

# The financialization of the American economy

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This paper presents systematic empirical evidence for the financialization of the US economy in the post-1970s period. While numerous researchers have noted the increasing salience of finance, there have been few systematic attempts to consider what this shift means for the nature of the economy, considered broadly. In large part, this omission reflects the considerable methodological difficulties associated with using national economic data to assess the rise of finance as a macro-level phenomenon shaping patterns of accumulation in the US economy. The paper develops two discrete measures of financialization and applies these measures to postwar US economic data in order to determine if, and to what extent, the US economy is becoming financialized. The paper concludes by considering some of the implications of financialization for two areas of ongoing debate in the social sciences: (1) the question of who controls the modern corporation; and (2) the controversy surrounding the extent to which globalization has eroded the autonomy of the state.

**Keywords:** Economic sociology, financialization, economic change, macro-economic data and indicators—United States

**JEL classification:** G3 Corporate finance and governance; N220 Economic history, financial markets and institutions; L2 Industrial organization: firm objectives, organization and behaviour

## 1. Introduction

It is difficult to escape the impression that we live in a world of finance. Financial news dominates the business press. The management of American corporations, large and small, moves to the rhythm of Wall Street. In recent years, a series of corporate scandals have dramatized the degree to which financial machinations have superseded productive enterprise in the US economy. Consumers are confronted daily with new financial products and financial ‘literacy’ is touted as a

core competency. For many Americans, the leading stock market indices act as a kind of barometer for the economy as a whole. Gains in the market generate surges in consumer spending even where more tangible indicators of economic vitality, such as job growth or wage levels, lag behind.

While many commentators in both popular and scholarly accounts have noted these and related developments, there have been few attempts to explore the meaning of such phenomena for the nature of the economy, considered broadly. In large part, this omission reflects the fact that the data that would allow a macro-level examination of the growing weight of finance in the American economy—a development that I refer to as *financialization*—raise a host of difficult methodological issues. As a result, even those accounts that are concerned with understanding the rise of finance in structural terms typically assert the presence of this phenomenon without providing any direct evidence for it. To take two prominent examples, Arrighi's (1994) *The Long Twentieth Century* explains financialization as resulting from intensified intercapitalist and interstate competition during periods of hegemonic transition. More recently, Phillips (2002) argues in *Wealth and Democracy* that the financialization of the US economy has produced extreme wealth and income polarization in the US in recent years, eroding the social bases of American democracy. Yet neither Arrighi nor Phillips establishes the existence of financialization.

It stands to reason that before such provocative theses can be fully assessed, we ought to first determine whether it is in fact accurate to characterize the US economy as having been 'financialized'. As Merton (1959, p. xiii) once remarked, 'It might at first seem needless to say that before social facts can be "explained", it is advisable to ensure that they actually are facts. Yet, in science as in everyday life, explanations are provided for things that never were.'<sup>1</sup> This paper, then, analyzes the available data for what they reveal about the rise of finance in the US economy. As such, the objectives of this paper are primarily descriptive and conceptual in nature—a full causal analysis is left for other writings (see Krippner, 2003). The question addressed here is how to characterize most usefully long-term structural change in the US economy, not how to explain that change, given that it has occurred. While the data problems involved in such an endeavour are daunting, I argue that we must confront the data directly, for the underlying shift in the economy that they signal is so dramatic—and so durable—that it challenges competing frameworks for understanding the nature of contemporary capitalism.

I define financialization as a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production (see Arrighi, 1994). 'Financial' here refers to activities relating to the provision (or transfer) of liquid capital in expectation of future interest, dividends,

<sup>1</sup> For a similar use of Merton in the context of a related debate, see Zeitlin (1974).

or capital gains.<sup>2</sup> At issue is the following problem: *What constitutes the relevant evidence for financialization, and how should this evidence be evaluated?* While there is a range of social science research that points to the increasing salience of finance in the economy, this problem has not been addressed by the literature, which has tended to focus either on organizational developments at the level of the firm or on activities inside financial markets. Fligstein's (1990, 2001) work on the emergence of the 'shareholder conception of control', for example, provides a compelling account of the increasing influence of financial considerations in the governance structures of large industrial corporations (cf., Davis and Stout, 1992; Davis and Thompson, 1994; Useem, 1996; Zorn, 2004; Zorn *et al.*, 2004). Other researchers have documented the explosion of financial trading and the proliferation of new financial instruments (Felix, 1998; Henwood, 1997; Sassen, 2001; Tickell, 1999). Yet neither an examination of the growing orientation of managers to financial variables nor of the changing nature of transacting in financial markets informs us as to the *overall shape* assumed by an economy dominated by such activities. In short, financialization has not been subject to the kind of close empirical scrutiny that would illuminate the precise timing and magnitude of this widely-perceived, if little-examined phenomenon.<sup>3</sup>

