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UNDERSTANDING FINANCIALIZATION: STANDING ON THE SHOULDERS OF MINSKY[1]

Charles J. Whalen

Abstract

Since Hyman Minsky's death in 1996, much has been written about financialization. This article — by means of the synthesis, interpretation, and assessment of an extensive literature — explores the issues that Minsky examined in the last decade of his life and considers their relationship to the financialization literature. At the heart of those issues is what Minsky called money manager capitalism, which he viewed through the lens of a theory of capitalist development inherited from Joseph Schumpeter. Advancing our understanding of the history of financial economics, the article shows how Minsky contributed to — indeed, anticipated much of — the study of financialization. The article also identifies two sources of Minsky's insightfulness: his treatment of economics as a grand adventure, and his willingness to step beyond the world of theory and interact with the world of practice. Today, scholars with a Minsky perspective face formidable challenges, but, the author concludes, within Minsky's writings is also a glimmer of hope: Economic systems are not natural systems; we can reshape them to achieve a more humane world.

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Introduction

In *Stabilizing an Unstable Economy*, Hyman P. Minsky (1986a, xiii) wrote that John Maynard Keynes provides "the shoulders of a giant upon which we can stand in order to see far and deep into the essential character of advanced capitalist economies." Even today, Keynes remains relevant, to be sure. However, as we seek to understand and cope with financialization, we can also stand on the shoulders of Minsky.[1]

This article has five sections. Part I summarizes and briefly reflects on Minsky's penetrating observations regarding what he called money manager capitalism, a subject on which he focused most of his research during the decade preceding his death in 1996. Part II outlines the powerful analytical framework that Minsky used to organize his thinking and that we can use to extend his work. Part III shows how Minsky's observations and framework represent a major contribution to the study of financialization. Part IV highlights two keys to Minsky's insightfulness: his treatment of economics as a grand adventure and his willingness to step beyond the world of theory. Part V concludes by providing a short recap as well as by acknowledging formidable challenges facing scholars with a Minsky perspective and by calling attention to the glimmer of hope that offers a way forward.

Minsky's Observations on Money Manager Capitalism

Minsky is best known for his financial-instability hypothesis, which suggests that the financial structure of advanced capitalist economies becomes more fragile over a period of prosperity.[2] But during the last decade of his life, Minsky focused not on that hypothesis but on the emergence of what he labeled money manager capitalism (MMC). Looking primarily at the economy of the United States, Minsky observed that money managers had, since the early 1980s, replaced corporate managers as the masters of private-sector economic activity. In a series of essays, Minsky presented his observations on that development and the dangers he believed it posed to the US economy—including the possibility of slower technological progress, greater economic instability, increased worker insecurity, and sharper income inequality.[3]

Money Managers

According to Minsky, MMC emerged in the 1980s and by the end of that decade the holders of the largest share of US corporate stocks and bonds were money-managing institutions—such as pension and mutual funds, bank trust departments, and the annuity arms of insurance companies—rather than individual investors. In an article published just after his death, for example, Minsky and Whalen (1996, p. 158) observed that money managers saw the fraction of US corporate equities under their control grow from 8 percent in 1950 to 60 percent in 1990; over the same period, pension funds increased their share of total business equities from less than 1 percent to almost 39 percent and their fraction of corporate debt from 13 percent to 50 percent.

As the portfolios controlled by fund managers grew, active management replaced a passive "buy-and-hold" strategy. The aim of money managers—and the sole criterion by which they are judged—is maximization of the total value of investments made by fund holders.[4] Thus, active management of such funds means that money managers are always "in the market." Minsky (1990a, p. 69) wrote, "These funds do not buy and hold common stocks for long-term increases in dividend income: the annualized rate of return from catching a short-run swing in interest rates or stock prices can easily dominate interest or dividend income."

With MMC taking hold, the short view replaced the long view across the economy. Money managers certainly felt the pressure of the near term—as investors' resources migrated to the most successful fund managers—but so did corporate executives. The growing influence of money managers forced business leaders to become increasingly focused on quarterly profits and the stock-market value of their corporations—in other words, on shareholder value. This pressure spurred many non-financial corporations to scale back costly and often aging manufacturing operations; engage in mergers and acquisitions at an unprecedented pace; and turn their attention to the sorts of borrowing, investing, and lending traditionally associated with financial firms.[5]

The experience of General Electric (GE) is emblematic of the corporate behavior that took root as MMC emerged. When Jack Welch became the chief executive at GE in 1981, the firm was a premier US corporation—"as traditional as any large manufacturing firm in the country" (Harrison & Bluestone, 1988, p. 36). To boost the company's earnings and stock value, Welch sought to transform the company. In the first five years, he closed a dozen plants and sold off 190 subsidiaries, including the entire small appliances division. He also spent $6.5 billion to acquire RCA (including its broadcasting subsidiary, NBC) and $1.7 billion to purchase the Kidder Peabody investment bank and Employers Reinsurance, a financial services firm. The strategy achieved Welch's aims and was widely imitated.[6]

The emergence of MMC was also accompanied by an array of institutional innovations in the financial world. For example, since billion-dollar funds own sizable amounts of stock in individual enterprises, the growth of managed-money funds led to development of block trading through investment banks. When a fund manager seeks to sell fund shares, investment banks buy the shares and then either find a fund willing to buy the entire lot or dispose of the shares in smaller amounts over time (Minsky, 1990a, p. 70).

Other financial innovations arose in large part because fund managers had outgrown portfolios of high-quality stocks and bonds. Always on the lookout for higher returns, money managers provided an eager market for new, specialized instruments such as securitized mortgages, credit-card receivables, and junk bonds (Minsky, 1992a, p. 32). The needs of money managers also spurred the development of program trading and portfolio insurance, observed Minsky (1990b, p. 213).

