Mazzola*, 716 F.2d 1226, 1232 (9th Cir. 1983) (discussing the prudent person test, the court notes that “at the time they engaged in the challenged transactions, [the fiduciaries] employed the appropriate methods to investigate the merits of the investment and to structure the investment”).

198. 29 U.S.C. § 1104(a)(1)(C).

199. PURCELL & STAMAN, *supra* note 179, at 26.

200. *See* DELOITTE, THE RETIREMENT LANDSCAPE HAS CHANGED—ARE PLAN SPONSORS READY?: 2019 DEFINED CONTRIBUTION BENCHMARKING SURVEY REPORT 16 (2019), <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/human-capital/us-2019-defined-contribution-benchmarking.pdf>

United States are funneled into mutual funds.<sup>201</sup> In this way, the rise of defined contribution pension plans has created demand for mutual funds, contributing to the extraordinary growth of the asset management companies that manage these funds.<sup>202</sup>

#### 4. Result: The Extraordinary Growth of (Passive) Mutual Funds

When the Companies and Advisers Acts were passed in 1940, mutual funds in the United States managed approximately \$450 million of assets.<sup>203</sup> As of 2014, U.S. mutual funds<sup>204</sup> in the United States managed approximately \$15.9 trillion.<sup>205</sup> Even accounting for inflation, that is a 2355-fold increase in the assets managed by mutual funds.<sup>206</sup> And, while growth in mutual funds has been occurring worldwide, the growth has been most extraordinary in the United States. As of 2014, U.S. mutual funds managed 53% of all the mutual fund assets in the world.<sup>207</sup>

So, the United States' decision to embrace markets over banks had a very lasting impact. The United States today has the largest capital markets in the world.<sup>208</sup> But, markets are inherently risky. So, over time regulatory strategies have emerged to make the markets less risky for the average investor. Consequently, mutual funds have grown to occupy an enormous portion of the U.S. markets.<sup>209</sup>

As mutual funds have grown, they have also evolved. Innovation has created new structures of mutual funds to reflect current knowledge about financial markets and

---

[<https://perma.cc/9GXA-64N8>] (listing the "top 10 investment option offerings," many of which include pooled, diversified investment funds); see also BRIGHTSCOPE & INV. CO. INST., THE BRIGHTSCOPE/ICI DEFINED CONTRIBUTION PLAN PROFILE: A CLOSE LOOK AT 401(k) PLANS, 2017 37 (2020), [https://www.ici.org/pdf/20\\_ppr\\_dcplan\\_profile\\_401k.pdf](https://www.ici.org/pdf/20_ppr_dcplan_profile_401k.pdf) [<https://perma.cc/ZS34-TXLN>] (showing that "equity and bond funds are the most common investment options in 401(k) plans").

201. BRIGHTSCOPE & INV. CO. INST., *supra* note 200, at 37; see also Martin Gelter, *The Pension System and the Rise of Shareholder Primacy*, 43 SETON HALL L. REV. 909, 960 (2013) ("The spread of 401(k) plans contributed to the enormous expansion of the mutual fund industry, in which much of these savings are invested.").

202. Rock, *supra* note 12, at 365–67. See also BlackRock, Inc., Annual Report (Form 10-K) 5 (Feb. 25, 2022), <https://d18m0p25nwr6d.cloudfront.net/CIK-0001364742/3173f90f-150e-43a3-941a-fba9a7e35773.pdf> [<https://perma.cc/D4EL-AFVD>] (stating that BlackRock, the world's largest asset manager, manages \$1.4 trillion of defined contribution assets and "remains well positioned to capitalize on the on-going evolution of the defined-contribution market").

203. BIRDTHISTLE, *supra* note 169, at 22.

204. The term "mutual fund" as used herein includes exchange-traded funds (ETFs). See *id.* at 182 (describing the ETFs as "essentially . . . an instrument identical to an old-fashioned index mutual fund except for the fact that this new ETF can be traded every second of the day"); see also *id.* at 175 (explaining that ETFs did not become available investment products until 1993).

205. INV. CO. INST., 2015 INVESTMENT COMPANY FACT BOOK (2015), [https://www.ici.org/doc-server/pdf%3A2015\\_factbook.pdf](https://www.ici.org/doc-server/pdf%3A2015_factbook.pdf) [<https://perma.cc/B5NH-2VJC>] ("2014 Facts at a Glance" is located on the unnumbered page after the cover).

206. *Inflation Calculator*, FED. RSRV. BANK OF MINNEAPOLIS, <https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator> [<https://perma.cc/5MWU-V6CP>] (enter \$450,000,000 in 1940 dollars in the calculator and convert to 2015 dollars; the result shows that \$450 million in 1940 dollars is approximately \$7.6 billion in 2015 dollars; \$17.9 trillion divided by \$7.6 billion is approximately 2355).

207. INV. CO. INST., *supra* note 205, at 10 fig. 1.2.

208. *Id.* at 8.

209. *Id.* ("2014 Facts at a Glance" showing that, at the end of 2014, investment companies owned 30% of all corporate equity in the U.S. markets and showing that mutual funds own far more assets compared with other investment companies).

changing investor preferences.<sup>210</sup> Today, mutual funds can broadly be divided into two categories: actively managed mutual funds and passively managed mutual funds.

Actively managed funds buy and sell securities in an attempt to earn a higher rate of return than the market as a whole.<sup>211</sup> Actively managed funds charge fees to pay managers to make the buying and selling decisions on behalf of the fund.<sup>212</sup> The hope of investors is that these managers will put their knowledge to work earning a high rate of return for the fund's investors.<sup>213</sup> The fees paid for these investment services are subtracted from any gains and could add to any losses. So, investors in actively managed funds assume the risk that their fund's managers will not perform well. The Company Act and Advisers Act attempt to reduce some of this risk by outlawing excessive speculation and fraud.<sup>214</sup> However, the inherent risk of investing in the securities markets cannot be wholly eliminated, and any person, however prudent, will sometimes make losing investment choices.

Because of this unavoidable risk, passively managed mutual funds have been rapidly growing in popularity. Passively managed mutual funds are more commonly known as index funds.<sup>215</sup> "Passively managed" refers to the fact that the advisers to these funds do not actively trade in securities to impact the fund's return on investment. Instead, they invest in a pre-determined "index" of securities, such as the S&P 500, and leave the invested money there until the individual investor decides to withdraw their investment.<sup>216</sup>

The advent, or at least early growth, of passively managed funds can be attributed to the academic research into financial markets discussed above. That research demonstrated that it is rarely possible to "beat the market" and showed that a diversified portfolio is the safest investment.<sup>217</sup> Recent data has demonstrated that actively managed funds rarely perform better than the market as a whole.<sup>218</sup> Passively managed funds are therefore arguably the least risky way to invest in publicly traded securities. Index funds allow investors to

210. Paula A. Tkac, *Mutual Fund Innovation: Past and Future*, in *POOLING MONEY: THE FUTURE OF MUTUAL FUNDS* 13, 1–16, 19–20 (Yasuyuki Fuchita & Robert E. Litan eds., 2008).

211. *Mutual Funds: Active vs. Passive Management*, FINRA, <https://www.finra.org/investors/learn-to-invest/types-investments/investment-funds/mutual-funds/active-passive> [<https://perma.cc/3DA2-ALPK>].

212. James Chen, *What Is a Fund Manager? Responsibilities and Career Path*, INVESTOPEDIA <https://www.investopedia.com/terms/f/fundmanager.asp> [<https://perma.cc/4K8G-PDQ7>].

213. *Id.*

214. *See supra* Part III.B.1.

215. *See* Fisch, Hamdani & Solomon, *supra* note 12, at 19 (describing passively traded mutual funds and ETFs as "*index funds or passive funds*"). ETFs and unit investment trusts (UITs) are other types of registered investment companies that can be passively managed. *See Exchange-Traded Funds (ETFs)*, SEC INVESTOR.GOV, <https://www.investor.gov/introduction-investing/investing-basics/glossary/exchange-traded-fund-etf> [<https://perma.cc/UZ9N-5PUY>] ("Some ETFs are passively-managed funds that seek to achieve the same return as a particular market index (often called index funds), while others are actively managed funds that buy or sell investments consistent with a stated investment objective."); *Unit Investment Trusts (UITs)*, SEC INVESTOR.GOV, <https://www.investor.gov/introduction-investing/investing-basics/glossary/unit-investment-trusts-uits> [<https://perma.cc/Y7LM-HXV4>].

216. Fisch, Hamdani & Solomon, *supra* note 12, at 21.

217. MALKIEL, *supra* note 168, at 15, 214, 385.

218. PEDRO MATOS, *THE GROWTH OF PASSIVE INVESTING WORLDWIDE 2* (2017), <https://www.darden.virginia.edu/sites/default/files/inline-files/Matos%20The%20Growth%20of%20Passive%20Investing%20Worldwide.pdf> [<https://perma.cc/EZ6A-6BRV>] ("This data from SPIVA supports the wisdom in Warren Buffett's recommendation [to invest in a low-cost S&P 500 index fund].").

hold a broad portfolio of stocks, without much work, for a relatively low price.<sup>219</sup> Because the managers of index funds (and similar products known as exchange traded funds, or ETFs) are not making trading decisions for the fund, the fees for these funds are relatively low.<sup>220</sup> So, while no investment in securities is risk-free, index funds are a relatively low-cost and low-risk option available to most U.S. investors. Consequently, they have become very popular.<sup>221</sup>

Thus, mutual funds have grown, in substantial part, because they are very good investments for most investors. However, having mutual funds control a substantial portion of the market changes the dynamic among investors in the market. The asset managers that manage many large mutual funds tend to be passive as shareholders.<sup>222</sup> That is, they do not initiate pressure campaigns on corporations they believe are under-performing. Doing so would cost money that could raise the price of their funds relative to their competitors.<sup>223</sup> Shareholders in U.S. corporations are given limited rights to participate in the governance of corporations in the hopes that they can serve as a backstop to managers who are neglecting their responsibilities.<sup>224</sup> Dispersed shareholders are generally deemed ineffective at serving in this monitoring role because the cost of engagement outweighs the potential benefits to a dispersed shareholder.<sup>225</sup> While the size of mutual funds could, in theory, overcome some of this rational apathy, many scholars have suggested that in practice, competition among funds makes them similarly unlikely to engage in corporations using their shareholder powers.<sup>226</sup> The fund company engaging in the activism would incur the costs, while all shareholders, including the fund company's competitors, would share in the benefit to the corporation.

Securities held by mutual funds are also not traded often. This is particularly true for passively managed funds.<sup>227</sup> By definition, these types of funds do not trade securities until a company or security either falls out of or is added to the index that the fund is tracking.<sup>228</sup>

219. Dawn Lim, *Index Funds Are the New Kings of Wall Street*, WALL ST. J. (Sept. 18, 2019), <https://www.wsj.com/articles/index-funds-are-the-new-kings-of-wall-street-11568799004> [<https://perma.cc/U89L-NURQ>].