A careful examination of the financialization of the American economy requires a different 'lens' than that typically used by scholars examining broad shifts in the economy. While most characterizations of long-term shifts in the underlying structure of the economy rely for evidence on changes in employment or in the mix of goods and services produced (e.g. Clark, 1940; Bell, 1973; Castells, 1996), these are not appropriate places to look for the rise of finance. The financial sector is not employment-intensive and its 'products' do not show up in transparent ways in national economic statistics (Block, 1987). Thus, in contrast to the dominant perspective on long-term economic change, which is concerned with *the tasks performed* or with *what is produced* in an economy, this paper engages another vantage point on economic change by examining *where profits are generated* in the US economy. For purposes of exposition, I label these two perspectives

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<sup>2</sup> I am indebted to Mark Suchman for this formulation.

<sup>3</sup> There is little research that attempts to document US financialization at the level of the macro-economy, although interested readers will want to compare the results here with those reported by Brenner (2002), Crotty (forthcoming) and Dumenil and Levy (2004). The important work of Epstein and Jayadev (forthcoming) should also be mentioned in this context. Epstein and Jayadev examine the 'rentier share' of national income, which they define as profits of financial firms, plus interest income generated by non-financial firms and households. While the objective of their research is somewhat distinct, their results are broadly confirmatory of those reported in this paper. Their work is also useful for showing that these trends extend broadly across the OECD countries.

‘activity-centred’ *versus* ‘accumulation-centred’ views, respectively.<sup>4</sup> While the activity-centred view highlights the rise of the service sector and is, therefore, associated with post-industrialism (Bell, 1973), a focus on changing patterns of profitability suggests that financialization is the key development in the US economy in recent decades.<sup>5</sup>

In contrasting these two perspectives on economic change, it is important to be clear that I am *not* arguing that one is somehow more ‘fundamental’—or more ‘true’—than the other. Post-industrialism and financialization both capture aspects of what is changing in the US economy, as do other frameworks, such as globalization or neo-liberalism. In this sense, how one conceptualizes structural change in the economy depends very much on one’s theoretical purpose. But neither is this to assume an entirely relativistic position on the problem of economic change, where one ‘lens’ is just as good as the next. While different data will produce any number of ways of understanding economic change, not all such understandings are equally useful for motivating new problems for investigation or for resolving impasses in problems currently under investigation. In what follows, I argue that financialization not only offers an apt characterization of the world in which we live, but a *productive* one, clarifying key issues in current areas of debate in the social sciences. In particular, I explore the implications of financialization for two ongoing controversies: (1) the issue of who controls the modern corporation; and (2) the role of globalization in eroding the autonomy of the state.

The paper is organized in six sections. In the following section of the paper, I compare the picture of structural change in the economy that emerges from activity-centered *versus* accumulation-centered perspectives on economic change. In Section 3, I develop two discrete measures of financialization and then apply these measures to post-war US economic data in order to determine if and to what extent the US economy is becoming financialized. In Section 4, I examine the issues of outsourcing and subsidiary ownership, discussing how the measures I have devised minimize the possibility that what appears in the data as ‘financialization’ is merely an artifact of corporate reorganization. Section 5 of the paper engages another potential objection to the results reported here: namely, that what I describe as the financialization of the US economy is better understood as resulting

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<sup>4</sup> The intention here is not to reify these labels into higher-order abstractions but to describe reasonably succinctly the kinds of data mobilized by these two perspectives in arguing for different interpretations of economic change.

<sup>5</sup> To be sure, finance is generally considered to be a central component of the rise of the service sector. But when profit data are adopted as the privileged lens on the economy, the rise of finance becomes so central to characterizations of economic change that merely subsuming finance under a broader category of service industries and occupations is, in fact, misleading.

from the globalization of production. In a concluding section, I both summarize the main findings of this research as well as illustrate the usefulness of the concept of financialization by describing two areas of debate in the social sciences for which these findings have relevance.

