

POLITICAL ECONOMY RESEARCH INSTITUTE

**PERI**

University of Massachusetts Amherst

**The Effects of Increased Product Market  
Competition and Changes in  
Financial Markets on the Performance  
of Nonfinancial Corporations in the  
Neoliberal Era**

**James Crotty**

2002

**POLITICAL ECONOMY  
RESEARCH INSTITUTE**

10th floor Thompson Hall  
University of Massachusetts  
Amherst, MA, 01003-7510  
Telephone: (413) 545-6355  
Facsimile: (413) 545-2921  
Email: [peri@econs.umass.edu](mailto:peri@econs.umass.edu)  
Website:  
<http://www.umass.edu/peri/>



**WORKINGPAPER SERIES**

Number 44

**The Effects of Increased Product Market Competition and Changes in  
Financial Markets on the Performance of Nonfinancial Corporations in the  
Neoliberal Era**

**By**

**James Crotty**

**Department of Economics**

**University of Massachusetts, Amherst**

**October 11, 2002**

I am grateful to the Political Economy Research Institute at the Department of Economics of the University of Massachusetts, Amherst, for generous research support, to Alper Duman and Ozgur Orhangazi for excellent research assistance, to Bob Pollin for helpful comments, and to Rob Parenteau for help with financial accounting puzzles.

Copyright: James Crotty 2002

## **I. Introduction**

In the aftermath of the Great Depression and World War II, national economies, even those in which markets played a very powerful role, were placed under the ultimate control of governments, while international economic relations were consciously managed by the International Monetary Fund (IMF) and World Bank. Western governments, with varying degrees of enthusiasm, lent support to unions, regulated business, tightly controlled financial markets, and built social welfare systems. They also began to regulate aggregate demand in pursuit of high employment and fast growth, a phenomenon known as the ‘Keynesian revolution.’ Business and financial interests accepted these changes in part because strong capital controls and low levels of trade and investment flows after the war left them without a credible “run-away” threat to undercut government economic policies they disliked. The global prosperity that characterized the quarter century following the war -- the so-called “Golden Age” of modern capitalism -- reinforced the belief that market economies need strong social regulation to function effectively.

Contradictions inherent in Golden Age capitalism led in time to the end of prosperity. Economic instability began in the late 1960s and erupted full force in the 1970s with two OPEC oil price shocks, the collapse of the Bretton Woods fixed exchange rate system, and the buildup of excessive debt in the Third World. Falling profit rates and a moribund stock market in the US triggered a powerful movement, led by business and, especially, financial interests, to roll back the economic regulatory power of national governments. The “invisible hand” of unregulated markets would replace government controls, and restrictions on the flow of goods and money across borders would end, creating an integrated liberalized global economy. This political and economic project is usually referred to as neoliberal globalization. The shift to this particular new model of capitalism was not inevitable; at any point in time there are many variants of capitalism that are viable. Rather, neoliberal globalization was *chosen* by economic and political elites, especially in the US and Britain, because they believed it would best serve their interests in turbulent economic times (Crotty 2002a).

Supporters of neoliberal globalization used neoclassical economic theory to market their program. The standard neoclassical view holds that, absent excessive

government interference, both national economies and the integrated global economy will operate efficiently, more or less like the models of a perfectly competitive market system found in college textbooks. It assumes that competitive market pressures lead to the full utilization of labor and productive capital, and cause aggregate demand (or spending) to balance full-capacity income, a proposition known as Say's Law. There is thus no need for governments to engage in activist Keynesian aggregate demand (AD) management. Globally integrated financial markets will raise efficiency and productivity, it was argued, by allocating world savings to the most productive investment projects no matter where in the world they are located. The elimination of cross border barriers to imports and direct investment will raise efficiency by subjecting stodgy domestic oligopolies to more intense competitive pressure and allowing firms in small countries to take advantage of global economies of scale.

Critics of neoliberalism argued that the abandonment of growth targeting by activist demand management would slow real GDP growth and generate higher unemployment. High unemployment and the drive for labor market 'flexibility' in turn would slow real wage growth and raise inequality. Financial liberalization would lead to high real interest rates and increased instability in global financial markets. Less advanced countries that substituted neoliberalism for interventionist economic development policies were seen as less likely to experience rapid long-term growth. These problems were not understood to be the inevitable result of increased global integration per se, but rather were caused by the specific institutions and practices that constitute neoliberalism.

Though each side defends its position with selected data, the weight of the evidence from the last two decades supports the position of the critics. Global income growth has slowed substantially from its Golden Age pace, as has the rate of growth of capital accumulation. Productivity growth has deteriorated, real wage growth has declined and inequality has risen in most countries, real interest rates are higher, financial crises erupt with increasing regularity, especially in developing economies, average unemployment has risen, the less developed nations outside East Asia have fallen even further behind the advanced, and post-1997 growth in East Asia has slowed. Empirical support for all these claims is provided in Crotty 2000. Since the slowdown in GDP

growth rates in the neoliberal era plays an important role in the arguments presented in this paper, a brief look at relevant data is appropriate.

The most widely accepted work on long-term economic growth was done by Angus Maddison for the OECD. It shows that the annual rate of growth of real global GDP fell from 4.9% in the Golden Age of 1950-73 to 3% in 1973-1998 – a drop of 39%. Calculated on a per capita basis, the decline in the growth rate was 55%. In Latin America, real GDP growth dropped by 43% between the periods, while Africa showed a 38% decline. The only major area where GDP growth rates increased was Asia (excluding Japan), an area in decline since the 1997 Asian crisis (Maddison 2001, p. 126). Using a different measurement procedure from Maddison's, the United Nations estimates that world GDP grew at an annual rate of 5.4% in the 1960s, 4.1% in the 1970s, 3% in the 1980s, and 2.3% in the 1990s.<sup>1</sup>

In this paper I focus on changes that took place in the structure and performance of large nonfinancial corporations (NFCs) in the neoliberal era, especially those subject to increasing international competition. I accept the general view, associated with Joseph Schumpeter and Alfred Chandler, that large NFCs operating in oligopolistic markets were the main source of most of the capital investment, technological change and productivity growth in the Golden Age and, in the US at least, for most of the twentieth century. I argue that in the 1970s and thereafter, NFC performance was adversely affected by two major changes in their environment created by the impact of neoliberal globalization on product and financial markets: (1) a slowdown in the rate of global AD growth and an increasing intensity of competition in key product markets; and (2) a shift from “patient” finance seeking long-term growth to impatient financial markets that raised real interest rates, forced NFCs to pay an increasing share of their cash flow to financial agents, drastically changed managerial incentives, and helped shorten NFC planning horizons. The combined effect of changes in both sectors lowered NFC profit rates, raised NFC indebtedness, slowed the rate of capital accumulation, and forced NFC top management to switch to short-term ‘survivalist’ strategies that involved attacks on white and blue collar labor and on key firm suppliers.

NFCs were eventually placed in what I refer to as a **neoliberal paradox**: intense product market competition made it impossible for most NFCs to achieve high earnings

most of the time, but financial markets demanded that NFCs generate ever-increasing earnings or face falling stock prices and the threat of hostile takeover. We can see the logical outcome of this contradictory set of forces in the recent US stock market bubble and subsequent collapse, as well as in the unmasking of widespread fraud in the financial statements of US NFCs.

Section II presents a skeletal outline of the reasoning that leads to the conclusion that neoliberalism has created slow demand growth and destructive product-market competition, conditions that impair the ability of large NFCs to operate efficiently and in the general interest. (A full presentation of my position can be found in Crotty 2000, and also in “Slow Growth, Destructive Competition, and Low Road Labor Relations: A Keynes-Marx-Schumpeter Analysis of Neoliberal Globalization” available on the website of the Political Economy Research Institute at the University of Massachusetts -- <http://www.umass.edu/peri/research.html#gm>.) Section III shows how the evolution of financial markets in the neoliberal era led to changes in NFC objectives and constraints that contributed to the deterioration in their performance. The empirical appendix provides support for many of the assumptions made in these sections. Section IV concludes that global economic performance will not improve until the neoliberal project is abandoned.

## **II. Effects of Changing Product Markets on the Structure and Performance of Large NFCs in the Era of Neoliberal Globalization**

### *The Main Argument*

In Crotty 2000 I argued that neoliberalism created chronically weak global aggregate demand growth. Slow demand growth, in turn, intensified competitive pressures in key industries, leading to inadequate profits, chronic excess capacity, excessive debt, and shifts in corporate strategies that exacerbated the original demand deficiency – *a neoliberal vicious circle*.

Here I simply identify six constraints on global demand that are deeply rooted in the structures and practices of neoliberalism.

1. Slow growth of wages and mass consumption.

2. High real interest rates.
3. Increasingly restrictive national fiscal policy after the 1980s.
4. Slower growth in gross private domestic investment worldwide.
5. The spread of IMF “austerity” programs and World Bank “structural adjustment” programs across the globe.
6. The weakening, and perhaps even the death-knell, of the high-growth East Asian late-development models.

During the Golden Age, important Northern industries were characterized by what Schumpeter called “*corespective competition*,” inter-firm relations based on partial cooperation rather than all-out war. Under corespective competition, firms could be reasonably sure that rivals would not take actions intended to undercut industry demand growth or erode industry profitability. Of particular importance, firms avoided predatory pricing and capital investment wars that destroy profits and create large-scale industry excess capacity. By placing upper limits on capacity and lower limits on price, firms generated secure oligopoly rents, which were used in part to fund the high road labor relations that were the hallmark of the dominant firms of the era. High road labor relations, in turn, helped generate high productivity growth and rapidly rising real wages. Closing the *Golden Age virtuous circle*, rising wages, low unemployment, and fast paced investment helped sustain strong private demand growth. In other words, these arrangements led to a rapid growth in aggregates supply that was matched by rapid AD growth. In this environment of contained uncertainty and adequate expected profits, firms in core oligopolies could engage in long-term planning, generously fund R&D, invest at a rapid pace, and offer lifetime employment to most of their workers. Profits were high enough to finance most investment internally and external finance was available at a modest cost, so indebtedness was kept within safe bounds.

It is important to understand that Schumpeter’s theory of core industry oligopolies does not imply that such industries should, as a matter of policy, be left alone to pursue their interests as they see fit. *There are numerous economic and political conditions required to ensure that core oligopolies act in a manner that helps create and reproduce a healthy economy.* These conditions include a strong regulatory apparatus, sustained high employment, a labor-friendly government, appropriate tax policies, and strong

unions in core industries.

In the neoliberal era, by way of contrast, deregulation, increasingly open borders, and the end of a commitment by government to pursue high growth through Keynesian macro policies have destroyed the conditions necessary for coresponsive behavior. We have witnessed an outbreak of what I have called “*coercive competition*”(Crotty 1993) based on cut-throat pricing, the destruction of secure oligopoly rents, over-investment relative to demand -- creating chronic excess capacity, and faced-paced technical innovation that often renders recently constructed capital goods prematurely obsolete -- and the debt that financed them unpayable.

With their survival threatened by fierce competition, much of it international in character, large firms were forced to adopt shorter planning horizons. Semi-cooperative management-labor relations were now considered unviable because firms had to slash labor costs through downsizing and wage cuts to survive beyond the short-run. Conflict-driven labor relations became the order of the day. Reliance on long-term planning horizons and high road labor policies are winning strategies *given coresponsive competition and strong aggregate demand growth*. But an extended bout of low demand growth and coercive competition makes these strategies unsustainable.

Chronic excess capacity in most global industries is a fact of life in the neoliberal era. For example, Business Week noted that: “supply outpaces demand everywhere, sending prices lower, eroding corporate profits and increasing layoffs” (January 25, 1999, p. 69). This raises an obvious question: *Why hasn't global supply growth adapted to the reduced pace of global demand growth in the past two decades, creating sluggish but balanced growth?* My answer is that in the neoliberal era, demand problems have exacerbated destructive competitive processes, causing widespread over-investment and chronic excess capacity. I summarize below the complex argument presented in Crotty 2000.

The modern global economy has key industries -- such as autos, airplanes, computers, semiconductors, electric appliances, steel, ship building, machine tools -- that dominate international trade and investment. I refer to these as core industries. They are capital intensive, with huge economies of scale and scope, and, in contrast with the assumptions made in the neoclassical theory of the firm, *marginal cost in core firms does*



*not rise with output* (at least until capacity is approached).

Firms in core industries have industry-specialized machinery, labor, and management; assets are thus substantially “illiquid.” If forced to exit from a core industry, a firm will find that the income from the sale of their assets on the second-hand market might be as little as one-third their original cost. *Exit is thus extremely costly.* The size of firms, the industry-specific character of their assets, the gap between marginal cost and total unit cost, and the firm’s vulnerability to rapid technical change and financial fragility, suggest that core industry firms would face excessive risk and inadequate profits under dog-eat-dog competition.

If intense competition drives price down to marginal cost, price will fail to cover the firm’s large fixed costs per unit, and firms will suffer large losses. This danger is exacerbated by high excess capacity, which raises fixed cost per unit.<sup>2</sup> In John Maurice Clark’s words, core industries are “*natural oligopolies*”: they cannot reproduce themselves in the long-run in the environment of intense or ‘perfect’ competition sought by neoliberalism.

Under oligopolistic organization and adequate growth in the overall economy, core global industries are highly profitable. Therefore, large multinational corporations from mature industrialized economies want to continue to dominate them. However, as the post-war period evolved, developing countries that wanted to move up the technology/productivity/value-added ladder entered these industries. Each new wave of entrants added to the potential for market over-crowding, making inter-firm cooperative relations increasingly difficult to maintain. Had global aggregate demand growth remained strong, the newcomers would have been easier to accommodate. But with sluggish demand, either established players must quickly exit from the industry as new firms enter or entry must be limited to avoid chronic excess supply, falling prices and low average profits. Neither happened.

*Why do new entrants keep coming?* Emerging countries *have to* go pass through most of the rungs on the technology ladder or they cannot develop: they cannot go directly from labor-intensive textile exports to auto and semiconductor exports. Thus, governments must see to it that domestic firms become competitive in these industries or establish public corporations to do the job.

*Why don't established firms withdraw as profits deteriorate?* Established incumbent firms have huge sunk costs that will largely be destroyed if they are forced to exit the industry. If it were known in advance which firms would ultimately lose the struggle for survival in the industry, the losers would exit to cut their losses – and some weak firms do exit. But given the importance of these markets and the huge sunk costs required to enter and thrive in them, most competitors try to “stay in the game” even as competition mounts. Firms hope to survive the current struggle so they can reap the secure, above-average profits expected to emerge when the war is over and the eventual winners re-oligopolize the industry. Given crushing exit costs and some probability of emerging as one of the profitable new oligopolists when the industry is reorganized, staying in the fight is often a rational choice. “The survivors of overcapacity downturns often emerge as the big winners,” The Wall Street Journal reminds us (November 30, 1998, p. A17).

*However, to have any chance of surviving, firms have to make substantial investments.* I have elsewhere (Crotty 1993) labeled this phenomenon “*coerced investment*.” Price-profit pressures force firms that have decided to “stay in the game” to build plants where labor and other costs are cheapest. They must invest to shed labor and more tightly control the workers who remain, and to gain the ever-greater economies of scale (for both cost reduction and quality reasons) that rapid technical change brings. Finally, they must invest to get inside the borders and on the ground floor of expected high growth developing markets. *The combination of sluggish demand growth and coerced investment leads to chronic excess capacity.*

Note that the existence of substantial coerced investment is not inconsistent with the empirical observation that the growth of gross domestic investment -- including residential investment, public investment, investment for the sole purpose of increasing capacity, and investment in industries not subject to destructive competition – has slowed substantially in the past two decades, constraining demand growth.

Of course, the most powerful firms in these industries have not been content to let this process complete its destructive course. In the 1990s, they engaged in a massive global merger and alliance movement that, in large part, was a response to destructive competition. Attempts at industry reorganization are discussed in Crotty 2000.