220. See, e.g., *Mutual Fund Fees and Costs*, CHARLES SCHWAB, <https://www.schwab.com/mutual-funds/costs-fees> [<https://perma.cc/H24V-6T4P>] (showing that the average operating expense ratio for passively managed funds in the United States is substantially lower than that of actively managed funds).

221. Aarti Goswami, Pramod Borasi & Onkar Sumant, *MUTUAL FUND ASSETS MARKET OUTLOOK—2027*, ALLIED MKT. RSCH. (October 2020), <https://www.alliedmarketresearch.com/mutual-fund-assets-market-A06932> [<https://perma.cc/XHV2-RXGS>] (“A mutual fund is one of the most preferred investment alternatives for small investors in the market.”).

222. See Bebchuk, Cohen & Hirst, *supra* note 129, at 90 (“[I]ndex funds have especially poor incentives to engage in stewardship activities that could improve governance and increase value.”).

223. See, e.g., Gerald F. Davis & E. Han Kim, *Business Ties and Proxy Voting by Mutual Funds*, 85 J. FIN. ECON. 552, 553 (2007).

224. See DEL. CODE ANN. tit. 8 § 211 (requiring annual shareholders meetings); *id.* § 212 (providing voting rights for shareholders); *id.* § 220 (providing shareholders with rights to inspect books and records of their companies); *id.* § 251(c) (providing shareholder rights in mergers and acquisitions); *id.* § 327 (allowing shareholders to bring derivative suits).

225. Lisa M. Fairfax, *From Apathy to Activism: The Emergence, Impact, and Future of Shareholder Activism as the New Corporate Governance Norm*, 99 B.U. L. REV. 1301, 1307 (2019).

226. See Bebchuk, Cohen & Hirst, *supra* note 129, at 98–100.

227. Nan Qin & Vijay Singal, *Indexing and Stock Price Efficiency*, 44 FIN. MGMT. 875, 875 (2015) (finding that “greater indexing leads to less efficient stock prices”).

228. *Id.* at 876.

In theory, actively managed funds do more trading, though some scholars have noted that sometimes even funds classified as “active” may follow a largely passive strategy.<sup>229</sup> Thus, securities held by mutual funds are generally not traded often. In public securities markets, the price of securities is determined by the price investors are willing to pay for them at any given moment. So, trading must happen for the prices in the market to be reliable. When a large proportion of the securities in the market are held in mutual funds, we should expect less trading to occur, which could, in theory, compromise this price discovery function of the market.<sup>230</sup>

Mutual funds provide many good services to investors, but they fail to fulfill certain market functions that can be beneficial to the health of the capital markets—engagement in corporate governance and trading in search of speculative gains. In the United States, another form of investment fund—the hedge fund—has recently grown to fill this void in market activity. The following section discusses the origin of hedge funds and how they fill the market gaps left by hedge funds.

### C. Hedge Funds

A relatively recent addition to the ecosystem of investment funds in the U.S. public markets has been hedge funds.<sup>231</sup> Hedge funds, like mutual funds, are investment funds. That is, they are companies in the business of soliciting investment capital from investors and charging a fee to invest the pooled money on those investors’ behalf. Unlike mutual funds, however, hedge funds are not available to all investors, as is discussed below. The remainder of this Part discusses the origin of hedge funds, how they fill gaps in market activity left by mutual funds, and how policymaking has helped to promote their growth.

#### 1. History and Growth of Hedge Funds

Hedge funds were not a prominent part of the investment landscape in the United States until the turn of the 21st century.<sup>232</sup> The first hedge fund was founded by sociologist—and Marxist—Alfred W. Jones in 1949.<sup>233</sup> Jones’ fund engaged in a long/short strategy—holding long positions on some investments and short positions on others—in an effort to ensure returns whether the market as a whole was rising or falling.<sup>234</sup> At the time, this strategy was quite novel, however this type of advanced strategy investing did not immediately take off in the United States. Nearly two decades later, in 1966, Carol Loomis published an article in *Fortune* magazine calling Jones’s fund a “hedged fund” and noting

---

229. Rock, *supra* note 12, at 373 (“Outside of the hedge fund sector . . . even ‘active managers’ will typically only depart slightly from an indexing strategy.”).

230. See generally Qin & Singal, *supra* note 227 (same).

231. Hedge funds are by no means limited to investing in the public capital markets. However, many hedge fund investment strategies are executed using public market securities, thus they are important players in these markets. See FRANÇOIS-SERGE LHABITANT, HANDBOOK OF HEDGE FUNDS 159–61 (2006) (describing the variety of strategies used by hedge funds.).

232. MEGAN TOBIAS NEELY, HEDGED OUT: INEQUALITY AND INSECURITY ON WALL STREET 44–48 (2022) (describing 2000 as the start of the ascendancy of hedge fund culture).

233. *Id.* at 48–50.

234. *Id.* at 48–49.

that it had out-performed every mutual fund in the country for the last ten years.<sup>235</sup> This article briefly brought hedge funds into the sights of investors, and within two years, the number of hedge funds grew from just a few to 140.<sup>236</sup> However, a market decline in 1969 resulted in poor hedge fund performance, slowing and reversing the growth of hedge funds in the U.S. markets.<sup>237</sup> They re-emerged in the mid-1980s and have grown in prominence ever since. In 1990, around 600 hedge funds managed \$40 billion in assets, and by 1996, 2000 funds were managing \$250 billion in assets.<sup>238</sup> The hedge fund industry began growing even faster after the turn of the 21st century as hedge fund investments weathered the bursting of the dot-com bubble better than more traditional investments.<sup>239</sup> Recent estimates place assets under management by hedge funds at over \$5 trillion.<sup>240</sup>

The hedge fund industry has been growing in concert with the growth of mutual funds and the growth of wealth inequality in the United States. While the hedge fund industry is global, it is concentrated in the United States. At the end of 2011, approximately 70% of all hedge fund managers worldwide worked in the United States, while nearly 20% worked in the United Kingdom, leading at least one scholar to denominate hedge funds an “Anglo-American industry.”<sup>241</sup> Hedge funds, therefore, are an important part of what makes the trajectory of capital market concentration in the United States unique.

## 2. Hedge Funds Do What Mutual Funds Can't

One likely explanation for the growth of hedge funds in the U.S. market is that they fill the gap in market practices that is left by mutual funds. As discussed above, two practices in which mutual funds are unlikely to engage are shareholder activism and speculative trading.<sup>242</sup> In addition to being activities that can help the markets function, these are also profit opportunities. Hedge funds have grown to take advantage of those opportunities.

Using shareholder rights to engage in corporate oversight can increase share prices, leading to profits for shareholders.<sup>243</sup> If un-monitored corporate managers are sub-optimally managing their companies, then the value of corporate stock could increase if managers were more closely monitored by their shareholders. As mentioned above, mutual fund companies do not usually initiate shareholder activism to change management strategy. That leaves open an opportunity for another properly incentivized investment

---

235. FRANK J. TRAVERS, HEDGE FUND ANALYSIS: AN IN-DEPTH GUIDE TO EVALUATING RETURN POTENTIAL AND ASSESSING RISKS 14 (2012) (citing Carol Loomis, *The Jones Nobody Keeps Up With*, FORTUNE, Apr. 1966).

236. Jan Fichtner, *The Rise of Hedge Funds: A Story of Inequality*, 2 MOMENTUM Q. ZEITSCHRIFT FÜR SOZIALEN FORTSCHRITT [J. SOC. PROGRESS] 3, 5 (2013).

237. TRAVERS, *supra* note 235, at 25.

238. Fichtner, Heemskerk & Garcia-Bernardo, *supra* note 122, at 6.

239. TRAVERS, *supra* note 235, at 25.

240. *Hedge Fund Industry Assets Under Management*, BARCLAY HEDGE, <https://www.barclayhedge.com/solutions/assets-under-management/hedge-fund-assets-under-management/> [<https://perma.cc/9BKB-DY4C>].

241. Fichtner, *supra* note 236, at 9.

242. *Supra* Part III.B.4.

243. Kenneth Squire, *Activist Hedge Funds Launched 89 Campaigns in 2021. Here's How They Fared*, CNBC (Jan. 15, 2022), <https://www.cnbc.com/2022/01/15/activist-hedge-funds-launched-89-campaigns-in-2021-heres-how-they-fared.html> [<https://perma.cc/N9KF-QQ9E>].

company to engage in and profit from this kind of activism. Hedge funds have emerged that successfully profit from this opportunity.<sup>244</sup>

This type of hedge fund is called an activist hedge fund. Activist hedge funds identify corporations that they believe are under-performing and purchase a substantial stake in the corporation's stock.<sup>245</sup> They then use that shareholder position to pressure management to make changes that the fund managers think will increase the corporation's stock price. They threaten bad publicity shareholder campaigns to oust directors to encourage management to acquiesce.<sup>246</sup> These funds are often successful in implementing some or all the changes they desire, increasing the stock price, and selling their shares at a profit.<sup>247</sup> Importantly, activist hedge funds *need* other capital to be invested via large intermediaries like mutual funds in order for this strategy to be effective. Modern publicly traded corporations in the United States are generally too big for any one fund to take a controlling interest. Activist funds need other big shareholders to be able to get the votes required to complete their campaigns, and asset managers of mutual funds fill that role.<sup>248</sup>

Hedge funds can and do also profit from arbitrage opportunities left open by mutual fund companies. "Arbitrage" refers to the active trading of securities in an attempt to profit off changes in the market before other traders have an opportunity to do so.<sup>249</sup> Since much of the money invested in the public markets via mutual funds or other institutions is not being actively traded, hedge funds can and do step in to seek out and profit from those arbitrage opportunities.

In these two ways, hedge funds have risen to fill gaps in market activity created by the rise of mutual funds. Though, this is by no means the full extent of what hedge funds do. Only one small subset of hedge funds—activist funds—engage in shareholder activism for governance change, and as the hedge fund industry has continued to grow, the array of strategies they employ in search of profits appears to have no end.<sup>250</sup> But the simultaneous growth of mutual funds and hedge funds is no coincidence. Hedge funds grew into the market space created by mutual funds.

---

244. *Id.* (describing hedge fund activism in 2020 and 2021 and their rates of success).

245. Marcel Kahan & Edward B. Rock, *Hedge Funds in Corporate Governance and Corporate Control*, 155 U. PA. L. REV. 1021, 1028, 1069 (2007).

246. *See id.* at 1029–30 (using Third Point's activism as an example).