MMC may have originated in the United States, but Minsky understood from the start that it had global significance; that, is, MMC helped fuel globalization. In a conference paper delivered in 1988, for example, he wrote that MMC was already "international in both the funds and the assets in the funds" and that it would continue to grow internationally. According to Minsky, "As managed funds grow, we should expect a world in which international portfolio diversification is much more prevalent than it is to date" (Minsky, 1990a, p. 71).[7]

Technological Progress

Minsky worried that MMC came with a number of dangers, including the possibility that technological progress and industrial innovation would stagnate. He offered two reasons: technological development usually demands a longer time horizon than that which drives money managers; and MMC often leaves corporations without sufficient financial resources for such development. Thus, from the perspective of what he called the capital development of the economy, Minsky feared that the financial evolution that produced MMC "may well have been retrograde" (Minsky, 1993, p. 113).

Minsky argued that money-fund managers do not see themselves as guardians of the economy's capital development, adding that this made them fundamentally different from the earlier leaders of finance admired by Joseph Schumpeter. Their emphasis, Minsky continued, is instead on trading profits, which he characterized as "the quick turn of the speculator." In fact, Minsky suggested that Keynes's famous remark about speculation and enterprise is especially relevant for MMC:

> Speculators do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes the by-product of the activities of a casino, the job is likely to be ill-done (Keynes, quoted in Minsky, 1993, p. 111-112).

In short, Minsky thought that MMC made the financial structure of the US economy look increasingly like a casino—and pressured non-financial enterprises to choose diversification and other strategies that could be implemented quickly rather than pursue longer-term strategies such as modernization of plant and equipment.[8]

Minsky also argued that innovation would be sluggish because companies in the era of MMC are often saddled with a high level of indebtedness, making it difficult for them to invest from internal funds. Such indebtedness often came from a leveraged buyout or other restructuring. Under MMC, Minsky explained, money managers have an incentive to sell their shares to support takeovers and financial-restructuring initiatives that promise to boost near-term portfolio value; they also tend to be the buyers of bonds issued to finance such reorganizations (Minsky, 1990a, p. 70).[9]

In short, Minsky wrote that the main purpose of those now in control of corporations (money managers) was no longer to make profits from production and trade. Rather, the purpose had become giving value to stockholders by assuring that the liabilities of corporations are fully priced in the financial market. In practice, that means "pledging a very high proportion of prospective cash flows to satisfy debt liabilities"—and not worrying whether there is much left for capital development (Minsky, 1993, p. 112).

Economic Instability

Increased economic instability is another danger Minsky associated with MMC. To be sure, Minsky understood that the financial system had already become increasingly fragile in the three decades before MMC emerged in the 1980s. In fact, Stabilizing an Unstable Economy discusses that process in detail: corporations took on more and more debt; banks expanded off-balance-sheet operations; and "fringe banking" grew relative to the rest of the financial system (Minsky, 1986a).[10] But MMC added to the increased instability in important ways, Minsky argued: it increased the possibility of a market panic; it fueled securitization; and it threatened to trigger an economic crisis that only coordinated international action would resolve.

Minsky's concern that money managers and block traders might contribute to the panic selling of equities was rooted in historical observation. In a paper written for a conference held in 1988, Minsky observed that position-taking by block traders (and the short-term financing provided to them by big banks) disappeared in the stock-market crash of October 1987 and that intervention by the Federal Reserve was needed to stabilize the market. "More than ever," he wrote, "the profit sustaining effect of government expenditures…together with prompt Federal Reserve intervention is required for aggregate stability" (Minsky, 1990a, p. 70-71).

In the same paper, Minsky (1990a, p. 71) argued there is a "symbiotic relation between the growth of securitization and of managed money."[11] Having recently returned from a conference convened (in May 1987) by the Federal Reserve Bank of Chicago, Minsky summed up the main takeaway as follows: "That which can be securitized will be securitized" (Minsky, 1990a, p. 70). But Minsky was ahead of the curve: A year before the conference he had written not only that securitization was poised to be "the wave of the future" but also that it came with the risk of an asset sell-off, falling asset prices, and "contagion reactions" on an international scale (Minsky, 1986b).[12] When mortgage securitization turned a real-estate bust into a global financial nightmare in 2007, Minsky—who had been dead for over a decade— gained considerable notoriety and was even the subject of a front page story in The Wall Street Journal (Lahart, 2007).[13]

Minsky wasn't merely concerned that MMC could trigger an international economic crisis; he was also worried that it was no longer possible for the United States to act "as the guardian angel for stability in the world economy" (Minsky, 1986b, p. 15). Rather, he argued, "As the countries that are involved in MMC increase, an international division of responsibility for maintaining global aggregate profits will be necessary" (Minsky, 1990a, p. 70). A year before his death, Minsky wrote: "Global financial integration is likely to characterize the next era of expansive capitalism. The problem of finance that will emerge is whether the financial and fiscal control and support institutions of national governments can contain both the consequences of global financial fragility and an international debt deflation" (Minsky, 1995, p. 93).

Worker Insecurity and Income Inequality

Minsky saw rising worker insecurity and income inequality as the flipside of MMC. He considered it no surprise that insecurity and inequality increased as money managers gained influence over the economy. In fact, Minsky offered two reasons for the trend: at the enterprise level, MMC pressured employers to cut labor costs; and at the macroeconomic level, workers were hurt by a grossly overvalued dollar attributable in large part to the portfolio choices of money managers.

In 1996, Minsky discussed the influence of money managers on the employment relationship within corporations. He wrote: "There is an almost chronic need to downsize overhead and to seek the lowest possible variable cost." As a result, workers' benefits were slashed or eliminated, concessions were demanded from unions, jobs were outsourced and off-shored, and many longstanding assurances of continued employment vanished (Minsky, 1996, p. 363).

Later that same year, Minsky and Whalen (1996) offered a further examination of this aspect of MMC by outlining some of the dimensions of growing worker insecurity and inequality. For example, their essay mentions widespread income stagnation, longer job searches, increased family dependence on multiple job-holdings, and explosive growth in part-time and temporary work. It also quotes Stephen Roach, chief economist at Morgan Stanley: "Recovery or not, the 1990s are still all about downsizing, longer workdays, white-collar shock and relatively limited opportunities for new employment" (quoted in Minsky & Whalen, 1996, p. 160).[14] Under MMC, all types of labor were increasingly seen by corporations as a "spot market" commodity—just another cost to be minimized.