The point that must be stressed is that *sluggish aggregate demand growth and chronic excess aggregate supply reinforce one another in a vicious circle*. The more competitive pressures develop, the more they force firms to cut wages, smash unions, substitute low for high wage labor, and pressure governments to cut spending so that corporations and wealthy households can receive tax cuts without eroding budget surpluses. But these actions constrain global aggregate demand even more tightly, creating yet stronger competitive intensity, and so on.

### *Summing Up: Low Profits, Coerced Investment, and Rising Debt*

I offer three stylized facts about the condition of most NFCs in the neoliberal era. First, slow demand growth and more intense competition reduced average NFC profit rates well below their Golden Age levels. Second, while NFC investment spending eventually declined, coerced investment delayed the decline and limited the extent of its fall. This meant that investment spending exceeded internal funds for most of the period. Third, the gap between internal funds and investment in both real and financial assets, forced NFCs into ever-rising indebtedness.

The data used throughout the rest of the paper refer to US NFCs because the US is the most important economy in the world, its economy is the most committed to neoliberal principles, and it has a highly developed economic database. European and Asian economies are undergoing transformation processes similar in form to those in the US, but generally at slower speeds.

There are many ways to measure profit rates; all of them involve serious measurement problems. Figure 1 shows US NFC profits before taxes as a percent of net worth. In the 1950s and 1960s, the profit rate remained high, peaking at almost 11% in the 1960s boom. It then declined in the troubled 1970s, and fell even lower in the 1980s and early 1990s, before rising again in the strange boom-bubble of the mid to late 1990s. Substitution of total assets for net worth in the denominator of the profit rate equation does not change the profit rate time profile seen in Figure 1. Profit rate data constructed by Brenner 1999, Dumenil and Levy 1999, and Glyn 1997 show a pattern that is reasonably similar to the one in Figure 1. Figure 2 shows the after-tax profit rate. Though

the difference between the Golden Age and the neoliberal era is slightly less pronounced as the result of recurring corporate tax cuts in recent decades, the general picture does not change.

Figure 3 shows the annual percentage change in net real fixed investment by NFCs. Note that even though the rate of profit fell dramatically after the mid 1960s, the rate of capital accumulation remained at a reasonably high level into the early 1980s. For example, consider the two sub-periods 1953-71 and 1972-86. While the average annual profit rate before taxes declined by almost 30% between periods, and the after-tax profit rate fell by almost 20%, *the average annual growth rate of the real net capital stock actually rose by 4%*. Figure 4 shows that NFC net fixed investment as a percent of GDP originating in the NFC sector is higher in the neoliberal era than it was in the Golden Age. Careful econometric analysis would be required to empirically demonstrate the importance of “coerced investment” in the post Golden Age era, but the evidence in these graphs is certainly consistent with the assumption that it is important, as are the econometric results in Crotty and J. Goldstein 1992.<sup>3</sup>

Figure 8 is a time series of NFC credit market debt as a percent of net worth. It shows a steady rate of increase of NFC indebtedness through 1970, followed by a slow reduction through the early 1980. In the hostile takeover movement of the 1980s, indebtedness rises dramatically. There is a slight decline in the early 1990s, but by 2001, this debt ratio was still more than 50% higher than in its peak year in the Golden Age.

In sum, the data suggest that the neoliberal era brought low profits, coerced investment, and increasing indebtedness to large US NFCs.

### **III. Effects of Changing Financial Markets on the Structure and Performance of Large NFCs in the Era of neoliberal Globalization**

#### *Overview*

There is an emerging literature on the rising importance of finance in the post Golden Age era. (See Aglietta 2000, Aglietta and Breton 2001, Arrighi 1994, Arrighi and Silver 1999, Boyer 2000, Dumenil and Levy 1999 and 2001, Felix 1998, Froud et.al. 2000, Henwood 1998, Krippner 2002, Morin 2000 and Useem 1996.) Its stronger versions suggest that we have moved from a Golden Age system in which finance

supported real-sector growth and capital accumulation, toward a neoliberal system in which finance in some sense ‘dominates’ the real sector, impeding economic growth and imposing more regressive distribution systems on most of the global economy. The unique logic of financial markets, it is argued, has been substituted for the laws of motion of Golden Age capitalism. “It is important to emphasize that the 1990s have seen the emergence of a totally new candidate for the succession to Fordism, as a finance-led regime has captured and fascinating many observers, including regulationist researchers... It is argued that, in such a regime, the hierarchy among institutional forms... is drastically shifted: the financial regime plays the central role that used to be attributed to the wage-labour nexus under Fordism” (Boyer 2000, p. 112). Most financial economists and financial market analysts do acknowledge a systemic change, but applaud the transformation, arguing that it will ultimately be best for everyone, even if it is regressive initially.

Many empirical indices point to the possible rise of some kind of “rentier capitalism.” The value of financial assets and finance-based income as a percent of GDP have risen dramatically in many countries and across the global economy. For example, in the US, stock market capitalization as a percent of GDP rose from its long-term average of about 50% to 185% in 1999. It declined after mid-2000, but was still 128% in the second quarter of 2002. Profits in financial industries have risen much faster than in NFCs. Figure 5 shows that the ratio of the profits of financial corporations to the profits of NFCs rose from about 15% in the early 1950s and 1960s to almost 50% in 2001. Figure 6, total credit market debt of all sectors as a percent of GDP, indicates that debt grew in line with GDP from 1961 through the mid 1970s, then rose slightly from that point until 1981. It accelerated rapidly in the decade of the 1980s -- from 160% in 1981 to 225% in 1989 -- as the federal budget deficit soared, hostile takeovers and leveraged buyouts loaded corporations with debt, and household borrowing increased. Corporate and household borrowing raised indebtedness further in the 1990s; by 2001 debt was 280% of GDP, almost double the ratio in the Golden Age. Moreover, real interest rates have been much higher in the neoliberal era than they were in the three decades that preceded it.

Following the breakdown of the Bretton Woods system in the early 1970s and the

gradual elimination of capital controls in both advanced and developing countries, money-flows across borders increased geometrically. In 1978 some \$18 billion worth of currency trades took place daily; by 1989 it was \$590 billion, and by 1999 it had risen to some \$1.5 trillion. Global derivatives contracts were worth less than \$20 trillion in 1990, but about \$120 trillion in 1999 (The Economist, May 18, 2002, p. 9 of special section “Capitalism and its trouble”). This surge in cross-border financial flows helped create a powerful international rentier class whose interests are championed by G7 governments, independent central banks, and the IMF and World Bank.

The new regime of integrated global financial markets has increased both the size and the instability of cross border capital movements, leading to booms in countries favored by global investors, and currency and banking crises in countries that fall out of rentier favor, often as the result of an inevitable collapse of the financial speculation and the excessive investment brought on by rising capital inflows. The incidence of such crises has increased as neoliberalism has taken deeper root. These crises, built into the neoliberal system, often become the occasion of IMF bailouts. As designed by Lord Keynes acting for Britain and Harry Dexter White for the US, the major goal of the IMF was to help deficit countries deal with short-term balance of payment crises in order to sustain their high growth rates and maintain low unemployment. Under the rentier logic of the new neoliberal IMF, however, its standard operating procedure is to force countries facing balance of payments problems to implement austerity macro policy and “reform” its economy in accordance with neoliberal principles. As more countries fall under IMF guidance in the current era, global neoliberal restructuring deepens, tightening constraints on growth.

It is not unreasonable, given changes such as these, to argue that finance has grown in importance with the rise of neoliberalism, that financial interests have become much more economically and politically powerful, and that these trends have been coterminous with a deterioration in real economic performance. However, even among economists highly critical of neoliberal globalization, there is to date no consensus on the appropriate definition of financialization, never mind agreement as to the logic or laws of motion – or even the existence – of a new system of rentier or finance capitalism.

My purpose in this section is not to develop a model of global rentier capitalism,

but rather to speculate about the impact of the evolution of financial markets in the past quarter century on the structure and performance of large NFCs, especially but not exclusively those in important globally-contested industries. I noted in section II that a Schumpeterian view of industrial organization and a Chandlerian perspective on the organization of the firm provide the best analytical framework for understanding the behavior of large firms in core industries. In this section I analyze the processes through which financial markets slowed the growth, eroded the profitability, and shortened the planning horizons of the large NFCs that generate most of the good jobs, implement most important new technologies (even when they do not invent them), own most of the private capital stock, undertake most national and global investment spending, and normally appropriate the lion's share of profits.

This paper is an outline for an ongoing research program, not a final product. My ultimate goal is to develop an integrated theory of the evolution of the structure and performance of NFCs in the neoliberal era that incorporates the effects of both rising product market competition and changes in financial markets.

*Financial Evolution in the Neoliberal Era and the Character of the Schumpeter-Chandler Managerial Firm*

Joseph Schumpeter is the economist most closely associated with the theory that identifies oligopoly under corespective competition as the most efficient form of industrial organization. Alfred Chandler is perhaps the scholar most responsible for helping us understand the internal or structural or managerial revolution that had to take place within US NFCs before they could take full advantage of the potential productivity gains made possible through rapid technical change and economies of scale and scope. With their theoretical contributions in mind, one could re-interpret the great contribution of John Maynard Keynes to be the crucial insight that even if the industrial organization that large NFCs need to function efficiently -- corespective competition in an oligopolistic environment -- and the internal organizational structures that make it possible for large multi-division NFCs to operate efficiently -- the Chandlerian or managerial firm -- are present, long-term prosperity cannot occur unless AD rises rapidly, and that this will not happen unless government stands ready to manage AD growth. We

argued above that changes in the intensity of product market competition forced NFC managers to adopt short-term survival strategies that are destructive over the long run. Here we present a complementary argument about the effects of financial market change in the neoliberal era.

Lazonick and O’Sullivan are economic historians strongly influenced by the work of Chandler. In a series of essays (1996, 2000, 2002), they chronicle important aspects of the neoliberal-era transformation of giant Chandlerian firms operating in the Schumpeterian industries that formed the core of the US economy for most of the twentieth century.

As has been the case throughout the twentieth century, in the 1980s a relatively small number of giant corporations, employing tens or even hundreds of thousands of people dominated the economy in the United States. On the basis of capabilities that had been accumulated over decades, these corporations generated huge revenues. They allocated these revenues according to a corporate governance principle that we call “retain and reinvest”. These corporations tended to retain both the money that they earned and the people whom they employed, and they reinvested in physical capital and complementary human resources. Retentions in the form of earnings and capital consumption allowances provided the financial foundations for corporate growth, while the building of managerial organizations to develop and utilize productive resources enabled investment in plant, equipment and personnel to succeed.” (2000, 14-15)

They argue (1996) that the most important function of the organizational structure of the successful Chandlerian firm is to foster process and product innovation over the long term. They believe that there are two necessary conditions for NFCs to achieve this goal: “*organizational integration*” and “*financial commitment*.”

Organizational integration refers to the creation and reproduction of a strong commitment to the long-run goals of the firm by its major stakeholders, including top management, lower level management, specialized professionals, white and blue collar workers, and the firm’s traditional suppliers. Stakeholders must believe that if they commit themselves to the firm’s goals, the firm will reward them in return. For workers and managers, the reward is secure employment and remuneration that rises with seniority. This is one version of the theory of ‘implicit contracts’ that was so popular with economists until ‘flexibility’ became fashionable.

Lazonick and O’Sullivan stress the importance of linking engineering and



production workers to firm goals, since they are the members of the firm most immediately responsible for generating continuous production cost and quality improvements. Labor economists often describe the relation between top management and workers captured by the concept of organizational integration as “high road” labor relations. Large NFCs in Japan, Europe and America that achieved long-term success usually had organizational integration, implicit contracts and at least some aspects of high road labor relations. The thesis that organizational integration in pursuit of continuous innovation is the key to sustained growth is based on the assumption that long-term objectives and long-term planning horizons are crucial to a firm’s success.

Large-scale innovation is an uncertain, expensive, path-dependent, long-term process. Even when successful, innovation may not pay off for many years and involves learning by doing, so the firm may have to put in more capital than initially planned to bring a successful innovation to fruition. *Only sources of finance with a long-term commitment to the firm can possibly provide the money needed to sustain long-term innovation.* The national NFCs that we think of as being dominant for long periods of time in post war years had access to adequate “patient” capital. Lazonick and O’Sullivan argue that if “the earnings of the enterprise come under the control of people who demand liquidity rather than financial commitment, then the existing financial conditions for initiating and sustaining innovative investment strategies will disappear” (1996, p. 11). Banks with long-term relations with client firms provided this kind of capital to East Asian and European NFCs, while in the decades preceding the 1970s, US firms could finance innovation largely through internally generated funds with assistance from the long-term bond market. Until the neoliberal era, US stockholders allowed management to retain control over the disposition of bulk of the firm’s cash flow.

The stock market was never an important source of corporate finance in the US; it was always a market where entrepreneurs could cash out, trading control of illiquid equipment and structures for money, and households could store value over long periods. As is demonstrated below, before the rise in institutional stock ownership in the US that began in the late 1960s, almost all stock was owned by individuals and held for long periods; stock turnover was quite low. Until recently, financial agents did not force large NFCs to disgorge earnings to financial markets each quarter, forcing them to compete

with other firms and individuals to get them back. Rather, they left management alone to use cash flow to finance such capital accumulation and innovation as changes in product markets pressures and opportunities indicated was best for the long-term growth of the firm.

We have already seen how the outbreak of destructive competition in core global product markets strongly pressured NFC managers to break the firm's implicit contracts, shift from high road labor relations to attacks on labor, and switch from long-term strategies to short-term survival strategies, eroding "organizational integration." *The point stressed here is that changes in financial markets over the same period created pressures on NFCs that were similar in their effects to, and thus reinforced, those generated by destructive product market competition.* In Lazonick and O'Sullivan's term, "financial commitment" eroded.

I stress two key dimensions of the changing relation of financial markets to large NFCs in the neoliberal era. The first is a shift in the beliefs and behavior of financial agents, from an implicit acceptance of the Chandlerian view of the large NFC as an integrated, coherent combination of relatively illiquid real assets assembled to pursue long-term growth and innovation, to a "financial" conception in which the NFC is seen as a 'portfolio' of liquid subunits that home-office management must continually restructure to maximize the stock price at every point in time. The second is a fundamental change in the incentives that guide the decisions of top managers, from one that linked long-term managerial pay to the long-term success of the firm, to one that links their pay to short-term stock price movements. This created an alignment of the interests of management with those of institutional financial investors and wealthy households and against the interests of other firm stakeholders. Both changes drastically shortened the planning horizons in large NFCs and led management to adopt strategies that undermined general economic performance.

We consider in order:

1. the impact of evolving financial markets on AD growth;
2. adaptations in the organization of the large NFC caused by a change in the conception of the firm held by and acted on by financial agents;
3. the rise of the 'shareholder value' movement and its impact on managerial

incentives and time horizons;<sup>4</sup>

4. empirical evidence documenting the dramatic rise in the share of corporate cash-flow extracted by financial agents;
5. the recent stock market collapse in the US and the outbreak of widespread NFC fraud and deception;
6. the so-called ‘financialization’ of the NFC in the neoliberal era.

### *Financial Constraints on AD Growth*

Section II discussed the impact that changes in product markets had on core industry NFCs as a result of the fall in the rate of growth of AD after the Golden Age. Here I stress important ways in which the evolution of financial markets helped constrain AD growth.