247. Aniel Mahabier & Folorunsho Atteh, *2020 Activist Investor Report*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Aug. 1, 2020), <https://corpgov.law.harvard.edu/2020/08/01/2020-activist-investor-report/> [<https://perma.cc/CE83-UYXM>] (reporting 101 successful activist campaigns in 2017 and 100 successful campaigns in 2018).

248. *See Strine, supra* note 122, at 1930–31 (noting that with sufficient control, funds can successfully influence corporate policies).

249. Tim Stobierski, *What is Arbitrage? 3 Strategies to Know*, HARV. BUS. SCH. ONLINE BUS. INSIGHTS (Jul. 20, 2021), <https://online.hbs.edu/blog/post/what-is-arbitrage> [<https://perma.cc/26XK-WMYS>].

250. L HABITANT, *supra* note 231, at 159 ("As hedge funds have gained size and popularity, they have deviated from the original Alfred W. Jones' model and are now following a plethora of investment strategies with very different risk and return characteristics.").

### 3. Legal Basis for the Growth of Hedge Funds

Unlike mutual funds, which are public investment companies, hedge funds are private funds.<sup>251</sup> This means they need not register with the SEC nor comply with the disclosure requirements and capital restrictions under the Company Act.<sup>252</sup> Congress passed the Company Act to protect the investments of Americans.<sup>253</sup> Hedge funds exist outside of the protected space. They need not comply with the legislative rules designed to make intermediated investing less risky. This means they can, and do, take on substantial risk. Hedge funds exempt themselves from these requirements by both (1) avoiding a public offering and (2) limiting their investors in either number or amount of invested capital.<sup>254</sup>

A hedge fund can avoid a public offering by relying on SEC Regulation D. Regulation D was promulgated by the SEC under the Securities Act and provides safe harbors for conducting private offerings that are exempt from registration.<sup>255</sup> Regulation D safe harbors turn substantially on the concept of the accredited investor, which is a term used to define the types of investors the SEC believes do not need the protection of the securities laws.<sup>256</sup> A fund selling shares in reliance on the Regulation D safe harbor must largely limit its offering of shares to accredited investors.<sup>257</sup>

An “accredited investor” is defined as either an institution or an individual who meets the wealth, income, or information requirements in the definition.<sup>258</sup> Very few individuals meet the information requirements, so for most individual investors, the wealth and income requirements are the gateway to accredited investor status.<sup>259</sup> Those parts of the definition require that an individual have either \$1 million in wealth, \$200,000 in income for one person, or \$300,000 of annual income for a couple.<sup>260</sup> So, under the safe harbor created by Regulation D, a hedge fund can avoid registration under the Securities Act, making it eligible to avoid compliance with the restrictions of the Company Act, if it sells interests in the fund only to institutions and individuals above this wealth or income threshold.

The second requirement for avoiding registration under the Company Act is eligibility for one of the explicit exemptions in that Act. The most popular exemptions for hedge

251. Caleb Silver et al., *Mutual Funds vs. Hedge Funds: What's the Difference?*, INVESTOPEDIA (Feb. 18, 2024), <https://www.investopedia.com/ask/answers/173.asp> [<https://perma.cc/9QG6-FEDQ>].

252. Lisa Lilliot Rydin, *Private Equity, Venture Capital, and Hedge Funds*, HARV. L. SCH. LIBR. [https://guides.library.harvard.edu/law/private\\_equity#](https://guides.library.harvard.edu/law/private_equity#) [<https://perma.cc/HY29-NRC5>].

253. Investment Company Act of 1940, 15 U.S.C. § 80a-1.

254. *Id.* § 80a-3(c)(1), (c)(7).

255. 17 C.F.R. §§ 230.501–08.

256. *Id.* § 230.501(a) (defining the concept of “accredited investor” as used by the SEC).

257. *Id.* § 230.501–.508. Limited sales to non-accredited investors are permitted within the Regulation D safe harbor. Under the Rule 504 safe harbor, offerees need not be accredited investors so long as less than \$10 million of securities are sold. *Id.* § 230.504. Under the Rule 506(b) safe harbor, up to 35 purchasers can be non-accredited, though all purchasers need to be “sophisticated.” *Id.* § 230.506(b).

258. *Id.* § 230.501(a). Individuals who work at the issuer and have access to information about the offering are also included in the definition of accredited investor. *Id.* § 230.501(a)(4), (11).

259. Amendments to the “accredited investor” definition adopted in 2020 added individuals with certain professional certifications or positions at the issuing company. *See* Amending the “Accredited Investor” Definition, Release Nos. 33-10824, 34-89669 (Aug. 26, 2020), <https://www.sec.gov/rules/final/2020/33-10824.pdf> [<https://perma.cc/R8PD-GWFF>] (noting that “the upper bound estimate” for how many new individuals will become accredited investors under professional certification or knowledgeable employee definitions is a 4% increase, representing 0.2% of the overall investing population).

260. 17 C.F.R. § 230.501(a)(5), (6).



funds are the exemptions found in Sections 3(c)(1) and 3(c)(7) of the Company Act.<sup>261</sup> Section 3(c)(1) exempts funds whose securities are beneficially owned by no more than 100 investors.<sup>262</sup> Hedge fund managers are usually compensated, in part, as a percentage of the assets they manage.<sup>263</sup> Moreover, hedge fund strategies usually require a large quantity of invested capital.<sup>264</sup> So, while a hedge fund relying on the Section 3(c)(1) exemption will not be required, under the law, to seek only very large investments from very wealthy investors, in practice, doing so will be necessary to raise adequate funds without exceeding the 100-investor threshold.

The Section 3(c)(7) exemption more explicitly targets only the wealthiest of investors. Section 3(c)(7) exempts funds that only sell to “qualified purchasers,” which are individuals or institutions that own at least \$5 million in investments.<sup>265</sup> Hedge funds relying on this exemption have no limit on the number of investors to whom they sell interests in the fund. The definition of qualified purchaser means that when funds relying on this exemption take investments from individuals, they must be very wealthy individuals—much wealthier than is required to be an accredited investor. This exemption has become the most popular choice among private funds, indicating that money from “qualified purchasers” is plentiful.<sup>266</sup> The laws governing investment funds, therefore, formally restrict access to hedge funds to those above either the accredited investor or qualified purchaser income and wealth thresholds.<sup>267</sup>

The policy reason for legally limiting access to hedge funds based on income or wealth is the additional risk involved in investing in private funds.<sup>268</sup> The Company Act’s rules result in mutual funds being largely limited to traditional, diversified, investing strategies in corporate equities, bonds, and cash instruments.<sup>269</sup> While these types of investments are by no means risk-free, other riskier investment strategies such as short selling, leveraged investing, or investments in derivatives are largely unavailable. A fund that is exempt from Company Act regulation is free to engage in these riskier strategies. Laws

261. Investment Company Act of 1940, 15 U.S.C. § 80a-3.

262. *Id.* § 80a-3(c)(1).

263. See 2 and 20 (*Hedge Fund Fees*), CORP. FIN. INST., <https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/2-and-20-hedge-fund-fees/> [<https://perma.cc/CNL3-P3LV>] (describing the usual fee structure for hedge funds, which includes a 2% management fee for all assets under management).

264. Jerry Lees, *Capital Hungry Hedge Funds*, HEDGE FUND J. (Jun.–July 2015), <https://thehedgefundjournal.com/capital-hungry-hedge-funds/> [<https://perma.cc/Z8H4-BKQ4>] (“[Hedge fund] managers needed to run at least \$310 million in [AUM] to enable their 2% management fee to cover all of their operating and regulatory costs.”).

265. Investment Company Act of 1940, 15 U.S.C. § 80a-3(c)(7); *id.* § 80a-2(a)(51)(i), (ii) (defining “qualified purchaser” as a person owning \$5 million or more in investments).

266. See Proskauer’s *Hedge Start: What Key Exemptions Apply to Hedge Funds?*, PROSKAUER (June 12, 2024), <https://www.proskauer.com/pub/proskauer-hedge-start-what-key-exemptions-apply-to-hedge-funds> [<https://perma.cc/J42A-S8TQ>] (describing 3(c)(7) exemptions as one of a key exemption applicable to most hedge funds).

267. Notwithstanding this legal barrier, non-regulatory obstacles also exist that keep ordinary investors from investing their savings in hedge funds. These barriers will be discussed in Part IV.A below.

268. Adam Hayes, *Bond Yield: What It Is, Why It Matters, and How It’s Calculated*, INVESTOPEDIA (May. 8, 2025), <https://www.investopedia.com/terms/b/bond-yield.asp> [<https://perma.cc/53KP-CG6K>] (describing how bond returns are pre-determined and not subject to the same volatility, including growth prospects, of equity securities).

269. Shelby, *supra* note 160, at 318.

restricting access to exempt funds to wealthier investors are meant to protect investors who (1) lack the financial know-how to understand the risks involved in more complex investments and (2) lack the wealth to weather potential losses.<sup>270</sup>

The same lawmaking that sought to ensure that the investment intermediaries that most Americans use are relatively low-risk and safe also left open the possibility for much riskier funds to operate in the U.S. capital markets. The contingency was that they could only legally offer shares in their funds to investors that the law deemed capable of understanding and weathering the risk involved with these investments. The law largely used wealth and income as a proxy for the ability to understand and weather those risks.

The combined effect of the changes outlined in this Part has been that an increasing amount of individual and family savings are flowing into investment companies—namely mutual funds and hedge funds. Investment companies have thereby become large, influential intermediaries in the U.S. capital markets—the type of large, influential intermediaries that lawmakers sought to avoid in 1940. However, the intermediaries that have developed in the United States are uniquely American because they are uniquely market-centric.<sup>271</sup>

In more recent years, U.S. lawmakers have only cemented their commitment to the continued growth of the capital markets. In response to the rapid growth of mutual funds, Congress acted via the National Securities Markets Improvement Act of 1996 to simplify the regulatory landscape they faced, making it easier for asset management companies to grow nationally.<sup>272</sup> At the same time, this law created a new way for hedge funds to raise even more money from extremely wealthy individuals and institutional investors.<sup>273</sup> And in 2012, the Jumpstart Our Business Startups Act gave hedge funds additional leeway to market and sell to even more investors.<sup>274</sup> The legislative record in the United States shows lawmakers continually committing to the capital markets ever since that choice was first made in 1933.