Minsky also saw a macroeconomic dimension to rising worker insecurity. MMC "has rendered obsolete the view that trade patterns determine the short-run movement of exchange rates," he argued (Minsky, 1990a, p. 71). Elaborating on this in another essay, Minsky wrote: "Because of the links among financial markets brought about by portfolio movements, … portfolio choices of money managers drive exchange rates; the balance and terms of trade can change out of proportion to changes in relative production efficiencies" (Minsky, 1990b, p. 211).

Then he connected the exchange rate to problems faced by US workers:

> Much of America's industrial decline of the early 1980s was a creation of a grossly overvalued dollar that resulted from interest rate differentials, safe haven portfolio choices towards the dollar, and speculative momentum rather than due to a sudden deterioration of America's comparative production costs (Minsky, 1990b, p. 211).[15]

Minsky's Observations in Retrospect

Although Minsky's observations were made more than two decades ago, he identified trends and dangers that continue to shape economic life in the United States and the global economy. Consider the following, for example.

The share of US corporate equities held directly by households has continued its post-World War II decline, and money managers now control about two-thirds of the domestic equity market (see Figure 1).[16] To be sure, a significant share of today's fund assets are passively managed (in the form of index funds, for example), but most—70 percent—are still actively managed (Miller 2016). Moreover, shareholder value is now widely recognized as driving corporate governance—along with the complementary strategic orientation of "downsize and distribute," which has replaced "retain and reinvest" (Lazonick & O'Sullivan, 2000).

Even before the global financial crisis of 2007-2008, the International Monetary Fund (2006) observed a global trend away from traditional banking (sometimes called "lend and hold") and toward financing through markets and new forms of intermediation such as securitization (often called "originate and distribute"). All of this was anticipated by Minsky (1990a, p. 70-71), who wrote—in 1988—that "the 1950s and 1960s pattern of continuing bank and bank borrower relations is now obsolete."[17]

The global financial crisis underscored the worldwide reach of MMC, the associated risk of macroeconomic instability, and the value of international policy coordination.[18] In addition, over the past few years it has become impossible for scholars, policymakers, and reporters to ignore the realities of worker insecurity and widening income inequality in the United States and other advanced industrial nations.[19]

Minsky's Theory of Capitalist Development

Of course, Minsky did not just leave behind perceptive observations that still resonate. He also left us an analytical framework that not only organizes and provides a context for those observations but also enables us to extend his work. That framework yielded his theory of US capitalist development—a theory rooted in an evolutionary and institutionally oriented view of the economy; fashioned with an acute awareness of the central role that finance plays in economic life; and centered on the interaction of finance and industry.

Evolution and Institutions

The crucial foundation of Minsky's theory is his conception of the economy. Minsky argued that the underlying conception of economic life in conventional economics is characterized by endogenous stability: the economic system is believed to be inherently stable, or at least self-regulating, and business cycles and other economic dynamics are caused by exogenous disturbances. Instead, Minsky stood on the shoulders of Karl Marx, Wesley Mitchell, Schumpeter, Michael Kalecki, and Keynes, all of whom viewed business cycles—and economic dynamics in general—as largely endogenous.

In particular, Minsky saw cycles and other economic evolution as an inherent part of capitalist economic life—a natural consequence of self-interested behavior taking place in complex systems of economic and financial relations. Moreover, from Minsky's perspective, the disruptiveness of a bout of instability—indeed, the complexion of all economic outcomes—depends on the aptness of institutions and policy interventions (Ferri & Minsky, p. 1992).

In other words, Minsky did not begin by assuming the inherent efficiency of markets and the validity of a laissez-faire stance toward economic policy. Instead, his starting point was evolutionary and institutionally focused thinking about the economy. Then he took that starting point and used it to analyze "the path of development of an accumulating capitalist economy through historical time" (Minsky, 1986d, p. 285).[20]

The Centrality of Finance

The economists who inspired Minsky shared an appreciation of the central role that credit and finance play in a capitalist economy.[21] "Because credit is essential to the process of development, a theory of economic development needs to integrate money into its basic formulation," wrote Minsky (1990a, p. 55). And, in another essay, he added: "The in-place financial structure is a central determinant of the behavior of a capitalist economy" (Minsky, 1993, p. 106).

While scholars have long recognized Schumpeterian forces of creation and destruction when looking at products, production, and even industrial organization, Minsky—who studied with Schumpeter at Harvard—emphasized that Schumpeter also gave attention to changes in financial systems. As a result, Minsky's theory stressed that financial markets evolve not only in response to the profit-driven demands of business leaders and individual investors but also as a result of the profit-seeking entrepreneurialism of financial firms. According to Minsky, "Nowhere is evolution, change and Schumpeterian entrepreneurship more evident than in banking and finance and nowhere is the drive for profits more clearly the factor making for change" (Minsky, 1993, p. 106).

Minsky was explicit about the centrality of finance in his evolutionary theory. He wrote: "To understand the short-term dynamics of business cycles and the longer-term evolution of economies it is necessary to understand the financing relations that rule, and how the profit-seeking activities of businessmen, bankers, and portfolio managers lead to the evolution of financial structures" (Minsky, 1993, p. 106). In fact, while conventional economics puts consumer choice in the driver's seat, Minsky rejected that in favor of the vision (conception of economic life) of Schumpeter and Keynes: "Consumer sovereignty is subordinated to the vision of entrepreneurs and the critical analysis of bankers in determining the path of the economy" (Minsky, 1993, p. 107).