First, high real interest rates and rising debt burdens constrained corporate and household spending. Real long-term interest rates in the G7 countries averaged 2.6% from 1959 to 1970, then fell to 0.4% in the high inflation years from 1971 to 1982 (Felix 1998, p. 184). Real global long-term interest rates averaged a staggering 5.1% from 1984 to 1991, before dropping to 3.8% from 1992 to 1999 – which still left them substantially above Golden Age levels (IMF April 2002, p. 223). The shift to extremely restrictive monetary policy undertaken by Fed Chairman Paul Volcker in the early 1980s simultaneously raised nominal interest rates and ended inflation in the US, creating extraordinarily high global real rates and a global recession in the early 1980s. But even after the mid 1980s, real interest rates remained above normal, sustained by the spread of investor-friendly central banks, the rising volume of footloose funds in global financial markets, and increased uncertainty in the face of higher instability. (Note that the rise in real interest rates itself tended to shorten the planning horizon in NFCs by shortening the payback period used to evaluate potential investment projects.)

When new loans are rising faster than interest and principle repayments, the addition of these borrowed funds allows spending to rise faster than sluggish income growth would permit. However, rising debt coupled with high real interest rate eventually reverses this process and constrains spending.

Second, global financial interests increased their influence over fiscal policy in

this era. Government debt as a percent of GDP increased rapidly after the early 1970s as transfer payments rose in the face of high unemployment, while tax revenue fell due to slow growth and the assault on the tax base by mobile corporations and wealthy households, an assault initiated by the Reagan and Thatcher governments. With governments now forced to remain in the good graces of their bondholders, intense pressure was created to shift from the high structural budget deficits of the late 1970s and 1980s toward budget balance. For the advanced countries, the structural budget deficit fell by 3.1% of GDP from 1992 to 2000, creating a huge drag on global AD growth (IMF April 2002, p. 179).

Third, the IMF and World Bank took control of policy making in a growing number of developing countries that, having initially opened their financial and product markets to some degree, ended up with serious balance of payment problems that forced them to seek IMF and World Bank assistance. Saturated with neoliberal ideology and virtually run by the US Treasury Department on behalf of Wall Street, these institutions forced the implementation of slow-growth macro policy on client states in order, they said, to restore foreign investor confidence. As Nobel laureate and former Chief Economist for the World Bank Joseph Stiglitz recently observed: “Today the IMF typically provides funds only if the countries engage in policies like cutting deficits, raising taxes, or raising interest rates that lead to a contraction of the economy. Keynes would be rolling over in his grave were he to see what has happened to his child “ (2002, pp. 12-13).

The IMF and World Bank accelerated the liberalization process in these countries, requiring them to end credit allocation and industrial policies, even where, as in the case of Korea, they had been enormously successful in the past. Such restructuring tended to slow the growth of global AD by eroding the necessary institutional foundation for high growth in developing countries.

### *The Rise of the Financial or Portfolio Conception of the NFC in Financial Markets*

In the 1960s and early 1970s, many large NFCs acquired other firms, becoming diversified conglomerates. Their management was attracted to a conglomeration strategy

by high stock prices that made acquisition relatively cheap, by the belief that diversification would bring more stable earnings than specialization, by a vague concept called “synergy,” and, toward the end of the period, by pressure caused by a decline in the profit rate.

The 1960s conglomerate merger movement was accompanied by a change in the perception of the proper role of top management, from one in which managers were expected to be expert in key aspects of the main business of the firm, to an evolving view of top executives as generalists who could manage any kind of enterprise, even if they knew little about the details of its business. This change helped erode organizational coherence by creating new conflicts of interest among stakeholders. Subunit management and labor obviously had firm- and industry-specific human capital; they were committed to their industries. Top home-office managers, on the other hand, began to think of their own subunits as liquid assets that could be disgorged to capital markets if they underperformed, and to look at other firms as assets to be added to their own portfolio if their acquisition would raise expected returns. Finance and accounting replaced production and engineering as the quickest paths to the top of the managerial hierarchy.

The shift to a financial or portfolio view of the large NFC remained incomplete until the hostile takeover movement of the 1980s. The late 1970s saw conglomeration fall out of favor with financial investors, but in the 1980s the US stock market became, for the first time in the post war era, a well functioning ‘market for corporate control.’ This was the period when a large active secondary market for below-investment-grade or “junk” bonds was created by Michael Milken at Drexel, Burnham, Lambert. Junk bonds existed prior to the 1980s, but it was only after 1982 that they became a viable source of debt finance for virtually any hostile takeover, even of long-established giant firms. In the 1980s, the hostile takeover moved from a marginal or deviant event to standard financial market practice. Financial investors were determined to end the dismal returns to equity of the mid 1970s through the early 1980s, a period that saw price-earnings ratios plummet to half their historic average. If insiders at NFCs failed to divest units whose rate of return fell below the cost of capital demanded by Wall Street, corporate raiders would take the firm over and accomplish this task themselves.

Raiders relied primarily on debt to finance takeovers, pushing NFC indebtedness

to historic highs. In the case of the 1998 takeover of Nabisco, the largest hostile acquisition in history to that point, \$23 billion of the \$25 billion purchase price was debt financed. Managers of targeted firms often defended their turf by loading the firm with debt-financed stock buybacks or special cash dividends to deter potential raiders. In the period 1984-89 alone, one trillion dollars was borrowed by NFCs to finance corporate takeovers or defend against them. Figure 8 shows that the ratio of NFC credit market debt to net worth shot up dramatically from the early 1980s through the early 1990s, and remained high thereafter. Yet, as Crotty and D. Goldstein 1993 show in their review of financial market performance in this period, the hostile takeover movement failed to improve average NFC performance in key areas such as cost control, productivity growth, and R&D investment.

*What the 1980s takeover movement did accomplish was to force the financial or portfolio view of the firm on NFC management.* Fligstein and Markowitz (1990) argue that in the financial conception, the firm is seen as “a bundle of assets to be deployed or redeployed depending on the short-run rates of returns that can be earned. The normative acceptance of hostile takeovers in the 1980s reflected the more general triumph of this view of the corporation” (p. 187). Financial market pressures could now force divestment of subunits that failed to meet investor expectations for just a year or two.

These developments accelerated the ongoing process of the shortening of NFC planning horizons caused by destructive product market competition. Top home-office managers now had little allegiance to management or labor in its subsidiaries. Indeed, their standard response to financial market pressure was to cut costs at subunits by firing workers, shifting cost pressure to suppliers, moving production abroad, downsizing the subunit, lowering wages and benefits, and outsourcing new functions – moves that run counter to the interests of key subunit stakeholders. In Lazonick and O’Sullivan’s terms, NFC management shifted from the long-term strategy of using cash flow to “retain and reinvest” to a short-run strategy to “downsize and distribute.” When cumulated throughout the system, these tactics further constrained AD growth.

This shift in financial practice was accompanied and supported by a development in economic theory known as “agency theory.” Pioneered by financial economists such as Michael Jensen and Eugene Fama and widely adopted in the business world, agency

theory assumes that unregulated market systems would work perfectly were it not for one intractable problem. “Principals” – the owners or shareholders -- have different information and different objectives for the firm than those of the management “agents” they hire to run the firm on their behalf, differences that cannot be eliminated contractually. Managers are assumed to seek individual aggrandizement and the endless expansion of firm size rather than shareholder value. Thus, they use “free cash flow” (cash flow left over after all investment projects with rates of return in excess of the market determined cost of capital have been funded) to create opulent corporate lifestyles and over-extended corporate empires.

Neoclassical financial economists applauded the hostile merger movement of the 1980s because they believed it reduced the agency problem in two ways. First, it loaded most NFCs with debt, forcing managers to disgorge cash flow to rentiers in the form of interest payments as well as through defensive stock buybacks and special dividends. As a side benefit, managers would now have to increase productive efficiency or they would be unable to generate the cash flow needed to meet their crushing debt burdens. Second, the market for corporate control would replace managers who did not maximize shareholder value by others willing and able to do so. Indeed, Jensen’s later writings picture the stock market as one in which teams of executives bid to see who can manage the large NFC most effectively in the interest of its shareholders. Jensen argues that: “The managerial competition model ...views competing management teams as the primary activist entities, with stockholders (including institutions) playing a relatively... passive role” (quoted in Henwood 1998, p. 268).

It would be almost impossible to imagine a vision more at odds with the Schumpeterian and Chandlerian views of the firm than its financial conception in agency theory.

*The “Shareholder Value” Movement: A New Alliance Between NFC Managers and Financial Investors*

As the financial conception of the NFC was taking root, the influence of institutional investors on stock prices and NFC management behavior rose. Mutual funds, public and private pension funds, insurance companies and other institutional investors

had, by the late 1960s, gained influence in the stock market. Technical progress in information processing, a steep decline in trading commissions (from an average 26 cents per share for institutional trades in 1970 to 5 cents per share in 1989), and liberalization of regulations on the composition of institutional portfolios led to a continuous rise in the percent of stock held by institutional investors in the 1980s and 1990s. Throughout the 1950s, households owned about 90% of corporate stock and tended to hold their stocks for long periods. However, by 1970 this share had dropped to 68% as institutional ownership rose. By the end of the decade, the household share stood at 59%; it then fell to 47% by 1985 where it stayed until the mid 1990s. By 2000, households held 42% of public shares, while US institutions owned 46% -- and held those securities that were directly or privately placed. Institutions had clearly become the dominant stockholders of large US corporations and were responsible for about three-quarters of all stock trades.

Institutional investment is a highly competitive business in which a very large number of firms fight for contracts to manage very large portfolios. (See Useem 1996.) Failure to achieve at least industry-average rates of return for even a few quarters can mean the loss of many such contracts. This is a situation ideally designed to generate herd behavior among investors: you must follow the crowd as it rushes in or out of an industry or firm or geographical area, thereby raising and lowering stock prices, or risk below-average portfolio returns, which can quickly put you out of business. As institutions became more important in the market, annual stock turnover (the ratio of the value of stock sales to the market value of stocks) grew ever higher. As shown in Figure 10, turnover on the New York Stock Exchange averaged about 20% from 1960 through the late 1970s. It then increased dramatically to over 70% through the most hectic phase of the hostile takeover movement – from 1983 through 1987. After falling back toward 50% in the recession of the early 1990s, it exploded once again as the shareholder value movement of the 1990s moved into full swing. It exceeded 100% in the first half of 2002, more than five times its Golden Age mean. *On average, stocks are now held for just one year.* Rational stockholder thus have no reason to concern themselves with the performance of the companies they ‘own’ beyond a one-year horizon. Clearly, stock prices had lost any significant connection with long-term ‘fundamentals,’ no matter how that term is defined.



“At many of America’s largest corporations, the dispersion of stockholding and consequent weakening of shareholders left professional executives firmly in control in the early 1980s” (Useem1996, p. 15). By the late 1990s, however, the hostile takeover movement followed by the shareholder value movement had firmly imposed the short-term horizon of institutional investors on the managements of NFCs.

*But pressure to push stock prices ever higher also became internalized within NFC top management itself.* One of the driving forces behind the corporate raids of the 1980s was a determination to force NFCs to raise the return on equity. This determination also led to the ‘shareholder value’ crusade of the late 1980s and 1990s through which institutional investors tried to force management to meet their need for ever higher stock prices in their constant search for above-average capital gains. In pursuit of this objective, they used their collective power to shift the incentive structure of top decision makers in large NFCs into alignment with their own – a shift that management had no reason to resist. The policy that achieved this goal was the spreading use of stock options.

Stock options had been used in a small way in the stock market boom of the 1960s, but had fallen out of favor as stock prices failed to rise even in nominal terms from the mid 1960s until the early 1980s. By the late 1990s, the dominant component of the pay of the management teams running America’s largest NFCs (as well as smaller firms in the high-status high-tech industries) was stock-price driven. The average proportion of the earnings of the top 100 CEOs that came in the form of exercised stock options was 22% in 1979 (the first year the survey done by Forbes Magazine -- the basis of the data used here -- was taken), a not insignificant amount. It rose substantially to about 50% in the late 1980s. In the financial boom years of 1995 through 1999, this average rose to 63%. Meanwhile, top CEO average pay in all forms rose from \$1.26 million in 1970, to \$37.5 million in 1999 (Piketty and Saez 2001, Table B4). Gargantuan payments accrued to managers who could get their company’s stock price above a trigger level -- even for one minute. Pay structures were such that it was rational for managers to do anything to push the stock price above the trigger point for their largest options. “By fiddling with their [financial] accounts,” The Economist argues, “company bosses could hope to drive up their share prices, cash in the options, and set sail in their yachts” (July 20, 2002, p. 53). And in the neoliberal era, financial market deregulation made almost

any sleazy financial manipulation legal. Frank Rich, a New York Times columnist, said “we are rapidly learning that there is no such thing as a prosecutable corporate crime” (“The Road to Perdition,” July 20, 2002). Even Fed Chairman Greenspan joined this chorus, arguing that “an infectious greed” had gripped the business community in the late 1990s bubble: the “spread of shareholding and options among business managers engendered an outsized increase in opportunities for avarice” (Testimony before the Senate Committee on Banking, Housing, and Urban Affairs, July 16, 2002).

Moreover, the typical stock option contract created an *asymmetric reward structure* for managers. They receive huge rewards if their decisions lead to large profit and stock price gains, but they lose nothing if the stock price plummets. This type of reward structure is conducive to over-investment and investment in risky projects. It is one reason why so many large corporations undertook such speculative investments in the late 1990s bubble economy. Over-investment helped cause a huge rise in excess capacity after the bubble popped, especially in telecommunications; it is estimated that 95% of the capital invested in telecommunications is currently unused. Adding insult to injury, top executives at the largest NFCs arranged to receive enormous payments in the event they were fired. “The contracts have made the executives nearly immune from dismissal, ensuring that they will receive millions of dollars when they leave their posts, under almost any circumstances” (New York Times, “Watch It: If You Cheat, They’ll Throw Money,” June 9, 2002).

The new options-loaded contracts were not designed to reward unusually effective management skills; in most cases, the trigger price was the current stock price. In the great bull market of the early 1980s through the 1990s, almost every listed firm saw its stock price rise, so large management pay increases became almost universal. From 1982 through 1999, the S&P 500 stock price index divided by the CPI increased at an average annual rate in excess of 12%, a cumulative rise of almost 700%. The market value of US corporations rose by \$15.7 trillion in the period. With the creation of belief in the arrival of a “new economy,” the S&P index rose 21% a year from 1995 to 2000. Since the median real wage of all US workers at the end of the 1990s was little changed from its value in 1973 (while the median real wage of male workers was still below its 1973 level), the ratio of the pay of top managers to that of average workers exploded. For the

CEO's of the 100 largest US corporations, this ratio rose from 38 in 1970, to 101 in 1980, to 222 in 1990, and finally to the unbelievable level of 1,044 in 1999 (Piketty and Saez 2001, Table B4). A more inclusive sample of CEO pay shows a similar time profile. Here the ratio of CEO to average worker pay was 26 in 1965, 37 in 1978, and 72 in 1989. It then leapt to 310 in 2000 before falling to 245 in 2001 as stock prices declined (Economic Policy Institute website, epinet.org, "Economic Snapshots," July 24, 2002").

Members of the investing classes had come to believe that annual gains on stock portfolios in excess of 20% would go on forever. Institutional investors demanded that NFCs produce rapid earnings growth so they could satisfy their clients. Top NFC managers needed to generate rising stock prices or their stock options would be worthless. The situation was especially precarious because expectations of earnings growth of 20% a year eventually became built into inflated price-earnings ratios. Disappointing reported earnings could thus lead to a sharp downward adjustment of the firm's P/E ratio as well as a fall in expected earnings, so that the stock price would take a double hit. The S&P 500 P/E ratio had been below its historic average of about 15 from the mid 1970s to the mid 1980s. It then rose above 15 in the early 1990s, hitting 20 by mid decade. In the heat of the bubble from 1996 through 1999, the ratio averaged 27, peaking at 31 in 1999.