270. *Accredited Investors—Updated Investor Bulletin*, SEC INVESTOR.GOV (Apr. 14, 2021), <https://www.investor.gov/introduction-investing/general-resources/news-alerts/alerts-bulletins/investor-bulletins/updated-3> [<https://perma.cc/G5V7-YFRS>] (“One reason these offerings are limited to accredited investors is to ensure that all participating investors are financially sophisticated and able to fend for themselves . . .”). For most of its existence, the accredited investor standard did not in any way screen for investor sophistication. Rather, it made an implicit assumption that those whose wealth or income meets the threshold have the requisite sophistication to understand the risks of investment. This assumption has long been widely criticized. *See, e.g.*, Manning Gilbert Warren III, *A Review of Regulation D: The Present Exemption Regimen for Limited Offerings Under the Securities Act of 1933*, 33 AM. U. L. REV. 355, 381–82 (1984) (criticizing the accreditation of investors based on their wealth, income, or amount of purchase); Donald C. Langevoort & Robert B. Thompson, “Publicness” in Contemporary Securities Regulation After the JOBS Act, 101 GEO. L.J. 337, 362 (2013) (“[W]e have plenty of anecdotal evidence of institutional and wealthy individual investors fending for themselves poorly.”).

271. *See supra* notes 207, 241 and accompanying text (noting that the majority of mutual fund assets and hedge fund managers, worldwide, are in the United States).

272. National Securities Markets Improvement Act of 1996, Pub. L. No. 104-290, 110 Stat. 3416, 3416 (1996) (describing the purpose of this legislation as “to promote efficiency and capital formation in the financial markets[] and . . . to promote more efficient management of mutual funds, protect investors, and provide more effective and less burdensome regulation”).

273. Investment Company Act of 1940, 15 U.S.C. § 80a-3(c)(7); Cary Martin Shelby, *Are Hedge Funds Still Private? Exploring Publicness in the Face of Incoherency*, 69 SMU L. REV. 405, 426–27 (2016).

274. Jumpstart Our Business Startups (JOBS) Act, Pub. L. No. 112-106, 126 Stat. 306 (2012). These are not the only regulatory changes over this period that have bolstered investment funds. Professor Cary Martin Shelby has meticulously documented the many regulations that have favored hedge funds over the years. Shelby, *supra* note 160, at 323–37.

The United States chose to embrace market financing, but markets come with risk. Efforts to protect most investors from some of those risks have created a unique ecosystem of market intermediaries in which American investors increasingly invest their wealth via mutual funds and hedge funds. Some of these intermediaries are only available to the wealthiest American investors. The following Part explores the distributional implications of this market structure.

#### IV. INTERMEDIATED MARKETS AND THE DISTRIBUTION OF WEALTH

This Part explores how the unique development of investment intermediaries in the United States interacts with the distribution of wealth. Researchers have noted a connection between market-based financing and economic inequality, particularly in developed economies.<sup>275</sup> The economies studied in this Article bear out this distinction. The United States relies substantially on publicly traded securities to finance corporations while the economies of Japan and Germany rely less on the securities markets for corporate finance.<sup>276</sup> Japan and Germany also have less wealth inequality.<sup>277</sup> This is not to say that the choice of a system for corporate finance is the sole determinant of wealth inequality. Surely it is not. Many other policy choices—perhaps most obviously tax policy—can impact the distribution of wealth. However, this Article identifies mechanisms in the United States’ system of corporate finance that have a demonstrable ability to exacerbate wealth inequality. This is consistent with the global finding that economies with larger capital markets have greater wealth inequality. The mechanisms described herein that can exacerbate wealth inequality are inextricable from the intermediaries described above. This Part describes how the intermediation of the public U.S. capital markets contributes to wealth inequality in the United States.

##### A. *Intermediated Markets are Unequal Markets*

###### 1. *Unequally Distributed Wealth Prefers Market Financing*

Before market intermediaries can grow, markets themselves must grow. In the United States, the capital markets grew because Congress passed legislation to promote them, and U.S. investors flocked to them.<sup>278</sup> The historical setting—namely public distrust of banks—was a primary driver of this choice, as described in Part III.A above. However, socio-economic characteristics related to the distribution of wealth likely also contributed to the United States’ penchant for market-based financing. Those characteristics include

---

275. Ferri, Gambacorta & Brie, *supra* note 93.

276. See *supra* Part II (discussing the United States’ greater reliance on market financing compared to Germany and Japan).

277. *Wealth Inequality by Country 2024*, WORLD POPULATION REV., <https://worldpopulationreview.com/country-rankings/wealth-inequality-by-country> [<https://perma.cc/4YTE-PPMH>].

278. See JULIA C. OTT, WHEN WALL STREET MET MAIN STREET: THE QUEST FOR AN INVESTORS’ DEMOCRACY 6, 214–15 (2014) (describing how, beginning with the New Deal, securities regulation helped foster a more stable market for excited investors).

the existence of large firms and economic inequality.<sup>279</sup> These characteristics existed at the time of the New Deal legislation, and they continue to exist today.

Dr. Sigurt Vitols has argued that economies with more small and medium-sized firms will tend to favor bank-based systems while economies dominated by large firms will tend to prefer market-based financing. This is because raising money from investors is costly, and when a smaller firm needs to raise a relatively small amount of money, the cost is not justified.<sup>280</sup> At the turn of the 20th century, when the United States' securities markets were developing, mergers and consolidations were creating very large, continent-spanning corporations for which securities offerings were surely cost-effective.<sup>281</sup>

The distribution of income and wealth can also be a predictor of a societal preference for either market-based or bank-based systems.<sup>282</sup> Taking on the risk of investing only makes sense once a household has reached a certain level of financial security. Consequently, Vitols notes, low-income families prefer to put their savings in banks, middle-income families prefer low-risk investments, and high-income families prefer riskier, market-based finance "because of the higher expected return and because of their greater ability to absorb short-term market risk."<sup>283</sup>

As was discussed above, bank-based systems are comprised of a greater proportion of low-risk investment options. Market-based systems, on the other hand, will have more issuances of corporate securities, which are riskier investments more appropriate for high-income or high-wealth families. In an economy with a lot of inequality, more wealth and income reside at the top of the distribution, creating wealthier families that seek more high-risk capital markets investments.<sup>284</sup>

As noted above, the United States has consistently, over the time periods for which data is available, had greater wealth inequality than Japan or Germany.<sup>285</sup> A number of scholars have noted a correlation between economic inequality and a societal preference for market-based systems.<sup>286</sup> The existence of economic inequality in the United States, therefore, may be another reason for our choice and maintenance of a market-based

279. Vitols, *supra* note 52, at 244 ("High-income households prefer market-based finance because of . . . greater ability to absorb short-term market risk . . . . Bank-based systems [in contrast with market-based systems] will . . . be best supported by societies with low levels of inequality.").

280. *Id.* at 244. Explaining that smaller issues of securities do not justify the cost of conducting a securities offering and that investors may be unwilling to incur the cost of researching a smaller venture. Today, this reasoning may be less applicable in the United States, where the market for private securities and small, start-up ventures has become quite robust. George S. Georgiev, *The Breakdown of the Public-Private Divide in Securities Law: Causes, Consequences, and Reforms*, 18 N.Y.U. J.L. & BUS. 221, 228 (2021) (describing the growth of private securities markets relative to public markets in the United States).

281. OTT, *supra* note 278, at 9–10, 12.

282. Vitols, *supra* note 52, at 244.

283. *Id.*

284. See *infra* Part IV.A.3 (describing this mechanism in more detail).

285. *Supra* note 99 and accompanying text.

286. See MARK J. ROE, POLITICAL DETERMINANTS OF CORPORATE GOVERNANCE 54 (2003) ("[N]ations that refuse to tolerate much inequality have a weaker stock market."); Raj Aggarwal & John W. Goodell, *Markets and Institutions in Financial Intermediation: National Characteristics as Determinants*, 33 J. BANKING & FIN. 1770, 1770 (2009) (finding that "national preferences for market financing increase with . . . economic inequality"); Vitols, *supra* note 50, at 4 ("[T]he more equal distribution of income . . . in Germany and Japan supports greater demand for bank deposits.").

financial system.<sup>287</sup> When the foundational policy choices were made in the United States to favor market finance, wealth was highly unequally distributed, with the top 1% of the wealth distribution owning between 40–50% of all national wealth.<sup>288</sup> Today, the United States is experiencing a similar level of inequality, with the top 1% of the wealth distribution owning 38.2% of all national wealth in 2019.<sup>289</sup> The United States’ consistently unequally distributed wealth therefore may explain its persistent commitment to market financing.

## 2. Unequal Participation and Unequal Returns

While an unequal distribution of wealth may favor market financing, once wealth is invested in markets, markets tend to perpetuate that unequal distribution of wealth because wealthier investors earn higher returns.<sup>290</sup>

Most wealth in the United States is held in the form of financial assets.<sup>291</sup> While not all these financial assets are public market securities, the public markets are where regulatory focus lies, and they are the only markets to which most Americans have access.<sup>292</sup> Even though, legally, all Americans can invest in the public securities markets, in practice, participation in these markets varies depending on wealth. This unequal access results in unequal returns on invested wealth. In 2019, the top 1% of the wealth distribution in the United States owned 54.9% of all stocks and mutual funds.<sup>293</sup> Between 1983 and 2019, the mean wealth of that top 1% grew by 157.2%, and one-third of that growth was attributable to stock market gains.<sup>294</sup> Wealthy investors not only earn a return on a larger quantity of invested wealth, they also earn a higher rate of return than ordinary investors.<sup>295</sup> So, the securities markets are a place where wealth grows, particularly for the wealthiest among us. The remainder of this Section describes how wealth determines a person’s ability to grow wealth in the public capital markets.

---

287. Vitols, *supra* note 52, at 245.

288. WOLFF, *supra* note 192, at 146 fig.4.1 (representing that that top 1% wealthiest Americans owned between 40–50% of the nation’s wealth starting in at least 1922 and continuing until the early 1930s).

289. Wolff, *supra* note 1, at 48 tbl.2.

290. See Emily Winston, *Unequal Investment: A Regulatory Case Study*, 107 CORNELL L. REV. 781, 804 (2022) (“Wealthy and ordinary Americans differ in the quantity of wealth they own and the composition of that wealth. They also differ in the rate at which their wealth grows. Wealthy investors earn a greater per-dollar rate of return on their investments than less wealthy investors.”).

291. Wolff *supra* note 1, at 51 tbl.5 (showing that, as of 2019, unincorporated business equity, pension accounts, financial securities, corporate stock, and mutual funds constituted 51.9% of all household wealth in the United States).

292. Compare *id.* at 66 tbl.18a (showing that, on average, 46% of households in the middle three quintiles of the wealth distribution owned stock in 2019), with *id.* at 54 tbl.8 (showing that in 2019, only 9% of households in the middle three quintiles of the wealth distribution owned unincorporated business assets, which include private stocks).

293. Edward N. Wolff, *The Stock Market and the Evolution of Top Wealth Shares in the United States*, 20 J. ECON. INEQ. 53, 61 tbl.4 (2022).

294. *Id.* at 66.

295. See Wolff, *supra* note 1, at 57 tbl.11 (showing that the average annual rates of return on gross assets were greater for the top 20% than the middle three quintiles of the wealth distribution for all periods from 1983–2019).