The Interaction of Finance and Industry

In an essay titled "Money and Crisis in Schumpeter and Keynes," Minsky (1986e) suggested that *The General Theory* was written because the Great Depression led Keynes to see a need to move beyond the economics of his previous books. I suspect the essay was written at a time when Minsky was feeling the same way about his own books. In fact, Minsky, who until that time had relied almost exclusively on Keynes for insight, practically says just that: "Further progress in understanding capitalism may very well depend upon integrating Schumpeter's insights with regard to the dynamics of a capitalist process and the role of innovative entrepreneurs into an analytical framework that in its essential properties is Keynesian" (Minsky, 1986e, p. 113).

"Money and Crisis in Schumpeter and Keynes" marks a turning point in Minsky's research—toward integrating Schumpeter (and Mitchell) and Keynes. From Keynes, Minsky gained an understanding of how business cycles emerge as *existing* financial structures become more fragile over time. From Schumpeter, Minsky gained insight into how those structures *evolve*—taking on new dimensions and reshaping the economy in the process. The result of Minsky's integration was his sketch of a long-term theory of US economic development, a theory focused on the interaction of finance and industry.

Elements of Minsky's theory are discussed in a number of articles and working papers.[22] Taken together, they form an analysis that traces US capitalism through five stages: <u>commercial</u> capitalism (1607-1813); <u>industrial</u> capitalism (1813-1890); <u>finance</u> capitalism (1890-1933); <u>managerial</u> capitalism (1933-1982); and <u>MMC</u> (1982-present).[23] While providing a detailed account of the stages and the evolution of the economy from one stage to another is beyond the scope of this article, we can identify and briefly trace changes along some of the important dimensions that Minsky highlighted.[24]

What follows is a brief look at four dimensions of industry and finance that Minsky discussed when examining US economic development. Changes over time along each of these dimensions help to distinguish one stage from another (see also Table 1):

1) The *distinctive activity* being financed evolved from the trading or processing of goods, to industrial expansion (acquisition of factories and machines), to industrial consolidation (trusts and merger), to macroeconomic growth and stability, and—in MMC—to corporate reorganization or restructuring designed to boost shareholder value.

2) The *pivotal source of financing* evolved from the merchant bank (though internal finance was also important), to the investment bank (in both the industrial and finance stages, though such banking was more centralized in the latter stage), to the central bank (though internal finance was once again important), and—in MMC—to managed-money funds. (Moreover,"originate and distribute" became a key feature of financing in MMC, as previously discussed.)

3) The *fundamental entity* being financed evolved from a proprietorship or partnership, to an industrial corporation, to a combined corporation, to the private sector financed through the central banking system (but the conglomerate was the dominant corporate form), and—in MMC—to the international corporation.

4) The *locus of power* was initially dispersed among merchants and bankers, but it then shifted to investment bankers during industrial and finance capitalism, to corporate managers (who assumed macroeconomic stabilization by government), and eventually—in MMC—to money-fund managers.

Extending Minsky's Theory

By leaving behind a framework for analysis and not just insightful observations, Minsky allows us to stand on his shoulders to extend his theory of development and more clearly understand economic reality. Extensions of Minsky's theory to date have taken a variety of shapes, including efforts to: enrich his analysis of stages; apply his framework to shed light on subsequent developments in the United States and the global economy; and build on his work to understand developing and emerging economies. A few examples of each are briefly discussed.

Some extensions of Minsky's theory of US capitalist development have sought mainly to enrich or flesh out Minsky's analysis. An early effort on my own part was published in 1997. It focused primarily on how MMC and the spread of worker insecurity—the end of "shared prosperity"—were two sides of the same coin (Whalen, 1997). A second article, published in late 2001, explained Minsky's framework and then offered a thumbnail sketch of the economic stages and their evolution (Whalen, 2001).

William Van Lear has also fleshed out Minsky's theory. For example, his book *A Populist Challenge to Corporate Capitalism* enriches the Minsky theory in the course of exploring whether the economy's evolution accords with fundamental American principles, which Van Lear identifies as a commitment to liberty, representation, property, and enterprise. Among his conclusions: the corporation has evolved along a path inconsistent with these principles (Van Lear, 2002). More recently, Van Lear and Sisk (2010) further fleshed out Minsky's theory in an article that explores how MMC is similar to the earlier era of finance capitalism.

Since Minsky's death, a number of economists have used his analytical framework to shed light on subsequent developments in the United States and the global economy. In 2002, for example, Zalewski (2002) looked at the rise of retirement insecurity in the age of MMC; and Rima (2002) brought into the picture information technology, venture capital, further globalization, and NASDAQ trading. My own essays explored the technology-driven boom that preceded the dot-com collapse (Whale, 2002) and updated the interaction between MMC and worker insecurity to the eve of the global financial crisis (Whalen, 2008a). Minsky's framework has also been employed more recently to examine rising income inequality (Zalewski & Whalen, 2010) and, of course, the global financial crisis (Whalen, 2010; Way, 2010; and Tymoigne & Wray, 2014).[25]

A growing number of economists have also built on Minsky's work to understand developing and emerging economies. They include Ventimiglia and Tavasci (2010), who explored how MMC has increased financial fragility in developing countries (such as Chile) primarily dependent on one commodity. Another contribution to this literature is Liang (2011), who examined the flow of capital into emerging market economies from countries where MMC prevails, highlighting the effects on financial-system development, market volatility, and macroeconomic policy. Her bottom-line conclusion would have come as no surprise to Minsky: global money managers require greater regulatory scrutiny.

Understanding Financialization

Minsky's observations and framework represent a major contribution to the study of financialization. Scholars often observe that the financialization literature lacks cohesion, but a number of strands can be identified. Elements of Minsky's work represent a contribution to them all—and in some cases, he anticipated much of the work done in recent decades.

Van der Zwan's Three Strands

Natascha Van der Zwan (2014) identifies three strands in the financialization literature. One strand equates financialization with the ascendancy of shareholder value as the driver of corporate behavior. A key contribution to that literature is Lazonick and O'Sullivan (2000). As we have seen above, Minsky anticipated much of the literature that highlights the emergence of a shareholder value orientation and that examines its tremendous economic significance.