By the late 1990s, the rational pursuit of self interest by powerful institutional investors and top managers at most large NFCs led them to do whatever it took to keep stock prices rising even in the shortest of runs. Joseph Stiglitz put the matter this way: "Over the last 15 years, executive rewards have soared, and so has the fraction of it related to stock prices, to the point where the fraction related to long-term performance is quite small. Effectively, managers have been discouraged from looking at ... fundamentals" (Guardian of London, "Corporate Corruption," July 4, 2002). In the late 1990s, stock prices moved solely in response to changes in reported quarterly earnings, or more accurately, in response to the relation of reported earnings to the 'market's' expectations about them. Nothing else seemed to matter. Managers thus had the strongest possible incentive to make sure that reported earnings kept rising without interruption – no matter what it took to get this done. According to the Wall Street Journal: "the incentives to do almost anything to increase the stock price were huge. And the

incentives weren't to increase profit and share prices over a decade or two, but rather to increase profits – never mind if they have to be restated later – just long enough for executives to cash out..." (June 6, 2002, p. A1).

*Financial Agents Have Extracted an Increasing Share of NFC Cash Flow:  
Empirical Evidence*

Destructive product market competition in core industries erupted in the late 1960s and increased in intensity in the following decades. This naturally led to a decline in gross NFC profit rates. NFCs used all the means described in section II to cut costs in an attempt to restrain the fall in profitability, but it was not until the mid-1990s that the rate of profit of US NFCs temporarily rebounded back to Golden Age levels.<sup>5</sup>

As noted above, Figure 3 shows that net investment in fixed capital by NFCs rose with the profit rate in the 1960s boom. It stayed at a fairly high level right through the mid 1980s even as the profit rate remained quite low. I have argued that many large NFCs felt they had to engage in 'coerced' investment spending to avoid forced exit from industries plagued by excess capacity and destructive competition. As a result, fixed investment spending exceeded internal funds in all but two years after the mid-60s, as can be seen in Figure 7. This is the 'investment funding gap' often discussed by financial analysts.

Moreover, as demonstrated in the next section, NFCs also increased spending on financial assets, so that the gap between internal funds and total investment, real and financial, was much wider than Figure 7 suggests. As a result, NFC indebtedness rose substantially. Figure 8 shows that the ratio of NFC credit market debt to net worth skyrocketed in the 1980s as a result of the hostile takeover movement, exceeding 50% by the early 1990s, a rise of some two-thirds from its early 1980s level. Figure 9 shows total financial liabilities of NFCs -- a broader liability category than credit market debt -- as a percent of their competition-constrained internal funds. This ratio cycled between 5 and 8 until the early 1980s, then it rose rapidly in the neoliberal era, topping 14 in 2001.

These changes in product and financial markets and in the incentives guiding management led to a qualitative jump in the percent of NFC cash flow taken by financial agents. Figure 11 shows NFC net interest payments as a percent of cash flow. The

interest burden rose from 5% in the financially robust 1950s to 15% by the end of the 1960s, as debt increased and real interest rates rose. Since real interest rates were quite low in the 1970s, the interest burden stayed constant until the early 1980s, at which point super-high real interest rates brought on by Paul Volcker's temporary conversion to monetarism followed by the debt-generating hostile takeover movement caused it to rise by decade's end to a post-war high of 30%. It then fell back toward 1970s levels as real interest rates declined, interest received increased, and cash flow rose in the mid to late 1990s.

Figure 12 shows dividend payments as a percent of cash flow. The proportion of NFC cash flow extracted by financial markets from NFCs in this form actually declined after the 1950s and 1960s, an era in which patient stockholders expected the bulk of the returns from their equities to be in the form of dividends. However, the rise of the shareholder value movement caused the dividend payout ratio to double from mid 1980s to the late 1990s, severely draining NFC funds.

Figure 13 shows net NFC stock *purchases* as a percent of cash flow. (Negative numbers indicate years in which NFCs were net issuers of equity.) It shows that until the 1980s, NFCs were net sellers of equity, though they never raised large sums in the equity capital market. Neoliberalism changed this pattern. After 1983, NFCs became large *net buyers* of NFC stock. In the hostile takeover movement of the 1980s, NFC management bought its own stock, often financing the purchase with debt, to keep the raiders from the door. The rise in stock price that resulted made takeover attempts more expensive, while the higher indebtedness made companies less attractive targets. *From 1984 through 1989, stock purchases ate up over 20% of NFC cash flow.* Net purchases dropped off in the early 1990s with the end of hostile takeovers, but rose again after 1993 as the shareholder value movement gained strength. NFC stock buybacks had to be large enough to maintain upward pressure on prices in the face of large sales from exercised options. In 1998 alone, NFCs made net purchases worth \$267 billion, over 30% of cash flow that year. From 1995 through 2001, NFCs purchased \$870 billion of their own stock, helping prolong the bubble ([Business Week](#), July 1, 2002, p. 30).

Figure 14 shows total payments to financial markets -- the sum of net interest plus dividends plus net stock purchases -- as a percent of cash flow. It thus brings together

product and financial market pressures impinging on NFCs in the neoliberal era. *Destructive competition constrained NFC cash flow, while financial markets forced NFCs to disgorge an ever growing share of their shrinking cash flow to financial agents.* Financial market payments rose from relatively low levels in the 1950s to average about 30% of cash flow from the mid 1960s through the late 1970s. *But from 1984 through 2000, with the exception of three years in the recession of the early 1990s, NFCs paid out well over half their cash flow to financial agents.* From 1984 through 1990 and again from 1997 through 2001, this ratio never fell below 50%, peaking at 76% in 1989 and again at 74% in 1998. This is impatient capital in an extreme form. In effect, NFCs were forced to fund most of their capital investment externally in the neoliberal era, and with debt, not equity, since stocks were being bought, not sold. From 1995 to 2001, NFCs added \$2.1 trillion in new debt (Business Week, July 1, 2002, p. 30).

To be sure that the striking results shown in Figure 14 were not the result of measurement bias, I recalculated total payments to financial markets, this time as a percent of the sum of cash flow plus net interest payments, a more conservative estimate of financial market claims. Figure 15 is the result. It has the same time profile as Figure 14, though the peaks in the 1980s and 1990s are not quite as high. Still, from 1984 through 1989, and again from 1997 to 2001, the payout ratio is about 50%. In this series, the 1989 value is 58%, while the 1990s peak occurs in 1998, the year of the largest stock purchases, with a payout ratio of 64%.

*I conclude that the combination of hostile product market conditions, the imposition of extreme short-term term horizons on NFC management from both external and internal pressures, high capital costs, and a lack of control over their own cash flow have made it impossible for US NFCs to operate effectively in the interest of the majority of the American people in the neoliberal era.*

*The Logic of Financial Market Evolution, the US Stock Market Collapse, and the Crisis of Confidence in the US Financial System*

All speculative bubbles eventually pop. From its peak in July 2000 to early October 2002, the S&P 500 stock price index fell by more than 45%, while the Nasdaq index fell by about 75%. Moreover, in 2002 the US experienced its worst financial

scandal of fraud, deception and corruption since the 1920s, before the creation of the Securities and Exchange Commission and the enactment of other regulatory reforms that were supposed to make a recurrence of the financial crisis of the period impossible.

To understand how these events could have taken place in the richest country in the world, one that was believed to possess the deepest, most efficient, most transparent, and most efficiently regulated financial markets in the world, one must understand the **neoliberal paradox**. *Destructive competition in product markets in the past quarter century has severely constrained the ability of NFCs to earn high profits and cash flow, yet financial markets demand ever-rising earnings to support ever-rising stock prices.*

In a study of British firms, Froud et. al. 2000 found that a large majority of NFCs were unable to achieve earnings in excess of the cost of capital. The small percent whose earnings exceeded the 12% to 15% cost of capital demanded by financial markets were concentrated in industries with oligopolistic structures and price-setting power. They see a sharp “contradiction in the US and UK between the ROCE [return on capital employed], which the fund managers of the capital market require, and what corporate management can deliver from most product markets.” They add: “only global monopoly and pricing setting power in most product markets could plausibly produce a general rise in ROCE.” They concluded: “financialization is not a coherent realizable project for corporate management” (2000, pp.106-07).

In the US, it took a precarious and dangerous combination of forces -- over-investment sustained by rising corporate debt and asymmetric management reward structures, consumption driven by rising household debt and enormous stock market and real estate capital gains, an unprecedented inflow of money from the rest of the world into US financial markets, and a sharp fall in labor’s share of GDP originating in NFCs – to push NFC profit rates from their low levels in the early 1990s to a two-decade high in mid decade. The forces supporting this boom were clearly unsustainable, yet financial market pressures and new internal NFC management incentive structures required that reported earnings rise virtually every quarter to prevent P/E ratios and stock prices from falling. Many of the large NFCs that reported the fastest growing earnings, such as Enron and WorldCom, were what the business press calls “serial acquirers.” By adding more and more businesses, these NFCs in effect bought the new earnings they could not gain

through expansion in traditional product markets because of destructive competition. Yale School of Management Dean Jeffrey Sonnenfeld notes that there is “a commonality in the approach” used by the CEO’s of large NFCs such as Tyco, WorldCom, Global Crossing and Enron whose reliance on fraud and deception to sustain reported earnings has recently been exposed.

All of them are “serial acquirers” of other companies... These executives saw their jobs first and foremost as expanding corporate holdings, rather than managing their companies to produce better products and services. And because their focus was on immediate financial results, they also tended to see regulators as adversaries and accounting rules as inconvenient barriers to their schemes... Mesmerizing Wall Street with a dazzling display of deals makes an absence of long-term management vision easy to hide.

He goes on to say that “the serial acquirers were successful briefly in that the very complexity of their businesses made it hard to hold them immediately accountable” (Wall Street Journal, June 12, 2002, “Expanding Without Managing”).

In the end, when even this strategy was not enough to keep earnings on the rise, management simply cooked the books. Froud et. al. put the matter this way in an article written before the recent stock market collapse and the discovery of widespread fraud and deception in large US NFCs.

Even in blue-chip companies, whose managements once built factories and market share, operating management becomes an endless series of cheap financial dodges: this year’s target is met by ending the defined benefit pension scheme, which saves labour costs, and next year’s dodge is leasing the trucks so that the capital appears on somebody else’s balance sheet. This work is punctuated and interrupted by major restructurings and changes of ownership where it is the financial engineering which is crucial: what will the capital base of the combined firms be and how many workers can be sacked after merger? (2000, p. 109)

Obsessed with earnings growth, disinterested in how it was obtained, and misled by accounting fraud on a massive scale that disguised the spreading corporate rot, institutional and individual stockholders kept pouring money into a market that kept feeding them back rising earnings reports and rising stock prices.

*The neoliberal paradox helps to understand why, given conditions in product markets, nothing but massive fraud and deception could possibly have kept stock prices from falling after 1997.*



Few people were aware of the extent to which these reporting distortions had grown by the decade's end. Yet the evidence needed to understand that something had gone very wrong with reported corporate earnings was freely available to anyone. *Government NIPA data showed that profits as a percent of the value added in NFCs peaked in mid 1997 and fell by over 20% in the next two years* (Council of Economic Advisers 2002a, p. 339). Even the nominal value of NFC profits peaked in 1997; it fell by 10% and 16% from its 1997 level in 1999 and 2000 respectively (Council of Economic Advisers 2002b, p. 8). Still, the earnings reported to financial markets and the Securities and Exchange Commission continued to rise at a rapid annual rate through mid 2000. The reported profits of S&P 500 corporations rose by 42% from 1997 to 2000 (Standard & Poor's website). If markets were informationally efficient, as assumed in neoclassical financial theory, deception of this magnitude would have been impossible. Financial asset prices in this era were driven by fraudulent information interpreted irrationally.

We now know that accounting fraud and deception took place on a grand scale, especially after 1997, as management teams used all the tricks made available by lax regulation, elastic accounting principles, and the inherent complexity of "financial engineering" to pump up reported revenue and hide rising costs and indebtedness. For example, over 1000 firms restated their earnings since 1997 (thereby acknowledging that the original estimates were significantly fudged), WorldCom listed \$3.8 billion in ordinary expenses as capital investment in 2001, and Xerox claimed \$1.4 billion in phantom revenues over five years. The Economist complained that "the abuses that have besmirched corporate America were the work of managers whose wealth depended on propping up their company's share price by any means and in the short term" (July 20, 2002, p. 12).

Severe conflicts of interest deeply embedded in the institutions and practices of the financial system allowed this fraud to occur. NFC managers with huge stock options were aided and abetted in their efforts to deceive investors by all the giant accounting firms, who signed off on virtually any financial statement management wanted, no matter how deceptive, because consulting contracts with these firms earned them more money than they got for audits. Market research by banks and brokerage houses is a loss leader, whose existence can be justified only by the profits it creates in other divisions of the

firm. Thus, bank stock analysts issued only “buy” recommendations to their clients, even when they knew better, because their firms needed the investment banking business of the same NFCs these analysts were evaluating. Congress defeated all proposals to force firms to provide accurate income and balance sheet information, passed legislation in the mid 1990s that made it almost impossible for shareholders to sue management for fraud and deception, and in 1999 removed all remaining safety ‘walls’ separating investment and commercial banking, because the financial and accounting industries are among the largest campaign contributors to Washington politicians in an era when elections are obscenely expensive.

It would be reasonable to conclude that modern financial markets like the one in the US have become so complex and impenetrable, and financial ‘engineering’ so sophisticated, that they are **inherently non-transparent**. The financial “transparency” that economist are searching for cannot be attained unless qualitatively stricter government financial regulation, monitoring and enforcement systems are put in place. It may even be necessary to ban some of the more sophisticated modern financial transactions in the interest of transparency, stability, efficiency, and growth.

The US has been experiencing an episode of corrupt “crony” capitalism larger than the one economists claim took place in East Asia in the 1990s. WorldCom had an estimated \$107 billion in assets at the time it declared bankruptcy, and Enron went bust with \$63 billion in assets (Wall Street Journal, July 22, 2002, p. A3). The Economist claimed that “the telecom bust is some ten times bigger than the better-known dotcom crash: the rise and fall of telecoms may indeed qualify as the largest bubble in history” (July 20, 2002, p. 9). In a front-page story in the Wall Street Journal, reporter David Wessel said that “the scale and scope of the corporate transgressions of the late 1990s, now coming to light, exceed anything the U.S. has witnessed since the years preceding the Great Depression” (June 20, 2002, p. A1). The amounts stolen or misallocated through fraudulent means dwarf the GDPs of many small nations.

Financial fraud contributed significantly to the over-investment boom of the late 1990s that left massive excess capacity and indebtedness in many ITC sectors and pushed the manufacturing capacity utilization rate to its lowest level since the Great Recession of the early 1980s. According to The Economist, “telecom firms have run up total debts of

around \$1 trillion” (July 20, 2002, p. 9). They have also fired one-half million workers. Lack of confidence in corporate financial statements combined with P/E ratios still significantly above normal are likely to hinder GDP growth for many years to come. Even after the market downturn in the two months following mid August of 2002, the trailing S&P 500 P/E ratio was 29, almost twice its historic average, and reported profits were still exaggerated by deceptive accounting practice.

Since, as of early October of 2002, the stock market had lost over \$7 trillion in value from its 2000 peak, investors were understandably upset and wanted stronger regulation. In late July 2002, Congress did pass a reform package, but these reforms are modest and it is now clear that they will not be vigorously enforced. Business press reports confirm that the expected offer of the Chairmanship of the newly created board to oversee accounting standards to a critic of current accounting practices was effectively vetoed by the accounting industry. Paul Krugman has concluded that “corporate reform is all but dead in the water” (New York Times, October 11, 2002, “Moles at Work). The odds against the creation of an adequate system of accounting and financial regulation for the new millennium are small because powerful interests – in financial markets, in large NFC boardrooms, and in Congress -- continue to control the political process.