As of 2019, 49.6% of American households owned stock, whether directly or indirectly.<sup>296</sup> This means that just over half of American households did not participate in the capital markets at all.<sup>297</sup> These households largely have inadequate wealth to take on the risk of capital markets investing and are therefore excluded from the potential income derived from these investments. They also lack access to an employer-sponsored defined contribution retirement account. Some of these households have inadequate wealth to invest in anything at all, even outside of the capital markets. In 2019, 19.6% of American households had zero or negative net worth, meaning their assets were not worth more than their debt.<sup>298</sup> Households of color are more than twice as likely as White households to fall into this group.<sup>299</sup>

Households that have positive wealth, but no securities most likely have their wealth stored in lower risk assets such as bank accounts, and their home.<sup>300</sup> Indeed, as of 2019, 64.3% of middle-class wealth was held in the form of the household's principal residence.<sup>301</sup> These are useful and important forms of wealth to have. Bank accounts with savings for future expenditures are important for financial security.<sup>302</sup> Homeownership likewise contributes to financial security.<sup>303</sup> However, these types of wealth do not grow wealth very quickly. If bank accounts earn any interest, it is generally very small and often less than inflation.<sup>304</sup> Homes hopefully do appreciate over time, earning a return on the value of the home. Though, as a relatively illiquid investment, that return is difficult to turn into cash. Moreover, the rate of return on residential real estate has historically been much lower than the return that can be earned on financial investments.<sup>305</sup>

Investing in the securities markets offers the opportunity to earn income without additional hours of work. While the number of hours a person can work in a week is finite, the amount of money a person can invest in securities has no theoretical limit. However, half of American households have inadequate wealth to invest in securities. Among these households, those that do have positive wealth will likely save that wealth in a bank account

296. *Id.* at 65 tbl.17b (including “indirect ownership through mutual funds”).

297. In theory, some of the 50.4% of households without stock could own publicly traded debt, though that seems unlikely for any more than a very small number of households.

298. Wolff, *supra* note 1 at 47 tbl.1.

299. *Id.* at 59–60 tbl.13 (showing that the 2019 ratio of Blacks/Whites with zero or negative net worth was 2.21 and the ratio of Hispanics/Whites was 2.05. Data for other racial/ethnic groups is not available in this data source.).

300. See *supra* Part III.B for discussion of how composition of wealth changes as wealth increases.

301. “Middle-class” defined here as the middle three quintiles of the wealth distribution. Wolff, *supra* note 1, at 53 tbl.7.

302. See Cassandra Jones Havard, *Doin’ Banks*, 5 U. PA. J.L. & PUB. AFFAIRS 61, 82–104 (2020) (describing the benefits of mainstream banking, including improving economic stability in financial markets and providing secure and convenient payment processing and credit).

303. See James Herbert Williams, *Economic Security and Home Ownership*, 38 SOC. WORK RSCH. 3 (2014) (“Home ownership and savings are primary avenues for low-income families and individuals to build wealth, economic assets, and security.”) (citation omitted).

304. Taylor Tepper, *History of Savings Account Interest Rates*, FORBES (Apr. 3, 2025), <https://www.forbes.com/advisor/banking/savings/history-of-savings-account-interest-rates/> [<https://perma.cc/C8LJ-4GHQ>].

305. Wolff, *supra* note 1, at 68 app.1 (showing that residential real estate earned a substantially lower rate of return than financial assets or pensions accounts for all reported time periods except for 2001–2007 and 2007–2010).

or use it to purchase a home. These are important investments that contribute to financial security; however, they do little to grow the wealth of these households.

The half of American households that do own publicly traded stock overwhelmingly hold it in their defined contribution retirement accounts, which, in turn, are predominantly invested in mutual funds.<sup>306</sup> Mutual funds have grown to be a large part of the U.S. capital markets for good reasons. They inexpensively allow many investors to invest even small amounts of money in broadly diversified portfolios. This is often deemed the wisest type of investment for almost all investors.<sup>307</sup>

Thus, for Americans with adequate wealth and opportunity to participate in the securities markets, mutual funds have, for good reason, grown into a popular investment vehicle. However, as discussed above, mutual funds will generally engage in less of certain market activities—shareholder activism and speculative trading—that are often deemed important for the functioning of the market. Hedge funds developed to engage in those market practices, and more.

While mutual funds and hedge funds play complementary roles in the capital markets, they are not equally utilized by or available to everyone in the United States. Very few middle-class families own any financial assets other than their retirement accounts.<sup>308</sup> Wealthy investors can, and do, invest money in the same retirement accounts and mutual funds used by ordinary investors.<sup>309</sup> However, they also have access to a number of additional investment options that are not available to ordinary investors.<sup>310</sup> Prominent among those investment opportunities are the hedge funds described in Part II.C above. As was described in that Part, laws intended to protect most investors from these risky investments allow investors with substantial wealth unlimited access to these investment opportunities. While this type of investor protection is a worthy policy goal,<sup>311</sup> in the realm of finance, taking on greater risk is compensated with the potential for higher returns.<sup>312</sup> Thus, the exclusion of many investors from hedge funds means that most investors do not have access to these higher rates of return.

Moreover, laws are not the only thing excluding ordinary investors from investing in hedge funds. The hedge fund industry operates based on networks of trust, and not everyone can gain entry to those networks.<sup>313</sup> Substantial wealth is necessary for an investor to have access to the social networks and investment advisors that can credibly connect them

---

306. *Id.* at 65 tbl.17b (showing that, in 2019, 42.5% of American households held stock indirectly via pension accounts); *see also* Gelter, *supra* note 201, at 953 (supporting the proposition that most 401(k) assets are held in mutual funds).

307. MALKIEL, *supra* note 168, at 15 (“Investors would be far better off buying and holding an index fund than attempting to buy and sell individual securities or actively managed mutual funds.”).

308. Wolff, *supra* note 1, at 52 tbl.6 (showing that only 15.3% of middle-class families own “[c]orporate stock, financial securities, mutual funds, and personal trusts” and only 7.8% own unincorporated business equity).

309. *Id.* (showing that 91.3% of households in the top 1% of the wealth distribution own pension accounts).

310. Winston, *supra* note 290, at 784–85.

311. *Id.* at 840 (“To a family with little wealth to spare, a large investment loss could be economically catastrophic.”).

312. *See Investment Basics: Risk*, FINRA, <https://www.finra.org/investors/investing/investing-basics/risk> [<https://perma.cc/23TP-6MHG>].

313. NEELY, *supra* note 232, at 47–48.

to hedge funds.<sup>314</sup> Though, wealth alone is likely not sufficient. The world of hedge funds is uniquely homogenous. By some estimates, 97% of hedge fund assets are managed by white men.<sup>315</sup> Because the hedge fund industry is based on relationships of trust, and people tend to trust people like themselves in terms of race and gender, this homogeneity is self-perpetuating.<sup>316</sup> So, for non-male, non-White investors, wealth alone may not be enough to plug them into this elite industry. Hedge fund managers have broad discretion over to whom they grant access to their funds.<sup>317</sup> Moreover, these funds usually have “minimum buy-ins,” meaning that you can only invest if you are willing and able to invest a minimum amount.<sup>318</sup> Those minimums are almost always over \$100,000 and can go well into the millions.<sup>319</sup> So, many social and economic forces would work to keep most Americans from investing in hedge funds even absent the legal exclusion of those who are not qualified purchasers or accredited investors.

Thus, the securities markets in the United States are unequal. Half of American families do not have the means to access these markets. Among those wealthy enough to gain entry, the market itself is stratified, with the wealthiest investors having exclusive access to hedge funds—the highest risk, and thereby highest return, investment funds. This unequal intermediation both contributes to and is fueled by the unequal distribution of wealth. That relationship is described below.

### 3. Unequal Participation and Unequal Distribution

Wealth inequality has been growing in the United States over the same period of time that we have witnessed the rise of investment intermediaries, including and importantly, hedge funds. Most of the global growth of hedge funds has occurred in the United States.<sup>320</sup>

Examining the United States’ unequally intermediated markets, we can see a clear connection between the way intermediaries have developed in the United States and the concurrent growth of wealth inequality. The relationship is bi-directional. Wealth inequality facilitates the growth of investment intermediaries by creating demand for those intermediaries—particularly for hedge funds. The existence of these elite investment options, in turn, contributes to the growth of wealth inequality. Each side of this self-perpetuating relationship is discussed in turn below.

---

314. See Julie Pinkerton, *How to Find a Financial Advisor If You’re Not Rich*, U.S. NEWS (May 14, 2025), <https://money.usnews.com/investing/articles/how-to-find-a-financial-advisor-if-youre-not-rich> [https://perma.cc/5MZU-646C] (“Advisors often prioritized high net-worth clients due to steep minimum asset requirements.”).

315. NEELY, *supra* note 232, at 2.

316. *Id.* at 21.

317. Joshua Kennon, *Investing in a Hedge Fund Can Be Difficult*, THE BALANCE (Oct. 25, 2020), <https://www.thebalance.com/investing-in-a-hedge-fund-can-be-difficult-357523> [https://perma.cc/8ZRM-VLZE].

318. See *id.* (“Those running a hedge fund can set the minimum investment at whatever they want in most situations.”).

319. See *id.* (“Some hedge funds require a minimum investment of \$100,000, while others may require \$25,000,000 or more.”).

320. The United Kingdom accounts for most of the rest of the growth. Fichtner, *supra* note 236, at 9.



*a. Wealth Inequality Fuels the Growth of Intermediaries*

When a person earns more money than they need for day-to-day living expenses, the first thing they will probably do with any extra money is save it in a bank account, if they have access to one.<sup>321</sup> Once some savings have been established, if this person has additional money, we might expect them to buy a car, and then a house. Additional savings could go toward low-risk financial investments such as government bonds or certificates of deposit. Only after these key economic needs are met will the average saver put any money into the public capital markets.<sup>322</sup> While not every person or household will follow this trajectory precisely, the general progression from low risk to higher risk investments likely holds for many households and is a sound investment strategy.<sup>323</sup> Investments in publicly traded securities are on the higher-risk end of this spectrum.

Because of this usual trajectory for how people accumulate and use wealth, when wealth moves from a less wealthy person to a wealthier person, a greater percentage of that wealth is likely to be invested in the capital markets. For example: if a less-wealthy person has \$100 of wealth, the first \$90 may go toward bank savings or mortgage payments, leaving only \$10 to invest in the capital markets. If that same \$100 is given to a wealthy individual who already has substantial financial security, we may expect the entire \$100 to be invested in risky assets like publicly traded securities. So, the more national wealth accumulates at the top of the wealth distribution, the more of that wealth will go to capital markets investments. In this way, unequally distributed wealth creates demand for publicly traded securities.<sup>324</sup> And the more unequal the distribution grows, the more money will be in search of riskier capital markets investments.