A second strand equates financialization with a regime of accumulation—that is, with a new stage of capitalist growth and development. In contrast to the strand of research emphasizing shareholder value, which focuses on microeconomic activity, this second strand focuses on macroeconomic sphere. In this strand, financialization in recent decades is seen as "a pattern of accumulation in which profit making occurs increasingly through financial channels rather than through trade and commodity production" (Krippner, 2005, p. 181). An important early contribution to this literature is Arrighi (1994), though the tradition can be traced back further, including Aglietta (1979).

Minsky's theory of capitalist development parallels the financialization work done by Arrighi and other scholars working in the macro sphere. Both lines of research place the US and global economic developments of the past few decades in the context of a broader sweep of history—and both put the interaction of finance and industry at the heart of their analysis. Minsky's work warrants recognition as part of this strand of financialization, not just for the observations on MMC but also for the analytical framework that connects those observations and allows us to integrate them with our own findings as the economy continues to evolve.

A third strand of financialization highlighted by Van der Zwan is the financialization of everyday life. According to Van der Zwan (2014, p. 111), this strand involves studies that concern themselves with the rise of the citizen as investor. That research includes "a cultural perspective on financialization, particularly with regard to the encroachment of finance into the realms of everyday life."

Although there are certainly aspects of this third strand that reach far beyond the work of Minsky, there is also some noteworthy overlap. To be sure, Minsky's scholarship doesn't contribute much to the work of researchers who examine how financial literacy campaigns affect the way ordinary people see themselves and their role in the economy and society. But also of interest to scholars working in this strand are the material outcomes of economic life for the broader population (Van der Zwan, 2014, p. 111) — something often overlooked in the other strands. Since a focus on material outcomes relates directly to the connection that Minsky made between MMC and worker insecurity, it seems reasonable to conclude that Minsky offered a contribution of substance to this strand as well as to the others.

Additional Strands and Definitions

Gretta Krippner (2005, p. 181) offers three additional strands of the financialization literature. One equates financialization with the rise of mutual funds and the explosive growth in financial trading that followed. Another uses financialization to describe a shift from bank-based, relational financing to market-based, arms-length financing as well as to increased reliance on new forms of intermediation such as securitization. A third strand uses the term to refer to an upsurge in the economic and political power of those who derive their income from financial investments (that is, the *rentier* class). Minsky seldom addressed the political power associated with the rise of MMC, but there is no question that he anticipated much of the recent scholarship on each of the other aspects of financialization identified by Krippner.

Reflecting on the many strands of financialization research, Gerald Epstein (2005, p. 3) fashioned a broad definition for his edited volume *Financialization and the World Economy*: "Financialization means the increasing role of financial motives, financial markets, financial actors, and financial institutions in the operation of the domestic and international economies." Building on that definition, Thomas Palley argued at the end of 2007 that the principal effects of financialization are to: "elevate the significance of the financial sector relative to the real sector; transfer income from the real sector to the financial sector; and contribute to increased income inequality and wage stagnation" (Palley, 2007, p. 3). In light of the observations discussed in earlier sections of this paper, it seems certain that Minsky would have seen Palley's list as a good summary of the effects of MMC but with one huge omission: increased economic instability and the likelihood of a severe, global downturn. By mid-2008, that omission was apparent to economists and policymakers worldwide.

Understanding Minsky

It is often said that Minsky was prescient about many things, including money managers, shareholder value, banking, securitization, and, of course, instability. Where did he get that insightfulness? I attribute his ability to see what so many others missed and to peer so far into the future to two features of Minsky's outlook: he treated economics as a grand adventure, and he was willing, indeed eager, to step outside the world of theory and come into contact with the world of economic practice.

Economics as a Grand Adventure

In the early 1990s, a small batch of Minsky's papers addressed his interactions with Schumpeter at Harvard in the period 1946-1949. Minsky described learning that Schumpeter would sit alone during office hours: The graduate students of the time "did not take Schumpeter seriously," he observed. "The prevailing ethic was careerist. The working postulate…was not only that big thinking was in the past, but, in truth, that it was not worth doing…In the prevailing view, economics was now a normal science, not a grand adventure, and therefore Schumpeter was irrelevant" (Minsky, 1992c, 362, n. 2).

But Minsky looked at things differently. So, he joined Schumpeter in his study—often accompanied by classmate Paulo Sylos Labini. Schumpeter encouraged them to develop their own style and follow their own vision.26 The message from Schumpeter: "Normal science was too easy" (Minsky, 1993, p. 103).

Minsky's vision (conception of the economy) was influenced by his time with Schumpeter, but he actually acquired the notion of economics as a grand adventure during his years as an undergraduate at the University of Chicago (1937-1941). In 1985, Minsky wrote about those years, stressing that economics was presented as part of the study of society: "Economic history, political science, sociology, anthropology and economics were part of an integrated sequence aimed at understanding modern society….If I had my way, the standard American course in economics would be eliminated and economics would be introduced in the context of social sciences and history. The current American way of teaching economics leads to economists who are well trained but poorly educated" (Minsky, 1985, p. 214).

Minsky's vision was also shaped by events in the world around him while living in Chicago. Memorable events included local labor strikes (during one strike in 1937, police shot and killed 10 unarmed demonstrators) and a swirl of domestic and international developments, including the trials and errors of the New Deal and war in Europe. He also attended many political talks and lectures, including a short course offered by Oscar Lange, which "made economics both interesting and important" (Minsky, 1985, pp. 213-215).[27]

Another influence on Minsky was his service during and after World War II, which included work in the Manpower Division of the Office of Military Government in Berlin in 1946. His division head was David Saposs, a well-known labor economist and student of John R. Commons. "The experience in Germany—and the interactions with Saposs—impressed upon me the importance of the specific institutions and historical circumstances upon what happens in the world." In fact, that experience reinforced what Minsky learned from Paul Douglas at Chicago—namely, that any formal analytical tool explains little of what happens in the world and "to be useful analytical tools have to be embedded in an understanding of the institutions, traditions, and legalities of the market" (Minsky, 1985, p. 212 and 216).