*If You Can't Beat Them, Join Them: The “Financialization” of NFCs in the Neoliberal Era*

Many NFCs responded to the low profits and high costs of external funds they faced in much of the 1980s and 1990s, as well as to the high returns they observed being made on financial assets and financial enterprises, in two innovative ways. First, an increasing percent of NFC investment funds were used to acquire financial assets. Second, firms created or bought financial subsidiaries, and expanded those financial subsidiaries already in existence. These widely noted developments are sometimes referred to as the “*financialization*” of the NFC in the neoliberal era. Unfortunately, data limitations make it difficult to evaluate the precise extent of this financialization process.

The database used to analyze US NFCs consists of the Federal Reserve’s Flow of Funds (FFA), the National Income and Product Accounts (NIPA), and Internal Revenue Service (IRS) documents. Two standard graphs taken from the FFA accounts appear in

Figures 16 and 17. Figure 16 shows the value of NFC financial assets as a percent of the value of tangible assets such as structures, equipment, software and inventories. This ratio increases only modestly until 1984, after which it grows rapidly for the remainder of the era. Its value in 2001, at about 100%, is roughly two and one-half times its value in 1984. Figure 17 shows the net acquisition of financial assets by NFCs as a percent of their internal funds, which is clearly higher after the Golden Age. The rising degree of financialization exhibited in these graphs is indeed impressive.

However, there are serious limitations of the use of FFA data for the purpose of measuring financialization. The most important one is this. The main source of the rising trend of financial investment is a category of financial asset labeled “other miscellaneous financial assets.” Figure 18 shows that the weight of “other” in total financial assets has been rising rapidly since the early 1980s and currently represents about half of total NFC financial assets. Unfortunately, there is no independent estimate of the size of this variable: it is merely a *statistical residual*. Personal communication with Federal Reserve economists make clear that the Fed itself does not know what kinds of assets are in “other” financial assets, or even whether all assets in that category are financial. I have found no reference to this serious data problem in the financialization literature.

To get a different view of the importance of financial assets for NFCs in recent decades, I constructed a balance sheet time series of the ratio of total financial assets minus “miscellaneous financial assets” to tangible assets. The only two significant components of miscellaneous financial assets are outward FDI, which is normally considered a real investment, and the “other” category just discussed. Figure 19 seems to indicate that NFCs were actually “de-financializing” in the 1970s. It is only in the neoliberal era that this trend begins to reverse itself, and it was not until the 1990s that this measure of financialization exceeded its 1960s level. But this series is unreliable as well, because the “other” category surely does contain financial assets. Until we can identify the assets contained in the residual category of “other miscellaneous financial assets” in the FFA and have independent measures of their size, the extent of this aspect of NFC financialization will remain something of a mystery.

These data problems do not mean that the financialization process did not take place or has not been important. We know, for example, that NFCs made enormous

capital gains on their holdings of the equity of other companies, especially in the 1990s, whether these stocks were held in pension fund accounts or as NFC corporate investments. For example, the IRS reports realized capital gains by NFCs at \$68 billion in 1997. If the FFA accounts incorporate these capital gains, it can only be in the “other” residual. Assisted by data generously provided by Greta Krippner, I constructed a time series of gross portfolio returns from NFC receipts of interest, dividends, and realized capital gains taken from IRS documents. Figure 20 shows the time trend of the ratio of NFC gross portfolio income to NFC cash flow. The ratio rises from a mid 1960s level of some 14% through 1978, when it reaches 24%. It then rises rapidly through the late 1980s where it peaks at 47%. After falling in the early 1990s, it begins to rise again through 1997, the last data point. It would be reasonable to speculate that it continued to increase at least through 1999.

But again, caution is required in interpreting the meaning of this time series because the numerator does not deduct the cost of acquiring and holding financial assets, while the denominator includes profit, which is a *net revenue* concept. This gives an upward bias to this series that could be substantial. Keep in mind that from 1975 through 1987, and again from 1997 through 2001, the *net* acquisition of financial assets was negative – NFCs issued financial liabilities whose value exceeded that of the financial assets they acquired. It is probably legitimate to conclude that portfolio income has risen in importance in the neoliberal era, but we do not know by how much.

The second dimension of the financialization of NFCs is equally burdened by data inadequacies. Everyone knows that many large US NFCs have important financial subsidiaries. Every discussion of this topic mentions GE, GM, and Ford. But I have not discovered a single source that either lists the total number of financial subsidiaries of an important category of NFCs -- such as those in the S&P 500 index or the Fortune 500 – or, more important, provides a careful estimate of the percent of assets, sales, revenues, profit or employment in large NFCs generated by their financial subsidiaries.

In sum: an initial study of the data on financialization leads to the temporary conclusion that there indeed has been a financialization of NFC firms in the neoliberal era, but more work is required to establish its precise dimensions. To quote Lord Keynes on a different subject: “About such matters, we simply do not know.”

#### **IV. Conclusion**

There are many reasons to oppose neoliberal globalization. It has led to slow growth, high unemployment, rising inequality within and across countries, the end of progress against poverty in the developing world, the outlawing of the policy tools used by those East Asian nations that made substantial progress toward development in the post World War II era, and the loss of effective democracy in countries under the control of the IMF and, as in the current case of Brazil, in countries where foreign investors can profoundly influence the electoral process.<sup>6</sup>

The main conclusion to be drawn from the analysis of this paper is that neoliberal globalization is also destroying conditions in both product and financial markets that are necessary for the successful long-term performance of large nonfinancial firms. It will not be possible for NFCs to lead either advanced or developing nations to stable, egalitarian, long-term prosperity unless the neoliberal project is rejected. The creation of a new “Golden Age” (and perhaps even the avoidance of another global depression) will require a new model of socially-embedded economic institutions and state-guided economic growth, one that is appropriate for Twenty First Century conditions. In section IV of Crotty 2000, I discuss some steps that must be taken to put the global economy on a better long-run trajectory.

## REFERENCES

- Aglietta, Mischel, "Shareholder value and corporate governance: some tricky questions," Economy and Society, February 2000, 29 (1), 146-59.
- Aglietta, Mishel and Regis Breton, "Financial systems, corporate control and capital accumulation," Economy and Society, November 2001, 30 (1), 433-66.
- Arrighi, Giovanni. The Long Twentieth Century: Money, Power and the Origins of Our Times (London: Verso, 1994).
- Arrighi, Giovanni and Beverly Silver. Chaos and Governance in the Modern World System (Minneapolis: University of Minnesota Press, 1999).
- Amsden, Alice. The Rise of the Rest: Challenges to the West From Late-Industrializing Economies (Oxford: Oxford University Press, 2001).
- Boyer, Robert, "Is a finance-led growth regime a viable alternative to Fordism? A preliminary analysis," Economy and Society, February 2000, 29 (1), 111-45.
- Brenner, Robert. Turbulence in the World Economy (London: Verso, 1999).
- Chandler, Alfred. Scale and Scope: The Dynamics of Industrial Capitalism (Cambridge: Harvard University Press, 1990).
- Chang, Ha-Joon. Kicking Away the Ladder (London: Anthem Press, 2002).
- Council of Economic Advisers. Economic Report of the President (Washington: US Government Printing Office, 2002a).
- Council of Economic Advisers. Economic Indicators (Washington: US Government Printing Office, July 2002b).
- Crotty, James and Jon Goldstein, "A Marxian-Keynesian Theory of Investment Demand: Empirical Evidence". In Fred Moseley and Ed Wolff, eds., International Perspectives on Profitability and Accumulation (Brookfield, Vt.: Edward Elgar, 1992), 97-234.
- Crotty, James and Don Goldstein, "Do US Capital Markets Allocate Capital Efficiently? The Case of Corporate Restructuring in the 1980s." In G. Dymski, G. Epstein, and R. Pollin, eds., Transforming the U.S. Financial System: Equity and Efficiency for the 21<sup>st</sup> Century (Armonk, NY: Sharpe, 1993), 253-68.
- Crotty, James "Rethinking Marxian Investment Theory: Keynes-Minsky Instability, Competitive Regime Shifts and Coerced Investment," Review of Radical Political

- Economics, March 1993, 25(1), 1-26.
- Crotty, James, "Slow Growth, Destructive Competition, and Low Road Labor Relations: A Keynes-Marx-Schumpeter Analysis of Neoliberal Globalization," Korean Journal of Economic Development, 6 (2), Dec. 2000, 1-74.
- Crotty, James, "Trading State-Led Prosperity for Market-Led Stagnation: From the Golden Age to Global Neoliberalism." In G. Dymski and D. Isenberg, eds., Seeking Shelter on the Pacific Rim: Financial Globalization, Social Change, and the Housing Market (Armonk, NY: M.E. Sharpe, Inc., 2002a), 21-41.
- Crotty, James, "Why Do Global Markets Suffer from Chronic Excess Capacity," Challenge, November/December 2002b, 45 (6), (forthcoming).
- Dumenil, Gerard and Dominique Levy, "Profit Rates: Gravitation and Trends," CEPREMAP, Modem, Paris, 1999.
- Dumenil, Gerard and Dominique Levy, "Costs and benefits of Neoliberalism: A Class Analysis," Review of International Political Economy, 2001, 8 (4), 578-607.
- Evans, Lawrence, What Drives Equity Values: Fundamentals or Net Flows? An Empirical Analysis of the 1982-1999 U.S. Stock Market Boom (Doctoral Dissertation, Economics Department, University of Massachusetts, Amherst, September 2001).
- Felix, David, "Asia and the crisis of financial globalization." In Dean Baker, Gerald Epstein and Robert Pollin, eds., Globalization and Progressive Economic Policy (Cambridge: Cambridge University Press, 1998), 163-91.
- Fligstein, Neal and Linda Markowitz, "Financial Reorganization of American Corporations in the 1980s." In William Julius Wilson, ed., Sociology and the Public Agenda (Newbury Park: Sage, 1990).
- Froud, Julie, Colin Haslim, Sukhdev Johal and Karel Williams, "Shareholder value and financialization: consultancy promises, management moves," Economy and Society, February 2000, 29 (1), 80-110.
- Glyn, Andrew, "Does aggregate profitability really matter?," Cambridge Journal of Economics, 1997, 21, 593-619.
- Henwood, Doug. Wall Street (London: Verso, 1998).
- International Monetary Fund. World Economic Outlook (Washington: International Monetary Fund, April 2002).
- Kotz, David, "The U.S. Economy in the 1990s: A Neoliberal Success Story?," paper



- presented at the Political Economy Workshop of the Economics Department at the University of Massachusetts, Amherst, December 2001 (dmkotz@econs.umass.edu).
- Krippner, Greta, "What is Financialization?," Sociology Department, University of Wisconsin-Madison, 2002. (Available through [gkripner@ssc.wisc.edu](mailto:gkripner@ssc.wisc.edu)).
- Lazonick, William and Mary O'Sullivan, "Organization, Finance and International Competition," Industrial and Corporate Change, 5 (1), 1996, 1-49.
- Lazonick, William and Mary O'Sullivan, "Maximizing shareholder value: a new ideology for corporate governance," Economy and Society, February 2000, 29 (1), 13-35.
- Lazonick, William and Mary O'Sullivan, eds. Corporate Governance and Sustainable Prosperity (New York: Palgrave, 2002).
- Maddison, Angus. The World Economy: A Millennial Perspective (Paris: OECD Development Center, 2001), p. 126.
- Morin, Francois, "A transformation in the French model of shareholder and management," Economy and Society, February 2000, 29 (1), 36-53.
- Piketty, Thomas and Emmanuel Saez, "Income Inequality in the United States: 1913-1998," Working Paper 8467, National Bureau of Economic Research, 2001.
- Schumpeter, Joseph. Capitalism, Socialism and Democracy (London: George Allen & Unwin, 1976 [1943]).
- Stiglitz, Joseph. Globalization and Its Discontents (New York: W.W. Norton, 2002).
- Useem, Peter. Investor Capitalism: How Money Managers Are Changing the Face of Corporate America (New York: Basic Books, 1996).

## ENDNOTES

---

<sup>1</sup> United Nations, World Economic Survey (New York: United Nations), various issues.

<sup>2</sup> This point is clearly explained in Crotty 2002b.

<sup>3</sup> One impediment to an econometric demonstration of the importance of coerced investment is that in theory, it should be a positive function of the intensity of competition. However, it is not clear how to develop a useful measure of this variable. There are no reliable statistics to measure the extent of excess capacity at the firm, industry or global market levels. In Crotty and J. Goldstein 1992, we estimate a time series regression for US manufacturing in which the profit rate, leverage, and the import penetration ratio – a proxy for the degree of competition -- are the independent variables. The sign on the import penetration index is positive and significant, suggesting that the *direct* effect of rising import competition was to stimulate (coerced) investment, even though it simultaneously exerts a negative indirect effect on investment because rising competition lowers the profit rate, other things equal. Of course, neoclassical theory totally neglects this positive direct effect of increased competition on investment.

<sup>4</sup> There are two peculiar aspects of conventional views about the relation of NFC management to shareholders that should at least be noted in passing. First, the concept of the ‘maximization of shareholder value’ is in fact vacuous; it provides no concrete guidance to management’s decision-making process. Should the stock price be maximized over the next month or the next decade, and if it is the latter, how is management to know how to do that? Second, the concept of aligning management incentives with shareholder interests is also vacuous until we identify the shareholders and understand their interests. Do we take the ‘typical shareholder’ to be someone who only intends to hold a stock for a year, and whose objective is to maximize capital gains?

<sup>5</sup> In a careful analysis of the sources of the rise in the US NFC profit rate from the early 1970s to its 1990’s peak, David Kotz 2001 found that the entire increase could be explained by a decline in the share of labor in value added.

<sup>6</sup> See Amsden 2001 and Chang 2002 for empirical and historical support for the thesis that all successful long-term developmental experiences, including those in Great Britain and the US, have been built on state-guided growth. There are no important neoliberal development success stories.