As of 2019, the top 5% of the wealth distribution in the United States held 66.4% of national net worth.<sup>325</sup> Meanwhile, the bottom 20% of the wealth distribution held less than 0% of national net worth because their debt exceeded their assets.<sup>326</sup> When wealth is skewed heavily such that a small number of households hold most of the national wealth, there will be more demand for high-risk, high-return investment intermediaries like hedge funds.

---

321. See Havard, *supra* note 302, at 72–74 (describing the lack of banks in many low-income geographic areas).

322. There are certainly exceptions to this progression, like the author, who has invested retirement savings but does not own a home. However, the general progression from less risky investments to more risky investments as one accumulates wealth should be generalizable to most of the population.

323. The Motley Fool, *#Adulting: 5 Things I Wish I Knew About Managing My Finances*, NASDAQ (July 29, 2018) [hereinafter *#Adulting*], <https://www.nasdaq.com/articles/adulting-5-things-i-wish-i-knew-about-managing-my-finances-2018-07-29> [<https://perma.cc/VK2T-7A6W>] (advising young investors to have liquid savings in a bank account as an emergency fund before investing in financial securities).

324. It also creates demand for privately traded securities and other riskier investments. These investment options are outside the scope of this Article, though the author plans to investigate other exclusive investments in future work.

325. Wolff, *supra* note 1, at 48 tbl.2. This is a ten-point increase over the share of wealth held by the top 5% in 1983.

326. *Id.*

At the end of 2020, Americans had a total of \$130.2 trillion in wealth.<sup>327</sup> If this were divided evenly among the approximately 126.8 million households in the United States in 2020,<sup>328</sup> it would mean each household would have approximately \$1,026,814 of wealth.<sup>329</sup> At that time, the median price of a home was \$358,700.<sup>330</sup> If each household owned one home purchased at that price, that would leave \$668,114 of wealth other than the family's primary residence. Depending on the number and age of the adults in the household, one would expect most or all of that remaining wealth to be saved for retirement or other future expenses. Little would be left over for additional financial investments.

In this scenario of perfectly equally distributed wealth, we should expect very little demand for high-risk investment products. However, when wealth is very unequally distributed, and a small number of families own an extremely large proportion of wealth, there is more money looking for riskier investments and higher returns. Extremely wealthy individuals and families own enough financial cushion to soften the blow of any losing investments. They already have emergency money in a bank account, one or more homes, and enough savings for retirement. They have plenty of financial security, so they can start putting their money toward riskier investments. And the more money this wealthy household has, the more of those investments they will seek. When laws and regulations favor growth in the capital markets and, in particular, favor the hedge fund sector, the industry will have no trouble meeting this demand.

Increasing wealth inequality creates more demand for the relatively risky investments that are available in the public capital markets. The growth of wealth inequality itself therefore partially explains the growth of the U.S. capital markets. However, having large markets does not necessitate having large intermediaries. The following two sections explore why the U.S. markets grew to be not only large, but populated with big, influential investment intermediaries.

#### *b. Intermediated Markets Exacerbate Wealth Inequality*

While the growth of wealth inequality fuels demand for hedge funds, unequal markets, in turn, contribute to the growth of wealth inequality. First, over 40% of households in the United States do not participate in the capital markets.<sup>331</sup> If those households do have positive wealth, it will most likely be in a bank account or invested in the household's primary residence. These are good uses of wealth for a family with a modest amount of wealth;

---

327. *U.S. Households Ended 2020 with Record \$130.2 Trillion in Wealth, Fed Says*, REUTERS (Mar. 11, 2021), <https://www.reuters.com/article/business/us-households-ended-2020-with-record-1302-trillion-in-wealth-fed-says-idUSKBN2B32DH/> [<https://perma.cc/CW7E-7DWG>].

328. Richard Fry, Jeffrey S. Passel & D'Vera Cohn, *U.S. Household Growth over Last Decade Was the Lowest Ever Recorded*, PEW RSCH. CTR. (Oct. 12, 2021), <https://www.pewresearch.org/fact-tank/2021/10/12/u-s-household-growth-over-last-decade-was-the-lowest-ever-recorded/> [<https://perma.cc/D6CD-QWBG>].

329. This is, of course, a vast over-simplification. Generally, and hopefully, adults accumulate wealth over the course of their lives. So, even in an economy with equally distributed wealth, we would expect younger adults to have less wealth than older adults.

330. Jack Caporal, *Average House Price by State in 2025*, MOTLEY FOOL MONEY (Mar. 3, 2025), <https://www.fool.com/money/research/average-house-price-state/> [<https://perma.cc/FA39-UWGL>] (providing \$358,700 as the median home sale price for the fourth quarter in 2020).

331. Aditya Aladangady et al., *Changes in U.S. Family Finances from 2019 to 2022: Evidence from the Survey of Consumer Finances*, BD. GOVERNORS FED. RSRV. SYS. 19 (2023), <https://www.federalreserve.gov/publications/files/scf23.pdf> [<https://perma.cc/S9CB-LQUN>].

however, these uses of wealth earn very little return. Bank accounts generally earn a rate of return at or close to zero.<sup>332</sup> The value of a home does often appreciate over time, though at a rate that is less than that of financial assets like interests in investment funds.<sup>333</sup> And, homes in predominantly White neighborhoods tend to appreciate in value more than those in non-White neighborhoods.<sup>334</sup> Thus, for some, wealth can accumulate outside of the capital markets, though unevenly. However, the wealth held outside the capital markets grows more slowly than wealth invested in the capital markets, making it harder for those who start with little wealth to accumulate wealth over time.

Households with adequate wealth and opportunity to participate in the capital markets can grow their wealth faster. Defined contribution pension accounts, for example, earned an average 7.43% annual return between 2010 and 2019, compared to 5.12% for residential real estate.<sup>335</sup> Financial assets held outside of pension accounts earned even more, at an average of 9.72%.<sup>336</sup> Precise figures for the average rate of return for hedge funds are difficult to come by, given the private status of those funds. However, sources suggest that in recent years, hedge funds have earned a return of between 13.7% and 18.9%.<sup>337</sup> For the reasons discussed above, hedge funds are disproportionately available to wealthy investors. Investing in the capital markets offers a higher rate of return than investing outside the markets. However, within the markets, the highest return is only available to the wealthiest and best-connected investors. This explains why wealthy investors consistently earn a higher rate of return on their investments than investors of more modest means.<sup>338</sup>

Higher rates of return for wealthy investors accelerate the growth of wealth inequality. Invested wealth will always have the tendency to grow inequality because those with more wealth are earning a return on a larger pool of money. However, if those wealthy investors also earn their return at a higher rate, that inequality will grow even faster.<sup>339</sup>

Hedge funds also contribute to the growth of wealth inequality by creating extremely high paying jobs that go, largely, to wealthy, well-connected White men. Success in founding and running a hedge fund depends crucially on the network of wealthy investors to which the fund's founder has access.<sup>340</sup> And long-standing and well-documented biases cause these networks to prefer investing their wealth with those who share their ethnic, racial, gender, and religious background.<sup>341</sup> Hedge fund professionals earn extraordinary salaries, but these salaries are predominantly available to a very small, elite, homogenous

---

332. Wolff, *supra* note 1, at 68 app.tbl.1 (showing that the rate of return on liquid assets was less than 1% between 2010–2019).

333. *Id.* (showing the rate of return on “residential real estate” as variously between 4% and 6% between 2010–19).

334. DOROTHY A. BROWN, *THE WHITENESS OF WEALTH* 88–89 (2021).

335. Wolff, *supra* note 1, at 68 app.1.

336. *Id.*

337. Hannah Zhang, *Hedge Funds May Be Falling Out of Favor—Again*, INSTITUTIONAL INV. (Mar. 16, 2022), <https://www.institutionalinvestor.com/article/b1x679cwhwg7rp/Hedge-Funds-May-Be-Falling-Out-of-Favor-Again> [https://perma.cc/B8V7-WG93] (providing average hedge fund rates of return for the years 2020 and 2021).

338. *See supra* note 34 and accompanying text.

339. Winston, *supra* note 290, at 835 (describing the higher rate of return and larger pools of capital of the wealthy as mathematically “entrench[ing] wealth disparities”).

340. NEELY, *supra* note 232, at 21.

341. *Id.* at 15–16, 21 (applying the sociological findings of Patricia Hill Collins and Charles Tilly to the financial industry).

group of already wealthy and well-connected professionals.<sup>342</sup> These extraordinary salaries create another source of income inequality, which becomes wealth inequality when the hedge fund professional does not immediately spend all of that income.<sup>343</sup>

The United States' intermediated markets can be a profitable place to invest. However, the current state of the U.S. public securities markets means, first, that close to half of American households do not have the means to access market returns. And second, among those who invest in the markets, only the wealthiest and best-connected have access to the highest returns. The result is that the wealthier you are, the faster you can grow your wealth. This exacerbates and entrenches wealth inequality.<sup>344</sup>

U.S. market intermediaries and wealth inequality reinforce each other. The proliferation of exclusive investment opportunities can contribute to wealth inequality while wealth inequality itself creates demand for exclusive investment opportunities. That demand is easily met by markets that are bolstered by supportive laws and regulations.

### B. Implications

The United States has uniquely intermediated and unequal capital markets. These markets are one cog among many in the complex economic machine that has grown economic inequality, and more specifically, wealth inequality, over the past four decades. Our long-standing preference for market financing, which over time developed into a full-on embrace of the growth of the capital markets, has fueled this trend. One potential implication of this outcome might appear to be that the original policy choice of market-based financing over bank-based financing was a mistake. The fact that Germany and Japan have historically had less wealth inequality than the United States would seem to support this conclusion.<sup>345</sup> However, many other differences exist between the United States, Germany and Japan, and nearly a century has passed since those initial policy choices were made in each country. It is not possible to disentangle the many historical events that have transpired in each country over those years to determine whether the choice of market-based or bank-based financing is a determinative factor in the wealth distribution in each country. Indeed, in the 1930s, U.S. policymakers had very good, anti-inequality motivations for explicitly disempowering banks.<sup>346</sup>

Moreover, the analysis above suggests that the markets' contribution to wealth inequality is largely a consequence of the unique development of intermediaries in the United States. Bank-based systems will generally have less variation in the rate of return because there are relatively fewer risky investment opportunities, and most people invest in low-risk investments. Thus, rather than completely restructuring the entire system of corporate finance in the United States, this Article suggests we may be able to achieve similar results by reducing the inequality in the U.S. markets. That is, by reducing the disparity in rates

---

342. Dan Weil, *Top 15 Hedge Fund Managers Earn \$15.8 Billion Last Year*, THESTREET (Feb. 15, 2022), <https://www.thestreet.com/investing/hedge-funders-took-home-15-billion-dollars> [https://perma.cc/R5L3-JTKY] (providing the top 15 best-paid hedge fund managers).