After the global financial crisis, a number of prominent academics were asked how economists were caught flat-footed by the meltdown. Franklin Allen of the Wharton School argued the problem was that such an event was unimaginable to economists: "It's not just that they missed it; they positively denied it would happen" (Knowledge@Wharton 2009). Similarly, Wilem Buiter, chief economist at Citigroup in London, wrote that most economists had adopted an efficient-market perspective, resulting in theories "that not only did not allow questions about insolvency and illiquidity to be answered; they did not allow such questions to be asked" (Buiter, 2009). In contrast, Minsky devoted his career to asking such questions—they were part of his attempt to understand the world around him, part of his vision, part of his grand adventure.

Beyond the World of Theory

Minsky's ability to see what other people overlooked cannot be attributed to his vision alone. Another important part of his perceptiveness came from a willingness—indeed, eagerness—to step beyond the world of theory and come into regular contact with the world of practice. An early example of this is suggested by a Harvard-era recollection that he offered in an interview for a *festschrift* celebrating his career. As one would expect, Minsky mentioned the influence of Schumpeter, but he also mentioned John H. Williams, who served as vice president of research at the Federal Reserve Bank of New York as well as a Harvard professor and administrator (Papadimitriou 1992, 20).

After tenure and promotion at Brown University, Minsky moved to the University of California, Berkeley, and collaborated with acquaintances from Harvard who worked nearby at the Bank of America (BoA). Together, they arranged funding for seminars and lectures that fostered interaction between the bank's staff and Berkeley faculty and students. At that time, BoA was the largest bank in the United States and had invented the VISA card, then known as Bankamericard. "The interchange of ideas in these seminars helped fashion Hy's ideas about institutional innovation in banking," reported Dimitri Papadimitriou (1992, p. 22) following an interview with Minsky.

Minsky later moved to Washington University in St. Louis and began an association with the Mark Twain Banks. When offers from other universities eventually came in, Washington University remained the more attractive option because of Minsky's relationship with the banks. Asked by Papadimitriou to identify his most important intellectual debts, Minsky responded: "It's hard to say. Certainly [Henry] Simons, Lange, and Schumpeter were important, but generally I believe we are all products of our environment. The involvement with the Bank of America staff, and later with the Mark Twain Bancshares was also significant in the development of my ideas" (quoted in Papadimitriou, 1992, p. 25).

Minsky's engagement continued when he moved from Washington University to the Levy Economics Institute in the early 1990s. There, he participated in regular seminars and conferences that drew practitioners as well as scholars from around the world. He also began each day by reading *The Wall Street Journal, Financial Times*, and other newspapers. Minsky understood what was happening in the economy, especially with respect to money and finance, because he was, to the very end, a voracious student of how it actually functioned.

Conclusion: Recap, Challenges, and Hope

For most of his career, Minsky stood on the shoulders of Keynes to understand financial markets and business cycles. Then, in the final decade of his life, he stood on the shoulders of Schumpeter and Keynes to understand the longer-term trends in the US economy. The result was a series of publications in which Minsky offered penetrating observations on the emergence and spread of what he called money manager capitalism. His essays from that period also sketch out a powerful analytical framework that Minsky used to organize his thinking and offer a theory of US capitalist development.

Today, we can stand on Minsky's shoulders. Since his death, a literature on financialization has developed and rapidly expanded. This article has shown that Minsky's work represents a major contribution to that literature, touching on all strands of contemporary financialization research. Standing on the shoulders of Minsky, we can update his observations, apply his framework, and extend his theory. In the process, we can explore new trends, identify and embark on new directions for research, and—equally important—enhance public understanding of what's happening in the economy.

Difficult Times

These are difficult times in the academy, however, for scholars with a Minsky perspective. Minsky's formidable powers of economic observation surfaced because he treated economics as a grand adventure into matters that were as important as they were interesting. Then he honed those powers, leaving behind an extraordinary legacy of insight and analysis, because he was willing to step beyond the world of theory and come into regular contact with the world of economic practice. Today, however, there is little room for any of that—it was the road less traveled in his time, and is an even more precarious and desolate way in ours. Despite the not-too-distant experience of a global financial crisis, much of the economics profession remains in denial about the need to change (Parramore, 2016; Chakrabortty, 2013; Davies, 2012).

These are also challenging times outside academia. The US economy has been stuck in low gear for so long that secular stagnation is again part of the profession's vocabulary. Working families in the United States continue to bear the burden of four decades of earnings stagnation and income inequality (Gould, 2017; 2015).[28] And money manager capitalism, a.k.a. financialization, remains entrenched—despite contributing not only to macro and labor problems across the nation but also to increased economic and political tensions in Europe and elsewhere.[29]

Hope

Still, all is not lost. As Minsky stressed, economic systems are not natural systems: An economy is a social organization created by a combination of legislation and evolutionary processes of invention and innovation. "Policy can change both the details and the overall character of the economy, and the shaping of economic policy involves both a definition of goals and an awareness that actual economic processes depend on economic and social institutions" (Minsky, 1986a, p. 7).

Policy—at times intentionally and at other times inadvertently—helped to create and reinforce money manager capitalism.[30] Policy can also scale it back, tame it, or even replace it. Besides, as Minsky often said, capitalism "comes in as many varieties as Heinz has of pickles," so we certainly have plenty of options from which to choose.[31]

Standing on the shoulders of Minsky, we better understand financialization. This includes the dispiriting realization that financialization has accentuated many of the predatory aspects of modern economic life (Minsky, 1996, p. 363). But we also catch a glimmer of hope in the realization that there is nothing natural about the economic system and nothing inevitable about our economic future. The task ahead is to use our improved understanding to chart a course toward a future in which the economy is not only more robust and stable, but also more humane.

Notes

1. As will be discussed in this article, financialization has many meanings. According to Epstein (2005, p. 3), "Financialization means the increasing role of financial motives, financial markets, financial actors, and financial institutions in the operation of the domestic and international economies."