## **APPENDIX**

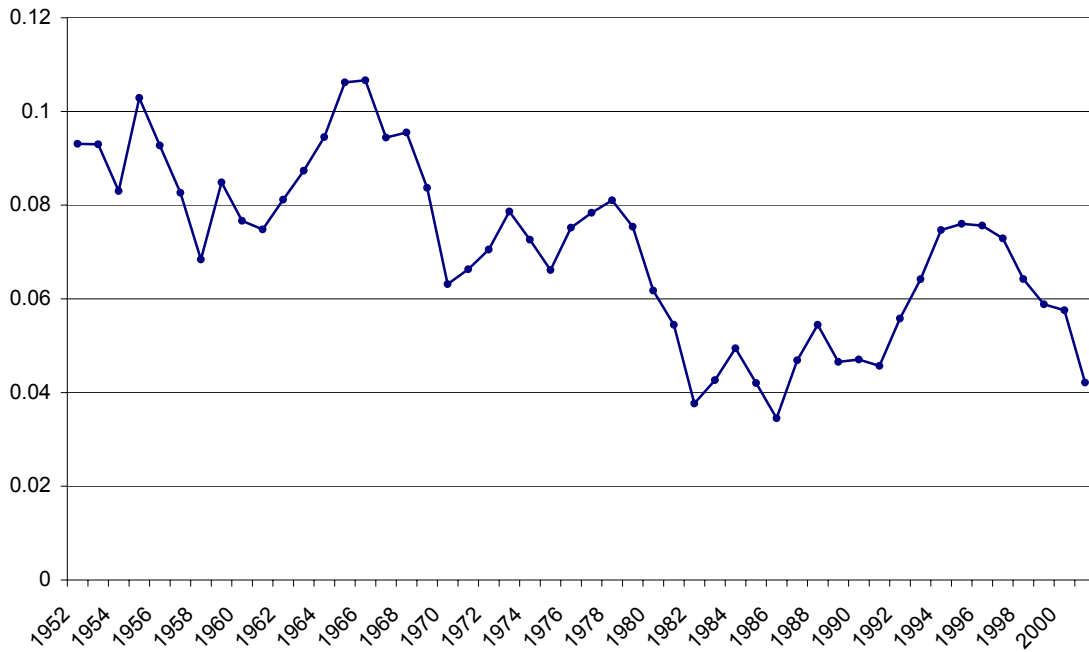
Abbreviations used in figure titles and sources:

NFC: Nonfinancial Corporate Business  
FFA: Flow of Funds Accounts of the United States  
BEA: Bureau of Economic Analysis  
NIPA: National Income and Product Account  
FAT: Fixed Assets Tables

### ***Notes:***

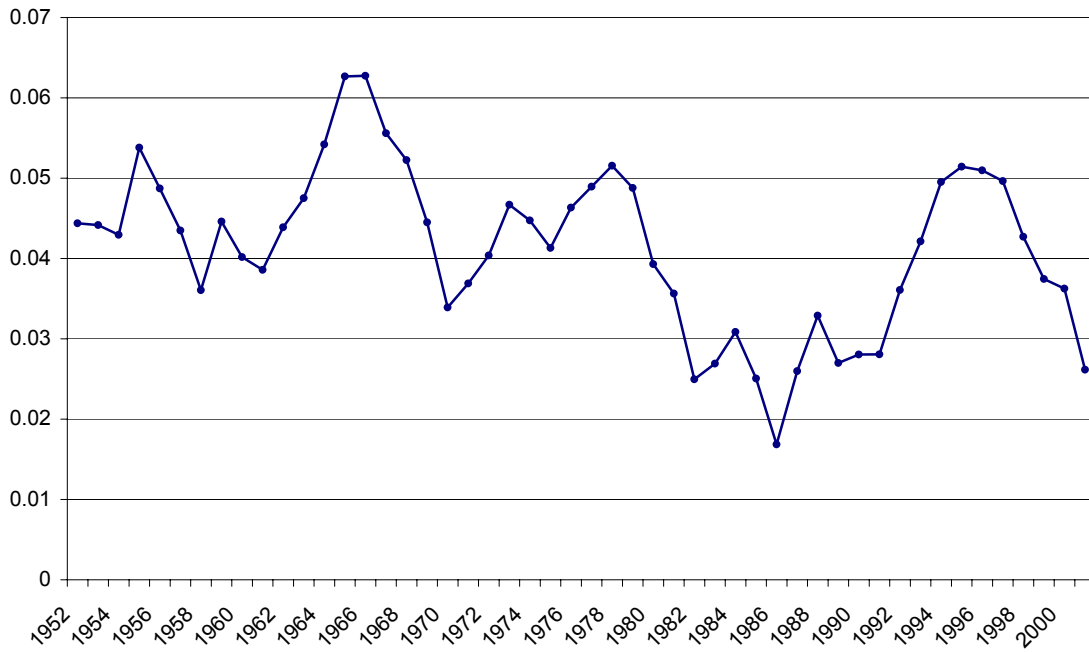
1. In figures 11 to 15 and 20, “cash flow” is defined as internal funds plus dividends.
2. In figures 14 and 15 “Total Payments to Financial Markets” includes net interest payments, dividends and net equity purchases.

Figure 1: NFC Profits Before Tax as a Percent of Net Worth (at market value)



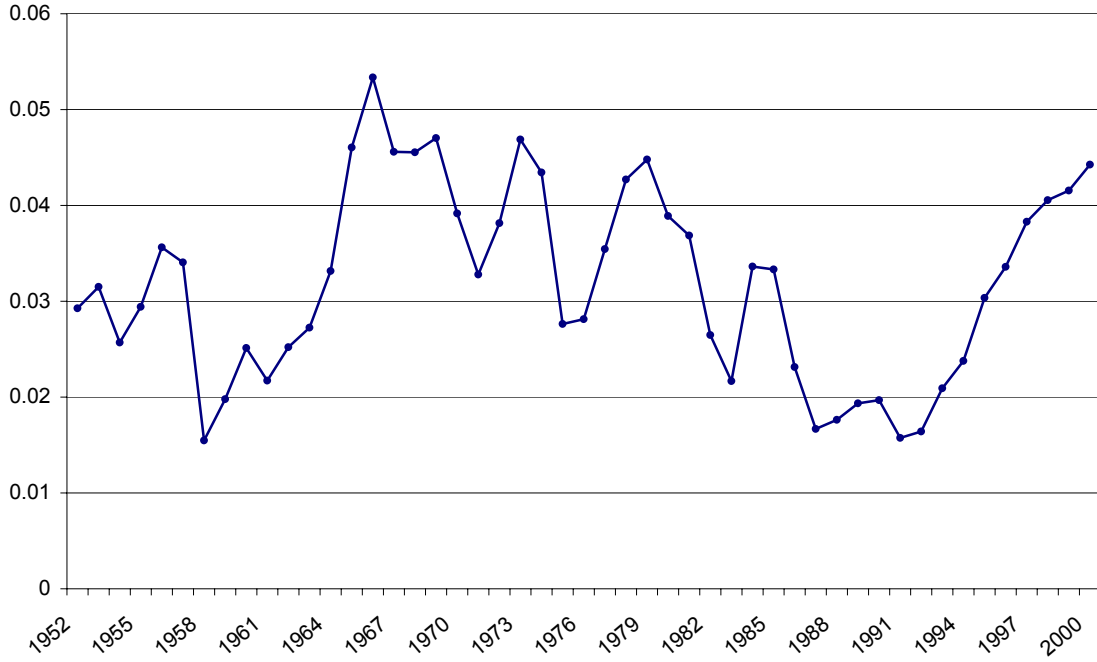
Source: FFA Table F.102 and B.102.

Figure 2: NFC Profits After Tax as a Percent of Net Worth (at market value)



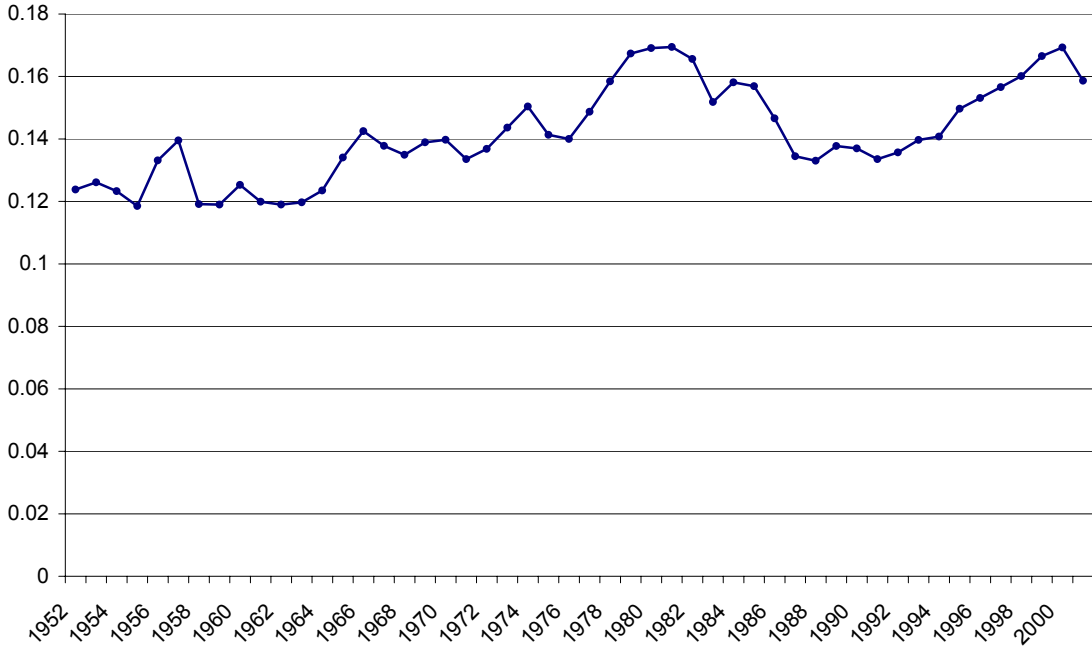
Source: FFA Table F.102 and B.102.

Figure 3: NFC Net Investment in Nonresidential Fixed Assets (annual percent change)



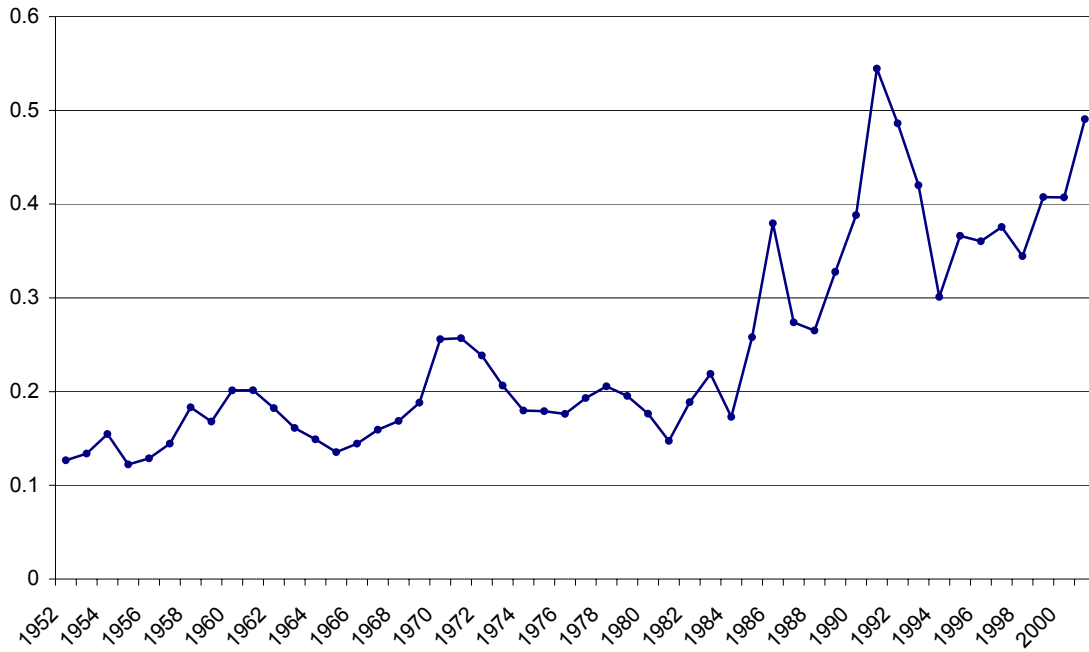
Source: BEA FAT Table 4.2.

Figure 4: NFC Net Fixed Investment as a Percent of NFC Gross Product Originating



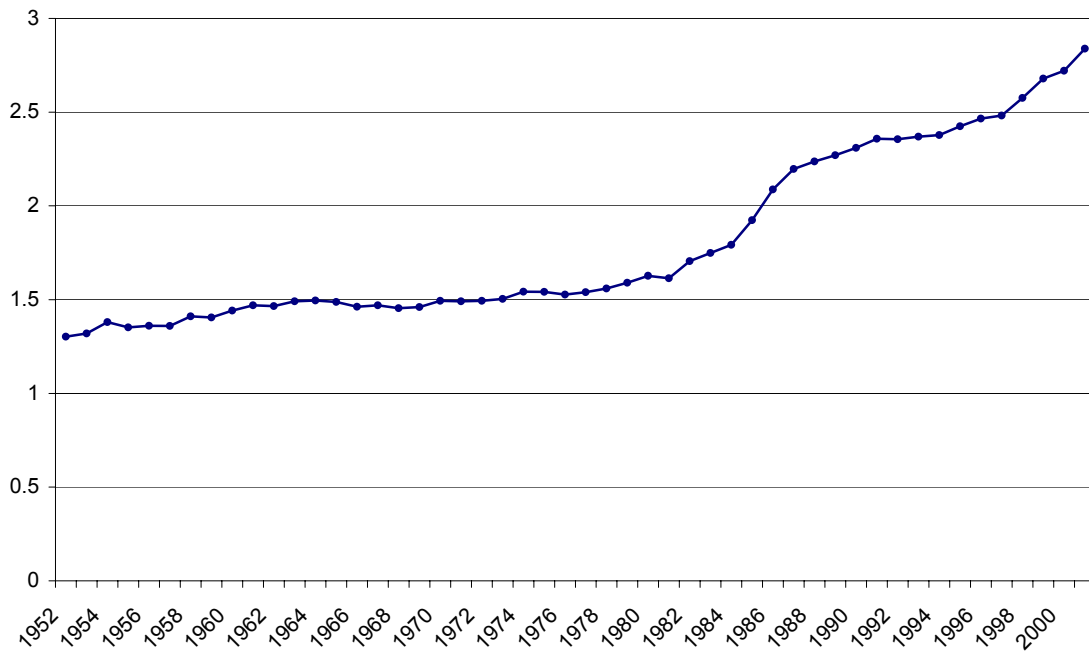
Source: FFA Table F.102 and BEA NIPA Table 1.16.

Figure 5: Profits of Financial Corporations as a Percent of NFC Profits



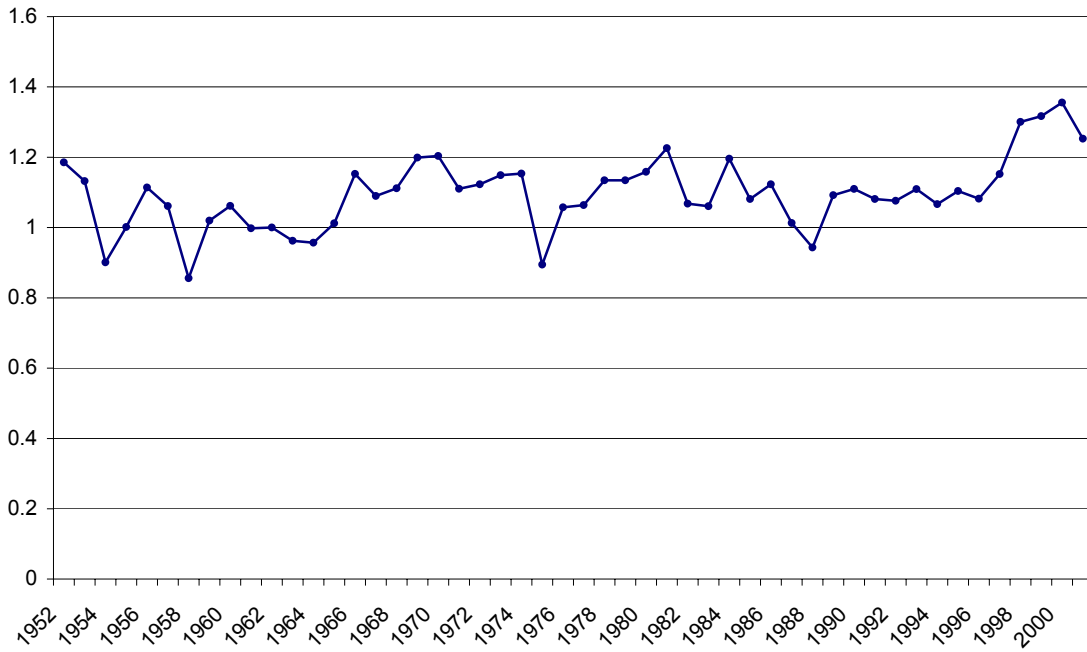
Source: FFA Table F.7.