343. See NEELY, *supra* note 232, at 7–8 (explaining how the disparity between social classes is on the rise as people in hedge funds have created a “class ceiling” to prevent others from participating).

344. Winston, *supra* note 290, at 835.

345. See OTT, *supra* note 278 and accompanying text.

346. See, e.g., CHERNOW, *supra* note 138, at 5–6 (describing the immense concentration of power once held by the banker J. P. Morgan and the populist and “trust-busting” reaction to that concentration of power).

of return available across the wealth distribution. The remainder of this Part considers policy choices that could accomplish this.

### 1. *The Benefit of Higher Interest Rates*

One timely implication of the foregoing analysis is that when the Federal Reserve raises interest rates, this may help to reduce wealth inequality. After an unprecedented period of very low interest rates following the 2008 financial crisis, the United States' Federal Reserve Bank began raising the federal funds rate in March 2022 in response to rapidly rising inflation.<sup>347</sup> Raising the federal funds rate has a domino effect of raising interest rates throughout the economy.<sup>348</sup> The Federal Reserve does this to slow down the economy and thereby slow down the increase of prices.<sup>349</sup>

Consumers in search of credit may not be pleased with these increased interest rates when they seek out a loan for a car or a house.<sup>350</sup> But for households with modest savings, the increased interest rates also mean more interest can be earned on savings that are deposited in savings accounts or invested in low-risk bonds. The availability of higher returns may cause some savings to flow out of the capital markets and into lower risk investments.<sup>351</sup> Thus, the relative size of the equity capital markets as a source of savings and financing will shrink relative to bank-based savings and financing. The foregoing analysis suggests this should help to reduce the markets' effect on wealth inequality. There is less variation in return on investment across savings accounts than there is in the capital markets,<sup>352</sup> and there is a ceiling on the return available from bonds.<sup>353</sup> So, the disparity in the rate of return that is a defining characteristic of the United States' intermediated markets will diminish as savings move from higher-risk to lower-risk options.

### 2. *Increasing Participation in the Capital Markets*

Reducing unequal returns requires that more Americans participate in the capital markets. Over 40% of American households do not invest in the capital markets.<sup>354</sup> Reducing the discrepancy in return between these households and the rest requires granting these households access to the capital markets. This could be accomplished in more than one

---

347. Nick Timiraos, *Federal Reserve Raises Interest Rates to 22-Year High*, WALL ST. J. (July 26, 2023), <https://www.wsj.com/articles/federal-reserve-raises-interest-rates-to-22-year-high-3c3e499c> [<https://perma.cc/CX6P-UQ2B>].

348. *Id.* ("The Fed fights inflation by slowing the economy through raising rates, which causes tighter financial conditions such as higher borrowing costs, lower stock prices and a stronger dollar.").

349. *Id.*

350. *Id.* ("The fed-funds rate influences other borrowing costs throughout the economy, including rates on mortgages, credit cards and auto loans.").

351. *How do Rising Interest Rates Affect the Stock Market?*, NASDAQ (July 7, 2023), <https://www.nasdaq.com/articles/how-do-rising-interest-rates-affect-the-stock-market> [<https://perma.cc/94VL-ZWAV>] ("Higher interest rates make less risky assets such as cash and bonds more attractive.").

352. James Royale, *Saving vs. Investing: How are They Different and Which is Better?*, BANKRATE (Apr. 19, 2024), <https://www.bankrate.com/investing/saving-vs-investing/> [<https://perma.cc/433B-NSKF>] (showing that savings accounts have lower risk and less variable returns than equity investments).

353. Hayes, *supra* note 268.

354. See Wolf, *supra* note 293 and accompanying text; see also Aladangady, *supra* note 331 and accompanying text.

way, and proposals that would work to include more Americans in the markets have been made by scholars and policymakers.

The SECURE 2.0 Act was passed by Congress in December 2022 with strong bipartisan support.<sup>355</sup> The Act was an extension of the Setting Every Community Up for Retirement Enhancement Act of 2019.<sup>356</sup> Both laws were intended to increase access to and participation in employer sponsored retirement plans.<sup>357</sup> The SECURE 2.0 Act contains provisions intended to make it more likely that employees who are offered a defined contribution retirement plan enroll.<sup>358</sup> It also facilitates the enrollment of part-time employees.<sup>359</sup> Evidence suggests that the SECURE 2.0 Act and its predecessor have increased participation in employer-sponsored retirement plans.<sup>360</sup> Because funds in these retirement plans are invested in the capital markets, these laws increase the number of Americans invested in the markets, thereby reducing unequal returns. Though, this legislation only impacts employees of employers who choose to offer retirement plans.

A bolder piece of legislation is also reported to be under consideration among lawmakers which would aim to ensure *all* workers have access to a retirement account.<sup>361</sup> If such a law could successfully enroll all or nearly all workers in a retirement account that is invested in the markets, it would be transformative in reducing market inequality at the lower end of the wealth distribution.

The late Professor Lynn Stout along with Professors Tamara Belinfanti and Sergio Gramitto have made another proposal that would have the effect of reducing inequality at the low end of the wealth distribution. In their book, *Citizen Capitalism*, these scholars proposed the creation of a universal mutual fund in which every American is automatically invested.<sup>362</sup> Such a universal fund would immediately bring all American households into the capital markets, substantially reducing inequality in investment returns.

These are all policy proposals that can usefully reduce market stratification by granting more families access to well-diversified investment funds. In the last few years, scholars have noticed what appears to be an increase in the number of retail investors in the U.S. markets.<sup>363</sup> “Retail investors” refer to individuals who purchase shares of stock directly rather than investing via an intermediary.<sup>364</sup> Data is not yet available to assess whether and

355. H.R. 2954, 117th Cong. (2021).

356. Sam Sturgis, *Is the Secure Act 2.0 Really ‘Saving’ Retirement for Americans?*, YALE J. ON REGUL. (April 6, 2024) <https://www.yalejreg.com/nc/is-the-secure-act-2-0-really-saving-retirement-for-americans-by-sam-sturgis/> [<https://perma.cc/P9W6-F8R3>].

357. *Id.*

358. *Id.*

359. *Id.*

360. *Id.*

361. Sarah O’Brien, *There’s a Push in Congress for a New National Retirement Plan to Fill Big Savings Gap*, CNBC (June 4, 2022), <https://www.cnbc.com/2022/06/04/theres-a-push-in-congress-for-a-new-national-retirement-savings-plan.html> [<https://perma.cc/P2GC-HAGY>].

362. LYNN STOUT, TAMARA BELINFANTI & SERGIO GRAMITTO, *CITIZEN CAPITALISM: HOW A UNIVERSAL FUND CAN PROVIDE INFLUENCE AND INCOME TO ALL* 49–50 (2019).

363. See, e.g., Sergio Alberto Gramitto Ricci & Christina M. Sautter, *Corporate Governance Gaming: The Collective Power of Retail Investors*, 22 NEV. L. J. 51, 51–53 (2021); James Fallows Tierney, *Investment Games*, 72 DUKE L.J. 353, 375 fig.2 (2022) (showing the growth of retail investor trading).

364. Barclay Palmer, *Institutional Investors vs. Retail Investors: What’s the Difference?*, INVESTOPEDIA (Oct. 30, 2024), <https://www.investopedia.com/ask/answers/06/institutionalinvestor.asp> [<https://perma.cc/TK3Y-DZKL>].

how many new investors entered the capital markets as part of this trend. However, even if this trend has brought new investors into the markets, it is unlikely to reduce the unequal nature of the U.S. markets. While these new retail investors may enjoy the opportunity to use their shareholder vote to express their opinions about corporate policy, retail investing remains a relatively risky way to invest in the capital markets. The return on mutual funds has historically always exceeded the return for those who choose specific stocks in an effort to turn a profit.<sup>365</sup> Therefore, any increase in retail investing is unlikely to reduce the effects of market inequality because it is unlikely to work to equalize the return on investment earned by ordinary and elite investors. Proposals to bring more Americans into diversified funds are therefore more promising methods of reducing market stratification.

### 3. *Shrinking the Hedge Fund Industry*

At the upper end of the wealth distribution, market inequality can be reduced by slowing or reversing the growth of the hedge fund industry. Fewer hedge funds would mean fewer opportunities for outsized returns for the wealthiest investors, and less money circulating among already wealthy and well-connected individuals.

Many scholars have noted with concern the fact that most investors are unable to take advantage of the higher rates of return offered by exclusive investments like hedge funds.<sup>366</sup> Many of these scholars have suggested that the solution is to allow ordinary investors more access to hedge funds.<sup>367</sup> However, these proposals are unlikely to reduce the ill effects of unequal markets for two reasons. First, hedge funds offer a higher rate of return because they are risky investments.<sup>368</sup> Investors without a substantial wealth cushion would be unwise to invest in hedge funds, especially without adequate wealth to diversify across funds. The result of a less-wealthy investor making an un-diversified investment in a hedge fund could be a substantial and catastrophic reduction in wealth, which of course would have adverse impacts on the wealth distribution. Moreover, if ordinary investors were granted access to hedge funds via a tiny stake in a diversified fund, the distributional impact would likely be too small to really slow down the mechanism by which the capital markets perpetuate wealth inequality. The wealthiest and best-connected investors would still represent the vast majority of money invested in hedge funds. That is the necessary consequence of a very skewed wealth distribution—wealthy investors have a lot more money to invest. Consequently, the majority of outsized hedge fund returns would still go to those super wealthy investors, and the self-perpetuating mechanism identified above would continue relatively unscathed.

---

365. MALKIEL, *supra* note 168, at 15.

366. See, e.g., Usha Rodrigues, *Securities Law's Dirty Little Secret*, 81 FORDHAM L. REV. 3389, 3430–31 (2013); see generally Anita K. Krug, *Investors' Paradox*, 43 J. CORP. L. 245 (2018); Jasmin Sethi, *Another Role for Securities Regulation: Expanding Investor Opportunity*, 16 FORDHAM J. CORP. & FIN. L. 783 (2011); Houman B. Shadab, *Fending for Themselves: Creating a U.S. Hedge Fund Market for Retail Investors*, 11 N.Y.U. J. LEGIS. & PUB. POL'Y 251 (2008); So-Yeon Lee, *Why the 'Accredited Investor' Standard Fails the Average Investor*, 31 REV. BANKING & FIN. L. 987, 1008 (2012) (“[T]here is no compelling reason for the government to bar [individual investors] from participating in [private offering] investment opportunities.”).