2. The role played by Minsky's financial instability hypothesis has evolved over time. It began (and continues to serve) as the foundation of an investment theory of business cycles (see Minsky, 1975; 1982). Then it also became an explanation for increasing financial fragility in the US economy in the decades following World War II (Minsky, 1986a). Most recently, it has been presented as an alternative to the "efficient market" hypothesis of financial markets that was discredited after the global financial crisis of 2007-2008 (Whalen, 2013, p. 19).

3. See Minsky (1996; 1993; 1992a; 1990a; 1990b) and Minsky and Whalen (1996). Part I of this article draws on the observations Minsky offered in those articles and papers.

4. As Minsky wrote in 1996, "The performance of a fund and of fund managers is measured by the return on assets, which is given by the combination of dividends and interest received and the appreciation in per share value" (Minsky, 1996; 363).

5. Minsky's observations on what the emergence of MMC meant for corporations (see, for example, Minsky 1996 and Minsky and Whalen 1996) were reinforced by the work of other economists writing in the 1980s, including Niggle (1988; 1986) and Harrison and Bluestone (1988).

6. The brief discussion of General Electric in this article is drawn from Lueck (1985) and Harrison and Bluestone (1988, pp. 36-37), but Jack Welch's transformation of the company was widely covered by journalists and extensively analyzed by academics. For a recent look at Welch's legacy that is consistent with Minsky's concerns about money manager capitalism, see Stewart (2017).

7. In a paper delivered in Budapest in 1990, Minsky wrote: "Multinational corporations are of lessening importance; multinational portfolios are of increasing importance" (Minsky, 1990b, p. 211).

8. As Minsky wrote in 1992, "The emergence of MMC means that the financing of the capital development

of the economy has taken a back seat to the quest for short run total returns" (Minsky, 1992a, p. 32).

9. In a paper written for a conference held in 1990, Minsky (1993, p. 111) wrote: "Given the tax laws and the way markets capitalized income streams in the 1980s, the total market valuation (value of equity shares plus bonds) of a highly indebted firm was typically greater than the market valuation of a more conservatively financed firm."

10. Minsky's "fringe banking" includes lending by finance companies, corporate issues of commercial paper, and banks outside the Federal Reserve System. The concept is similar, but not identical, to "shadow banking." For a recent discussion of shadow banking, see Nesvetailova (2014).

11. According to Minsky, "Money managers are a large part of the market for securitized instruments. Sophisticated instruments can be created that mete out the cash flow from a corpus of assets with given cash flow properties to various claimants—the essence of securitization—in a way that is tailor-made to suit the objectives of a particular fund" (Minsky, 1990a, p. 71).

12. Securitization put financial regulators in a tough spot, Minsky argued: "The growth of securitization means that, even as the power and authority of the regulators are attenuated, the scope and dimensions of their task increase" (Minsky, 1986b, p. 14).

13. According to Minsky, "An easier filter for financing ruled after securitization was developed than before." The reason was simple: originators and underwriters walked away from the deal with net income and no recourse from the owners. "All that was required for the originators to earn their stipend was skill avoiding obvious fraud and in structuring the package" (Minsky, 1992b, p. 23).

14. Two notes are warranted. First, while Roach mentions "white-collar shock," it is worth recalling that blue-collar shock had already been widespread for at least a decade, owing to plant closings at facilities making a variety of products including steel, automobiles, consumer electronics, and textiles. Second, Minsky and Whalen (1996) cite a companion piece by Whalen (1996) that provides details on divergent trends across household income quintiles and on the rising gap between worker and executive salaries.

15. In another essay, Minsky noted that dollar-denominated debts in the global economy also contribute to worker insecurity in the United States. Because of the magnitude of such debts, the stability of the international financial system requires that the United States maintain both a sizable trade deficit and long-term capital exports, he argued: "The unemployment and industrial disruption in the rust belt are not due solely to 'industrial' inefficiencies. They largely are due to exchange rate patterns that emerged as market mechanisms 'tried' to attain balance of trade positions which enable debt burdens to be carried....United States workers may lose jobs so that Brazilian debts to Swiss bankers that manage accounts for Arab interests can be validated" (Minsky, 1986c, p. 4 and 9).

16. Although the holdings of pension funds have decreased somewhat since the year 2000 (consistent with the movement of corporations away from defined-benefit pensions), holdings of mutual funds, hedge funds, and exchange traded funds have largely taken their place (Ro, 2015).

17. For more on "lend and hold" vs. "originate and distribute," see Kregel (2008).

18. For a Minsky perspective on globalization and the need for international action, see Wray (2011); for other perspectives, see Feenstra and Taylor (2014).

19. While much has been written about worker insecurity since Donald Trump's electoral victory in 2016—see, for example, Levin-Waldman (2017)—Hacker (2006) is still worth reading. Also noteworthy is the 700-page book on inequality by Piketty (2014), which was a recent bestseller despite its considerable heft.

20. Minsky (1986d)—a paper prepared for a conference that convened in 1983—contains what I believe is his first (albeit brief) discussion of the emergence of MMC.

21. In addition to Schumpeter, Keynes, Mitchell, and the other economists mentioned above, Henry C. Simons also inspired Minsky. Simons's view of the monetary-financial process and its role in economic life was much closer to that of Keynes and the institutionalists than to more recent "Chicago School" economists, argued Minsky (1982, pp. 71-73).

22. For the most important essays in which Minsky addressed elements of his theory of capitalist development, see Minsky (1996; 1993; 1992a; 1990a; 1990b) and Minsky and Whalen (1996).

23. In my own writings, I prefer to use the term *banker* capitalism (a term I borrow from John R.

Commons) for what Minsky called *finance* capitalism (a term often traced to Rudolf Hilferding). Since "finance" is an activity taking place at all stages, I find it best to avoid using the term to label a particular stage. However, I use Minsky's term here, in part because it is often used by other economists—including some who are cited in this article.

24. For further discussion of Minsky's stages and the evolution from one stage to another (including a discussion of the factors leading to money manager capitalism), see Whalen (2008a; 2008b; 2001).