Figure 6: Total Credit Market Debt of All Sectors as a Percent of GDP



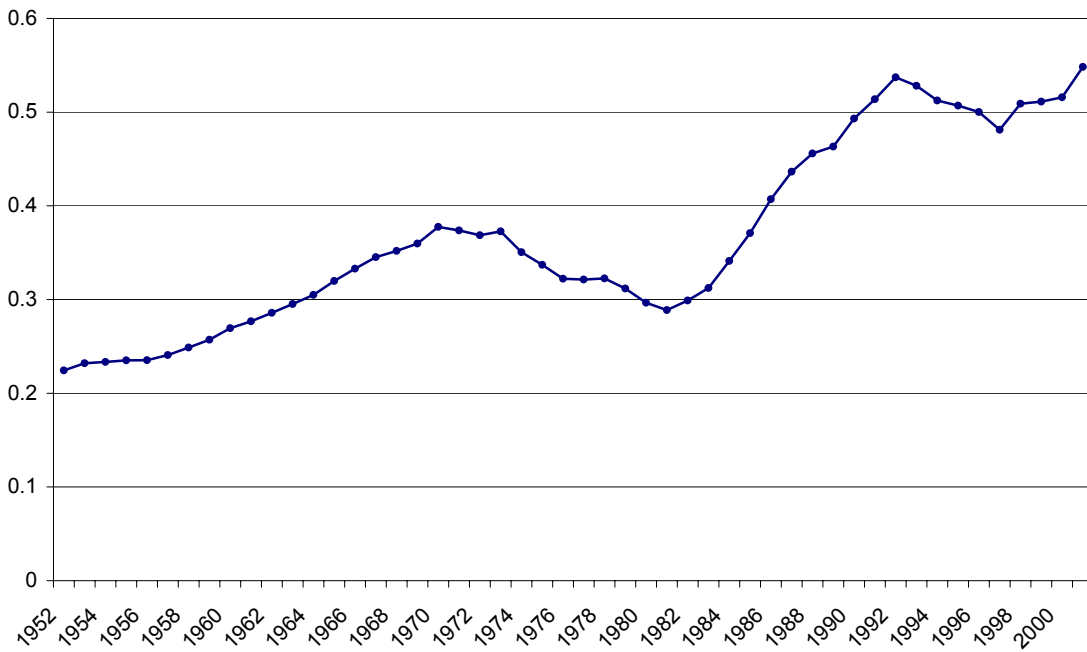
Source: FFA Tables F.7 and L.1.

**Figure 7: Gross Investment by NFCs as a Percent of Internal Funds**



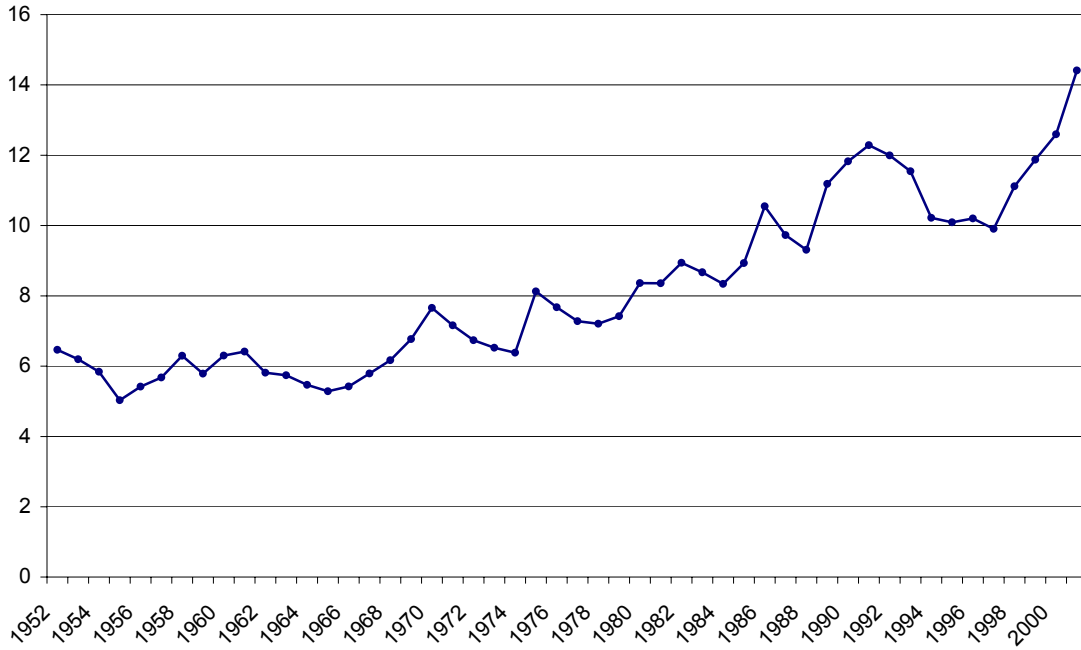
Source: FFA Table F.102.

**Figure 8: Credit Market Debt as a Percent of NFC Net Worth (market value)**



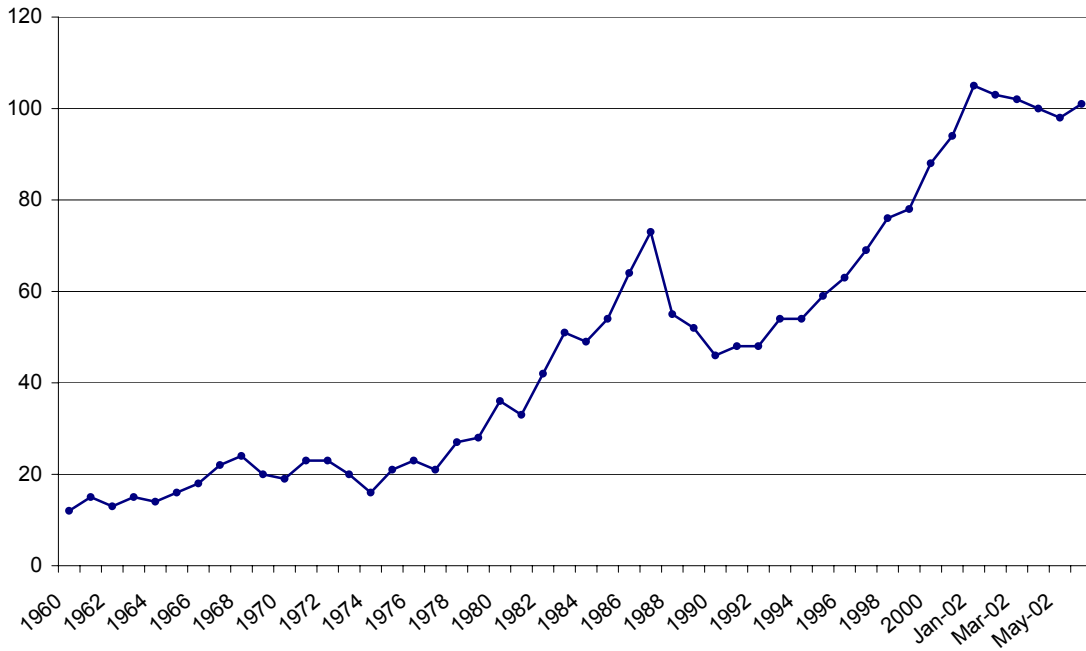
Source: FFA Table B.102.

Figure 9: Ratio of Net NFC Financial Liabilities to Internal Funds



Source: FFA Tables F.102 and B. 102.

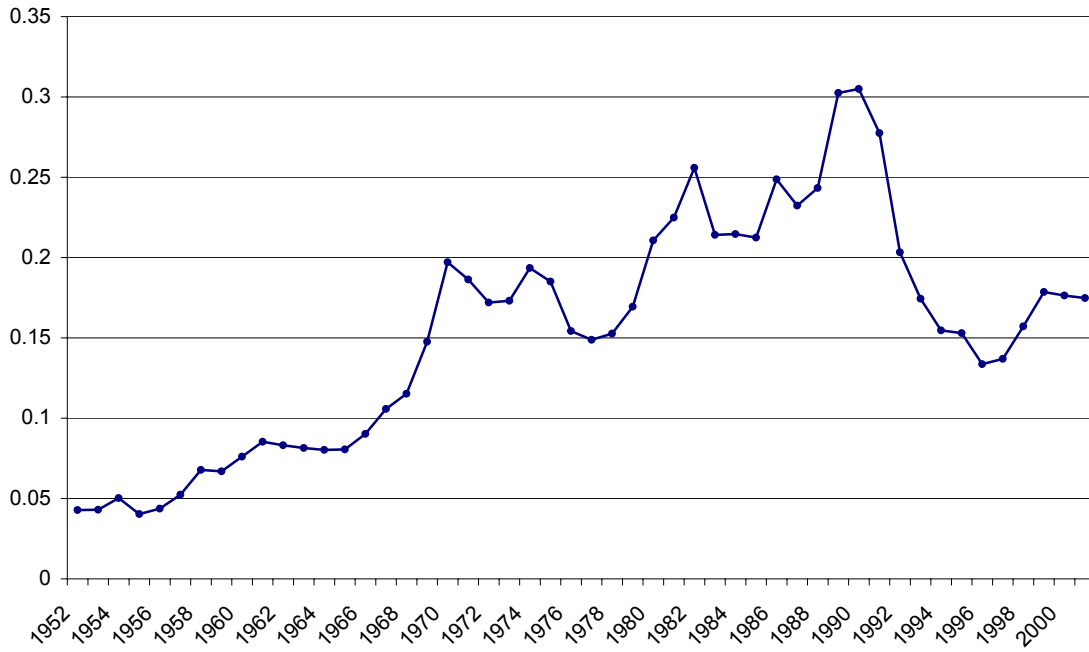
Figure 10: Annual Stock Turnover Rate: New York Stock Exchange



Source: New York Stock Exchange 2001 Fact Book and [www.nyse.com](http://www.nyse.com).

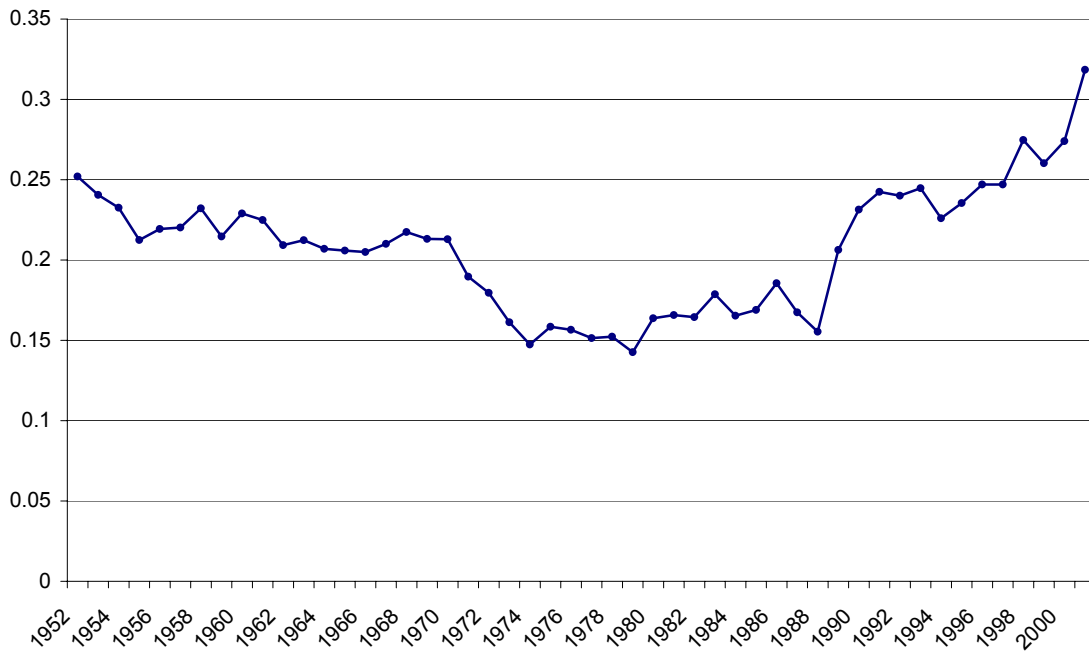


Figure 11: NFC Net Interest Payments as a Percent of Cash Flow



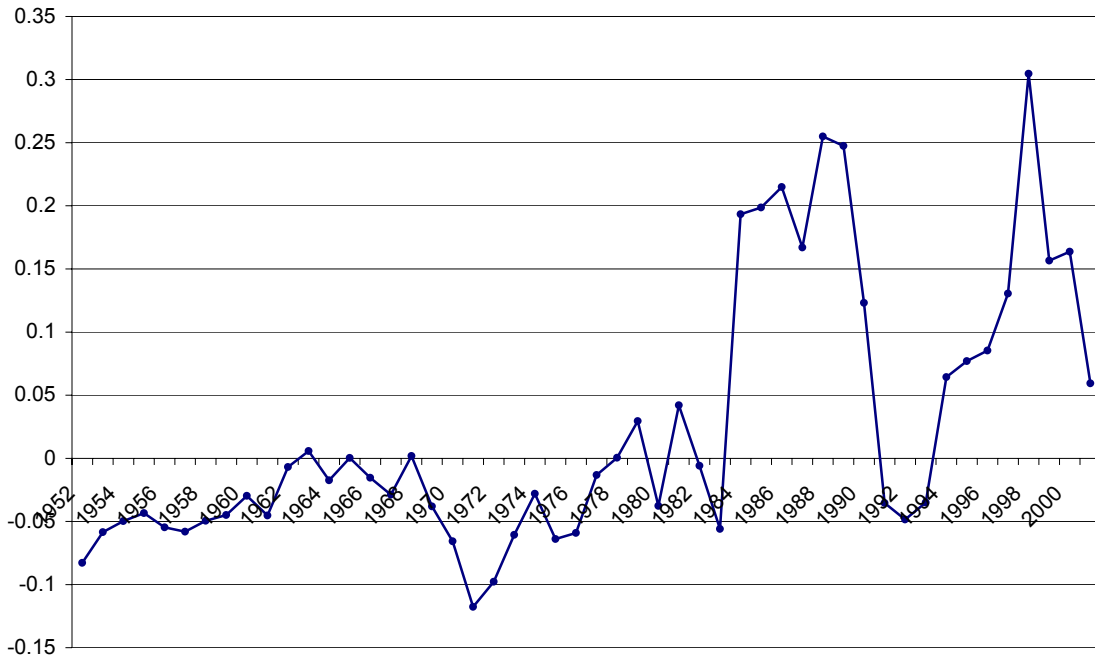
Source: FFA Table F.102 and BEA NIPA Table 1.16.

Figure 12: NFC Dividends as a Percent of Cash Flow



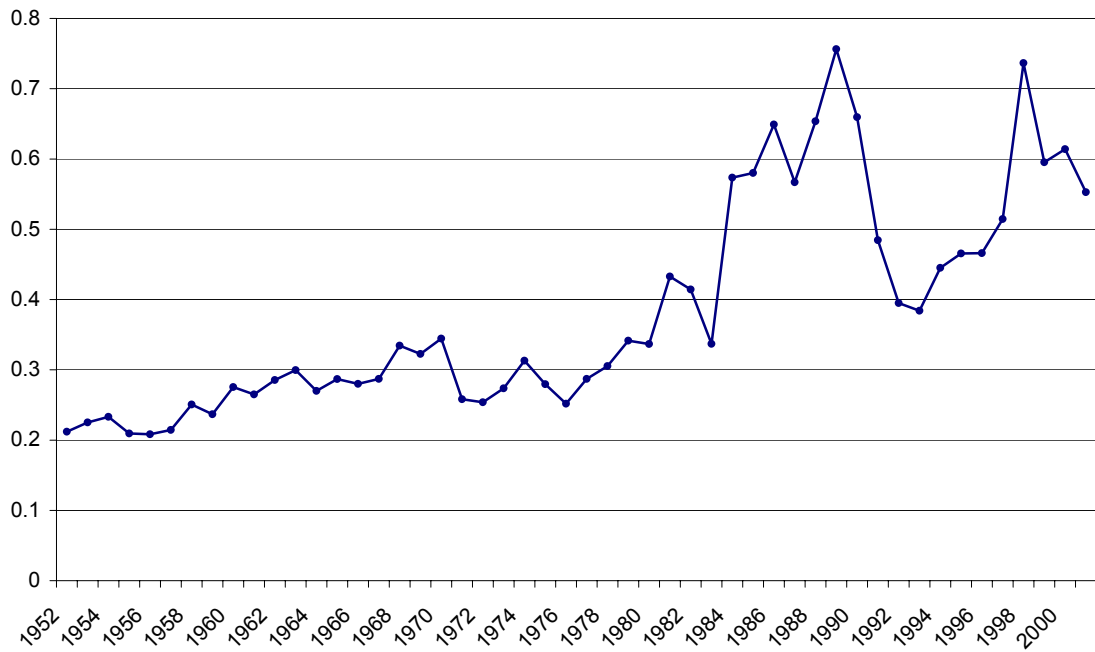
Source: FFA Table F.102.