367. Lee, *supra* note 366, at 1007–08; Shadab, *supra* note 366, at 318–19.

368. See, e.g., Silver et al., *supra* note 251 (“Hedge funds are known for using higher-risk investing strategies . . .”).

The other, more promising option is to slow or reverse the growth of the hedge fund industry with the goal of reducing the number of opportunities wealthy investors have to earn outsized returns. This would also reduce opportunities for well-connected financial professionals to grow their wealth via extraordinary salaries. A reduction in elite investment opportunities could be accomplished by ending the regulatory preference that is granted to hedge funds *vis-a-vis* mutual funds. As was discussed in Part III.C above, a number of laws over the years have made it easier for hedge funds to raise money. Reversing those regulatory preferences could slow the growth of the hedge fund industry. Professor Cary Martin Shelby has suggested that hedge funds not be exempt from all the regulatory requirements of the 1940 Act that befall mutual funds.<sup>369</sup> In August 2023, the SEC took a step in this direction when it adopted a number of rules strengthening oversight of hedge funds (and other private funds).<sup>370</sup> These rules would have weakened one of the main benefits that hedge funds enjoy as private funds—the relative lack of regulation.<sup>371</sup> However, the Fifth Circuit vacated these rules in June 2024 on the grounds that the SEC had exceeded its authority in promulgating these rules.<sup>372</sup>

The proposals of Professor Shelby and the SEC would work to reduce market inequality at the high end of the wealth distribution. Additional regulatory oversight of hedge funds would make them less appealing, potentially reducing the supply of hedge funds.<sup>373</sup> With fewer hedge funds, fewer of the dollars invested in the capital markets will benefit from elite-level returns.

#### 4. The Limits of Growth

Capital markets, of course, should do more than just perpetuate economic inequality. They have the capacity to create social goods as well. The most prominent policy

---

369. Shelby, *supra* note 273, at 405–06 (describing the public effects of otherwise “private” hedge funds and advocating for Congress and regulators to take on this understanding of public impact).

370. The rules required annual audits and disclosures by private funds to their investors. They also strengthened protections against conflicted transaction. SEC, PRIVATE FUND ADVISER REFORMS: FINAL RULES 2, <https://www.sec.gov/files/ia-6383-fact-sheet.pdf> (on file with the *Journal of Corporation Law*).

371. See *id.* (describing the final rules as requiring quarterly statements to private fund investors, an audit of private funds under private fund advisors, and other requirements); Press Release, SEC, SEC Proposes to Enhance Private Fund Investor Protection (Feb. 9, 2022) <https://www.sec.gov/news/press-release/2022-19> [<https://perma.cc/H2W9-KSSA>] (describing the impacts of the proposed Investment Act rules); Documentation of Registered Investment Advisor Compliance Reviews, Release No. IA-5955 (proposed Feb. 9, 2022) (to be codified at 17 C.F.R. pt. 275), <https://www.sec.gov/rules/proposed/2022/ia-5955.pdf> (on file with the *Journal of Corporation Law*).

372. See Private Fund Advisers; Documentation of Registered Investment Adviser Compliance Reviews, Release No. IA-6383 (Aug. 23, 2023), <https://www.sec.gov/files/rules/final/2023/ia-6383.pdf> (on file with the *Journal of Corporation Law*) (“**Disclaimer:** On June 5, 2024, the U.S. Court of Appeals for the Fifth Circuit issued an opinion . . . vacating the [new] rules (the ‘Final Rules’). As a result, those rules that were newly adopted under the Final Rules have been vacated.”); Nat’l Ass’n of Priv. Fund Managers v. SEC, 103 F.4th 1097, 1114 (5th Cir. 2024) (holding that “[t]he [SEC] has exceeded its statutory authority in adopting the Final Rule”).

373. It would also have the benefit of protecting hedge fund investors. See Shelby, *supra* note 273, at 412 (“Mandating tailored registration under the 1940 Act could preemptively deter investor exposure to systemically harmful entities by subjecting such funds to standardized valuations, mandatory disclosure, and various other protections.”).



justification for market-favoring lawmaking is that the capital markets promote growth.<sup>374</sup> If plentiful savings flow into the capital markets, innovative businesses have inexpensive access to extensive capital. These businesses can then create jobs and produce valuable goods and services. This, we hope, will grow the economy and improve the quality of life of people across the wealth and income spectrum.<sup>375</sup>

Economic growth is generally thought of as a positive development because it can create security.<sup>376</sup> Absent an interconnected economy, humans historically had to constantly worry about their ability to secure food, shelter, and other necessities to survive and thrive.<sup>377</sup> Through the United States' embrace of capitalism, we have grown to have one of the most productive economies in the world.<sup>378</sup> Food, shelter, and many other luxuries are plentifully produced in the United States, which should have the effect of reducing scarcity and the insecurity that can entail.

However, the data on the distribution of wealth that was discussed above demonstrates that despite the extraordinary growth that the United States' economy has achieved, we have not eliminated economic insecurity. As of 2019, nearly one in five American households had zero or negative net wealth.<sup>379</sup> These households have no savings and therefore no way to pay for unexpected expenses. They may not have enough money to pay for regular, expected expenses. These households have not reaped the benefits promised by the United States' extraordinary growth.

Market financing can, indeed, fuel growth.<sup>380</sup> That growth can offer quality-of-life improving innovations, interesting jobs, and other benefits to the economy. However, those benefits will not always flow to everyone in the economy. And, in the case of the United States, we can see they have not. The unequal distribution of wealth in the U.S. economy is evidence that economic growth has not proven a panacea for social security.

If we were to temper our strong American preference for capital market financing, it could come at the expense of growth. However, the growth that the markets have facilitated thus far has not achieved its ultimate goal of eliminating insecurity. One-fifth of American households live in a state of extreme economic insecurity. If a turn away from the markets could help to facilitate a more equal distribution of wealth—thus reducing economic insecurity at the bottom of the wealth distribution—that could justify a reduction in growth.

---

374. See E. GORDON & K. NATARAJAN, *FINANCIAL MARKETS AND SERVICES* 3 (10<sup>th</sup> rev. ed. 2016) (“It is the financial system which supplies the necessary financial inputs for the production of goods and services which in turn promote the well-being and standard of living of the people of a country.”); EMILIOS AVGOULEAS, *GOVERNANCE OF GLOBAL FINANCIAL MARKETS: THE LAW, THE ECONOMICS, THE POLITICS* 4 (2012) (“The financial system provides a large number of critical functions . . . which are inextricably linked with the welfare of modern economies and day-to-day life.”).

375. Winston, *supra* note 290, at 808–09.

376. DIRK PHILIPSEN, *THE LITTLE BIG NUMBER: HOW GDP CAME TO RULE THE WORLD AND WHAT TO DO ABOUT IT* 18–19 (2015) (describing economic growth as “the logic of our culture” because we associate it with features of our country’s overall well-being such as “a decent standard of living”).

377. *Id.* at 11 (using Eastern Island as an example of this phenomenon).

378. WORLD BANK GROUP, [https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most\\_recent\\_value\\_desc=true](https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=true) [https://perma.cc/2LAC-LGJQ].

379. Wolff, *supra* note 1, at 47 tbl.1.

380. See GORDON & NATARJAN, *supra* note 374 and accompanying text.

### 5. *Implications Beyond the Capital Markets*

The way we choose to regulate our capital markets can impact the relationship between those markets and the distribution of wealth. However, even if we manage to reduce the inequality-perpetuating tendencies of the U.S. markets, that cannot alone solve the wealth inequality problem because the capital markets are not the only place wealth is created. Much of the solution therefore lies in policymaking outside of the realm of the capital markets. Nonetheless, the capital markets will continue to exist in the United States and be a place where people invest their money regardless of what other policy approaches are or are not adopted to reduce wealth inequality. Understanding the relationship of the capital markets to wealth inequality is therefore necessary to understanding the dynamic effects of any policy changes. This Article, therefore, offers policy considerations for the regulation of the capital markets themselves, and puts forth a descriptive account intended to inform broader discussions of wealth inequality and policymaking solutions.

## V. CONCLUSION

In the years following the stock market crash of 1929, U.S. policymakers made a choice to promote market-based financing. Lawmakers of this era acknowledged the risks inherent in market investing, but under the historical circumstances, a market-based system appeared to be the socially optimal choice. In the ensuing decades, to manage the risks of market investing, lawmakers passed many laws designed to reduce the risk of investing in the markets for most Americans. A consequence of this policymaking was the extraordinary growth of market intermediaries. First came mutual funds—inexpensive, diversified funds that reduce the risk of investing. While mutual funds are an excellent investment choice for many Americans, they do not engage in shareholder activism or trade regularly for arbitrage gains. These practices are both good for market health and offer opportunities for profit (though with substantial risk). Hedge funds have grown into this market space left by mutual funds—they count both these practices among the tools they use to earn money for their investors.

These market intermediaries are not equally available to all Americans. Nearly half of American households have inadequate wealth to participate in the markets at all. If these households have positive wealth, it will be invested in low-risk, low-return assets outside of the capital markets. The predominant way that most middle-class Americans participate in the markets is via their retirement accounts, which are predominantly invested in mutual funds. Mutual funds earn a higher rate of return than non-market investments. Only the wealthiest Americans have access to the highest risk, and thus highest-return funds—hedge funds. So, a person's existing wealth determines the rate of return they are able to earn from capital market investing.

Perhaps it is not surprising, then, that during the same period that investment intermediaries were growing in the United States, wealth inequality was growing as well. A close look at both the development of investment intermediaries in the United States and the characteristics of the wealth distribution reveals that our uniquely intermediated markets are tied to the wealth distribution. In fact, the mechanism is bi-directional. In one direction, growing wealth inequality contributes to demand for investment intermediaries because when wealth is concentrated at the top of the wealth distribution, more wealth is in search of relatively risky capital markets investments. In the other direction, our intermediated

markets contribute to wealth inequality by offering a higher rate of return to investors with more wealth. Thus, the United States' capital markets and their uniquely robust ecosystem of intermediaries work as a cog in the economic machine that has skewed the wealth distribution over the last 40 years.

This finding has policy implications within and without the capital markets. Within the realm of capital markets, the implication is that policy choices that favor capital markets, and innovation therein, are not distributionally neutral. New opportunities in the capital markets tend to be new opportunities for wealthy individuals to grow their wealth. While the ultimate policy goals of capital markets are economy-wide, growth in the capital markets favors those households on the winning side of the wealth divide. More helpful regulation would aim to bring less-wealthy Americans into the capital markets and limit the growth of unequally available investment intermediaries. With respect to policymaking outside the capital markets, the important takeaway is that our capital markets, as they currently operate, are a mechanism that perpetuates and grows wealth inequality in the United States. Any policy discussions aimed at reducing wealth inequality need to account for the fact that this mechanism exists.