25. Further extensions of Minsky are offered by Brown (2008) and Todorova (2009), who draw on aspects of his framework to examine consumer debt and the household sector.

26. According to Schumpeter, every theory rests on a theorist's view (vision) of the basic features of society and of what is—and is not—important for understanding economic life (Minsky, 1992c, p. 365).

27. Minsky also writes about spending a spring vacation (in 1939) in Memphis, Tennessee, where he worked with organizers from the Southern Tenant Farmers Union. "This experience transcended the abstract student concerns with American racism and poverty" (Minsky, 1985, p. 217).

28. Economic challenges in the United States are likely to become more difficult in the coming years owing to the ongoing aging of the baby-boom generation.

29. For an examination of how financialization has contributed to slower economic growth as well as greater instability and inequality, see Tomaskovic-Devy, Lin and Meyers (2015).

30. Minsky seldom mentioned the role played by government in the emergence and spread of MMC, but some references and a few complementary articles are listed in Whalen (2008a, p. 286). Minsky had more to say about how to turn policy in a more progressive direction; see, for example, Minsky (1996) and Minsky and Whalen (1996).

31. Minsky was also not terrified by the word "socialism." In fact, he thought the label actually had little meaning since some brands of socialism have a lot more in common with certain types of capitalism than with other brands of socialism (and vice versa). He was, however, deeply committed to individual liberty, democracy, social justice, and a humane economy (Minsky, 1985, p. 221; Minsky, 1986a, p. 9-10, p. 293).

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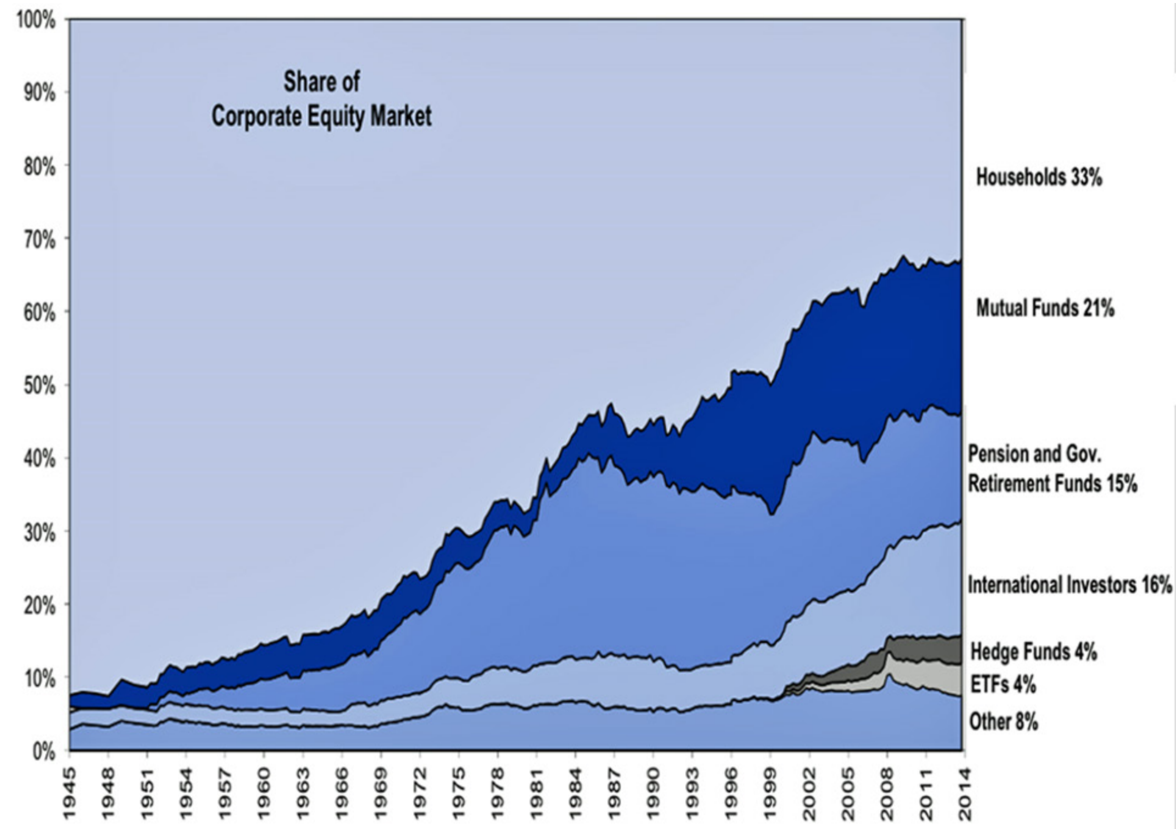
Figure 1: Ownership of the US Equity Market Since 1945
(Holdings through 3Q 2014)



Source: Federal Reserve Board and Goldman Sachs Global Investment Research.

Source: Reproduced from Ro (2015)

Table 1. Minsky's Stages of Capitalist Development

	Commercial Capitalism (1607-1813)	Industrial Capitalism (1813-1890)	Finance Capitalism (1890-1933)	Managerial Capitalism (1933-1982)	Money-Manager Capitalism (1982-present)
Distinctive Activity Financed	Trading, transporting or processing goods; inventory acquisition and storage	Industrial expansion	Industrial consolidation	Macroeconomic growth & stability	Strategies to boost corporate stock-market values and profits
Pivotal Source of Financing	Merchant bank (also internal financing)	Investment bank	Investment bank	Central bank (and internal financing)	Institutional investment funds
Fundamental Entity/Enterprise Financed	Proprietorships & partnerships	Industrial corporation	Combined corporation	Private sector (financed through the banking sector; conglomerates dominate the business structure)	International corporation
Locus of Power	Dispersed	Investment bankers	Investment bankers	Corporate managers	Money-fund managers
Distinctive Input	Labor	Machinery	Management	Macroeconomic stabilization by government; industry coordination by business executives	Expertise in finance & accounting

Source: Whalen (2001)