Figure 13: NFC Stock Buybacks as a Percent of Cash Flow



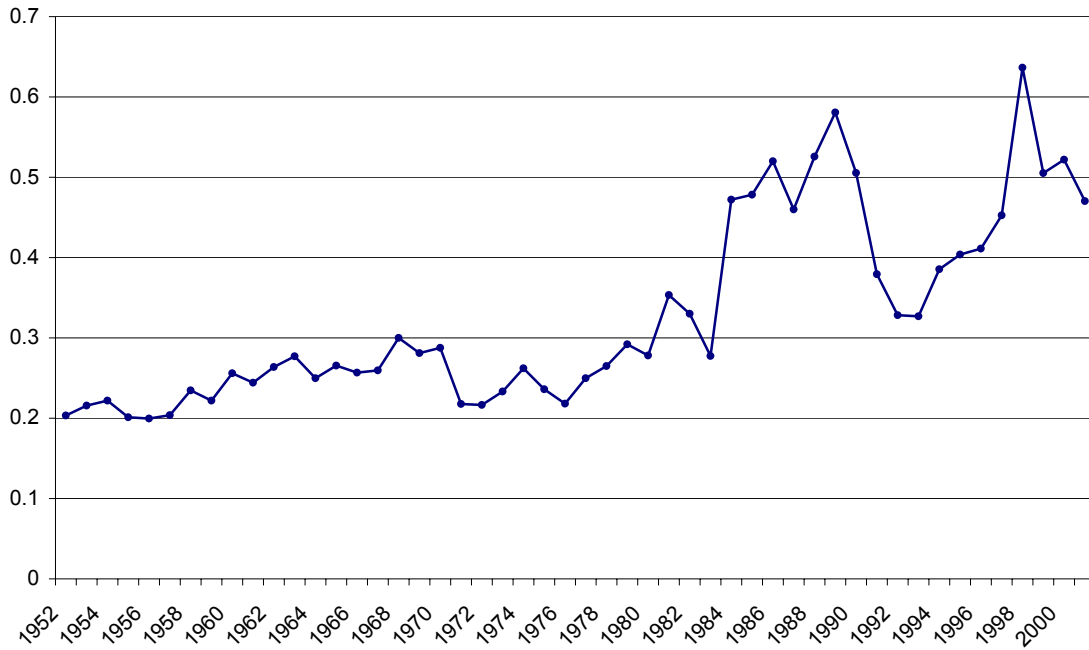
Source: FFA Tables F.102 and F.213.

Figure 14: Total Payments to Financial Markets by NFCs as a Percent of Cash Flow



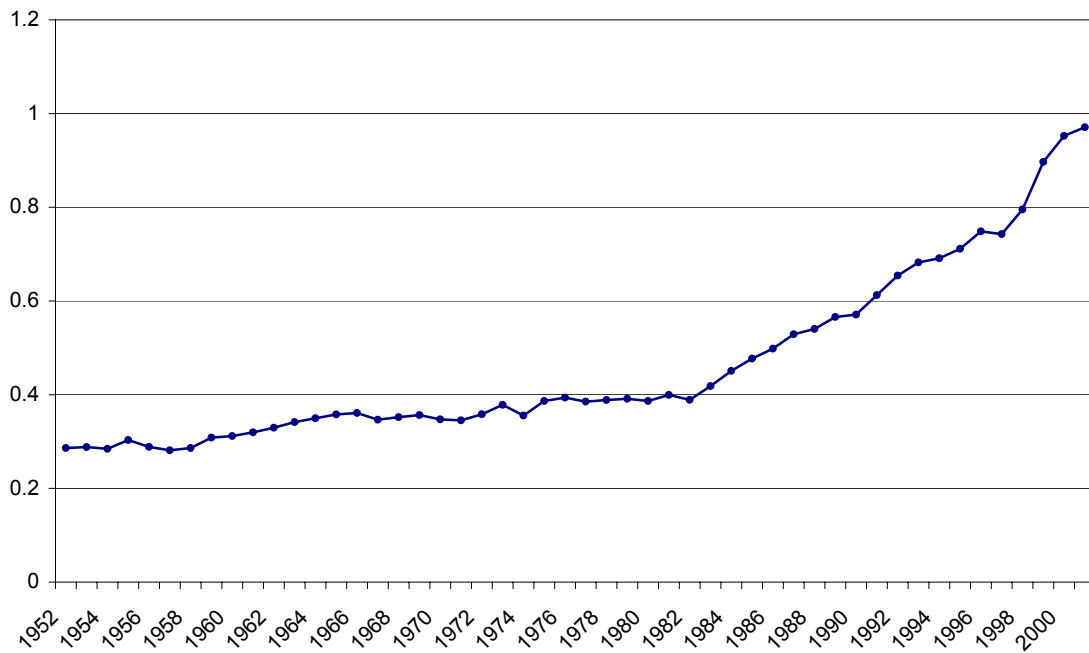
Source: FFA Tables F. 102 and F.213, and BEA NIPA Table 1.16

**Figure 15: Total Payments to Financial Markets by NFCs as a Percent of Cash Flow Plus Net Interest**



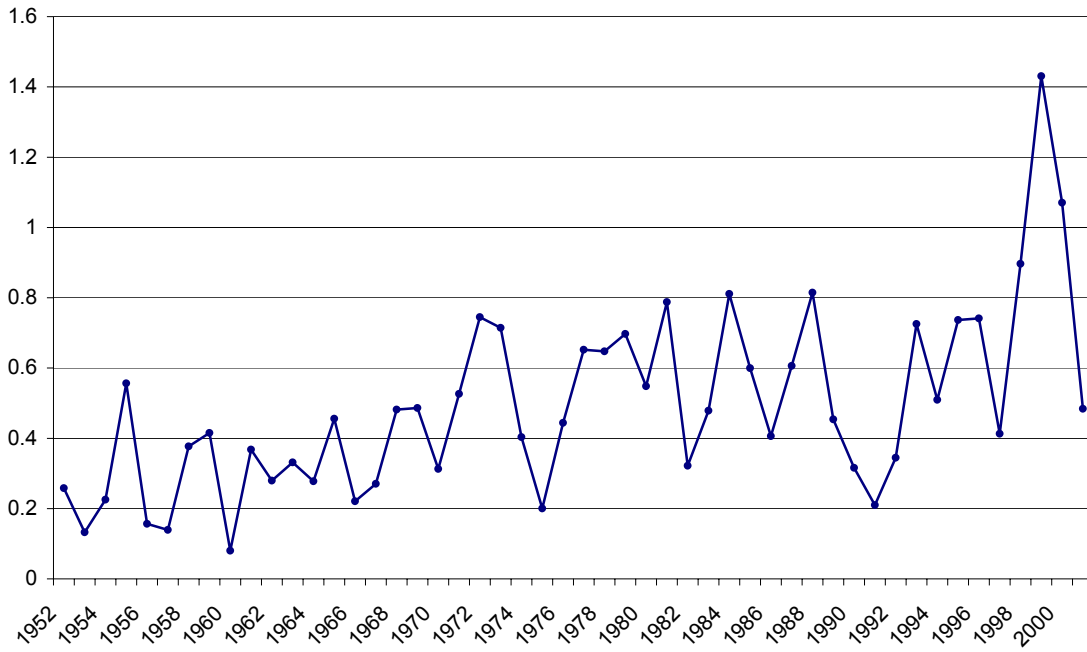
Source: FFA Tables F.102 and F.213, and BEA NIPA Table 1.16.

**Figure 16: NFC Financial Assets as a Percent of Tangible Assets**



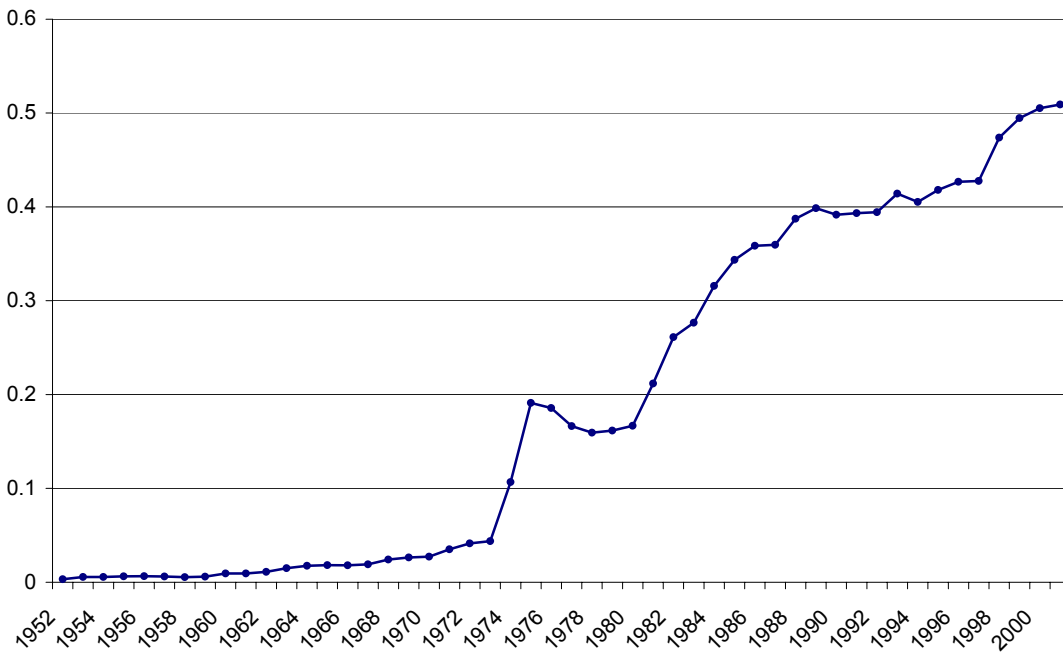
Source: FFA Table B.102.

Figure 17: Net Acquisition of Financial Assets by NFCs as a Percent of Internal Funds



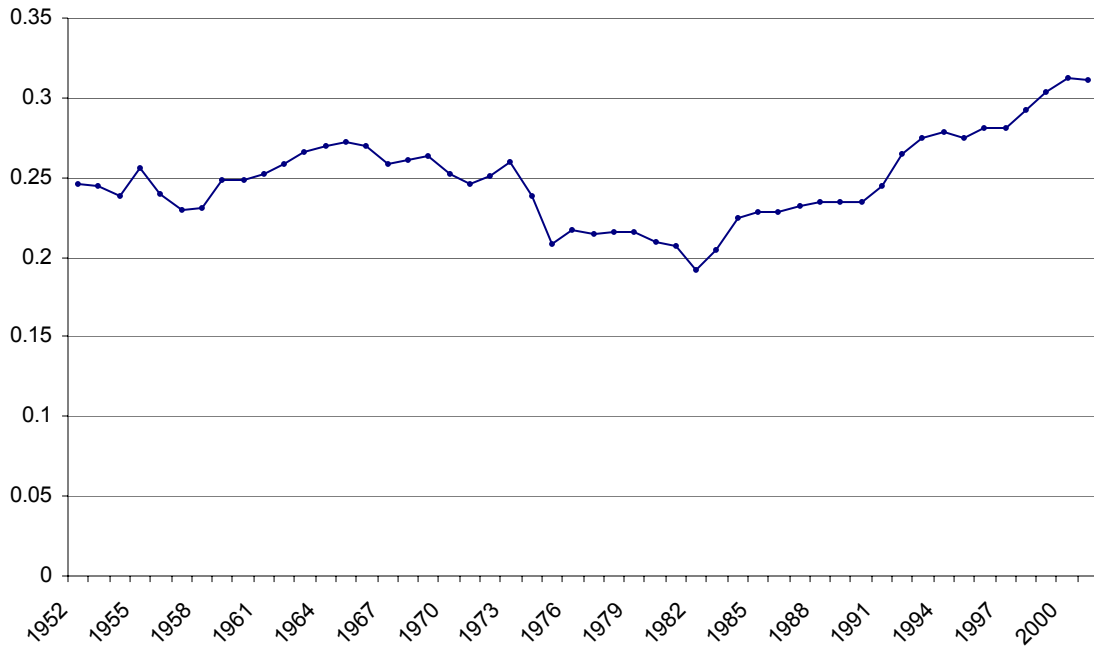
Source: FFA Table F.102.

Figure 18: Other Miscellaneous Financial Assets of NFCs as a Percent of Total Financial Assets of NFCs



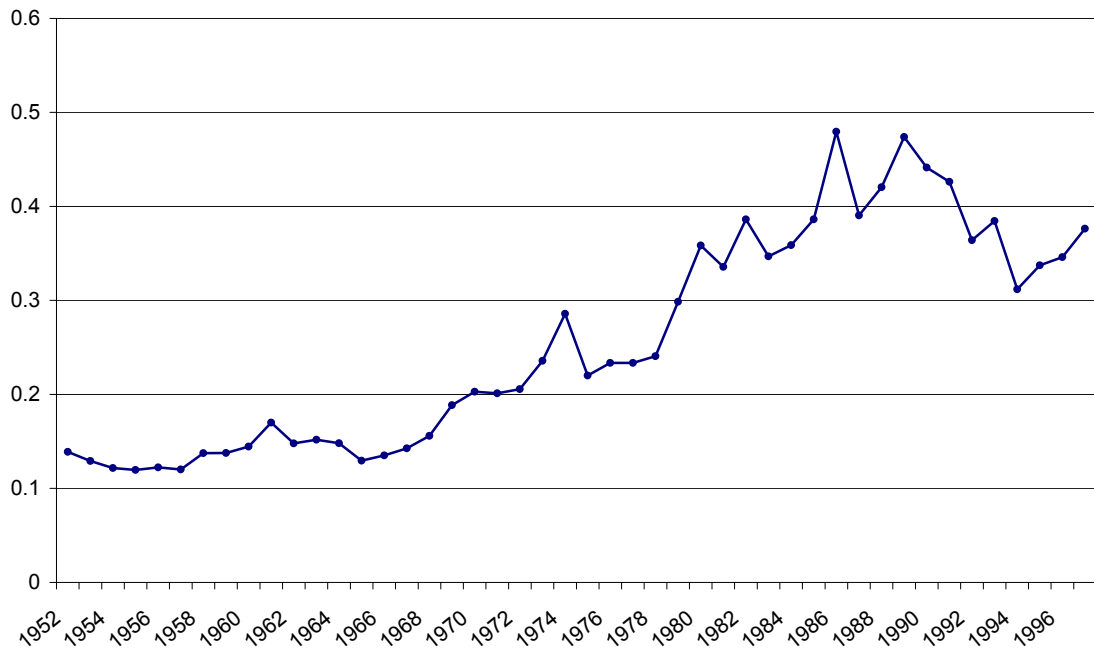
Source: FFA Table L. 102.

**Figure 19:** Total Financial Assets Minus Miscellaneous Financial Assets as a Percent of NFC Tangible Assets



Source: FFA Table B.102.

**Figure 20:** Gross Portfolio Income of NFCs as a Percent of Cash Flow



Source: FFA Table 102, and IRS data provided by Greta Krippner.