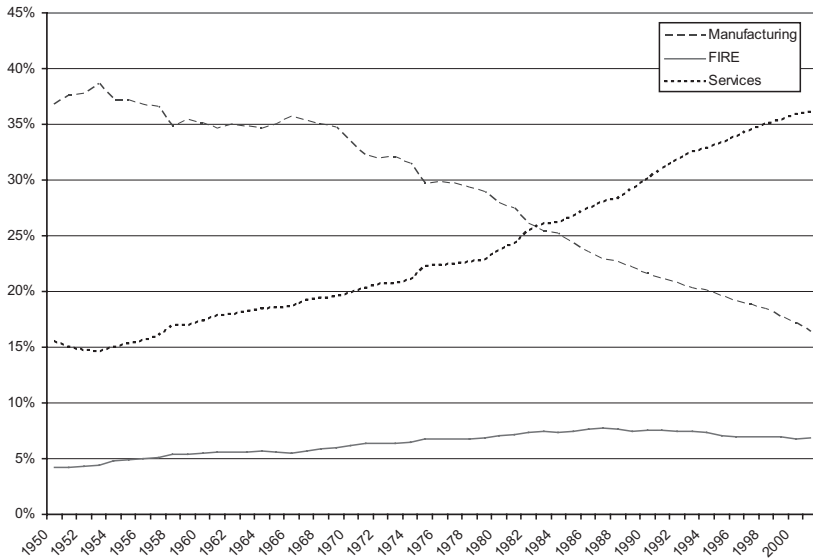
## 2. Two views of economic change

The primary purpose of this paper is to evaluate the evidence for the financialization of the American economy. Before turning to that task, I first want to motivate this endeavour by contrasting two views on economic change. The standard way of tracking long-term structural shifts in the basic composition of the economy has been to examine changes in employment or in the ‘contribution’ of different sectors to gross domestic product (GDP). This *activity-centred* view of economic change spans several generations of research, from early work on the rise of the service sector (Clark, 1940), to Bell’s (1973) famous thesis on post-industrialism, to recent theorizations of the information economy (Castells, 1996). By contrast, in this paper, I propose an *accumulation-centred* view of economic change, in which the focus is on where profits are generated in the economy. My objective in this section is to show how dramatically these two views diverge in terms of what they signal about the fundamental shifts that characterize the contemporary US economy. I do so through a simple comparison of the picture of structural change in the economy that emerges from employment,<sup>6</sup> GDP and profit data.

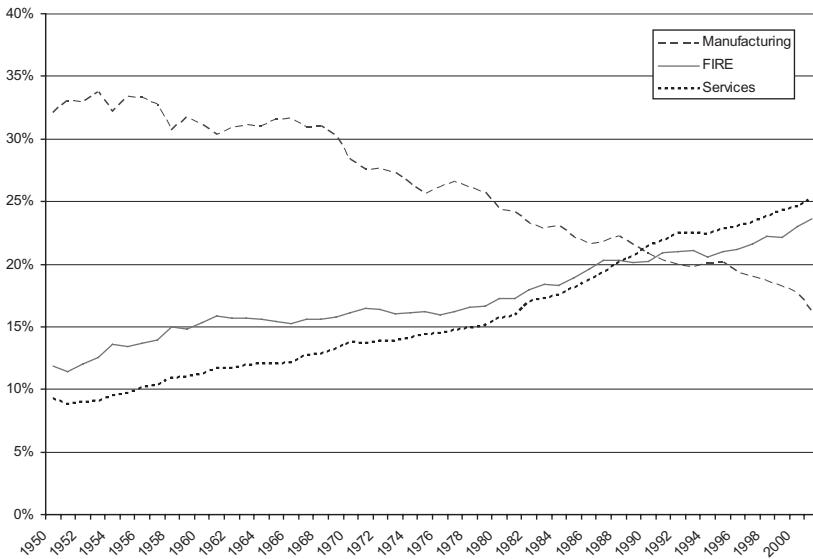
Two brief caveats are necessary. In the analyses reported in Figures 1–3, as well as throughout the paper, I do not include the public sector as a component of the total economy. I omit the government sector because, while public data is available for employment and contribution to GDP growth, there is no concept analogous to profits with which to gauge the ‘accumulation’ occurring in the public sector. However, the inclusion or exclusion of the public sector makes little difference for the *relative* levels of the other industries. For related reasons, self-employment is also excluded from consideration here and throughout the paper. There is no way (short of making *ad hoc* assumptions) to distill a profit concept from *proprietary income*, which does not distinguish between profits and compensation. Were it possible to include self-employed workers in the analysis, this would

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<sup>6</sup> In the following discussion, I use the term ‘employment’ to refer to only the sectoral—and not the occupational—dimension of employment. While occupational data are also occasionally used to assess shifts in the structure of the economy, I do not replicate these analyses here. Occupation is a property that attaches to discrete *jobs*, whereas employment, GDP, and profit data are typically disaggregated by *industry*. Thus, an examination of the shifting composition of occupations is not strictly comparable to changing patterns of profitability because these measures involve different units of analysis.

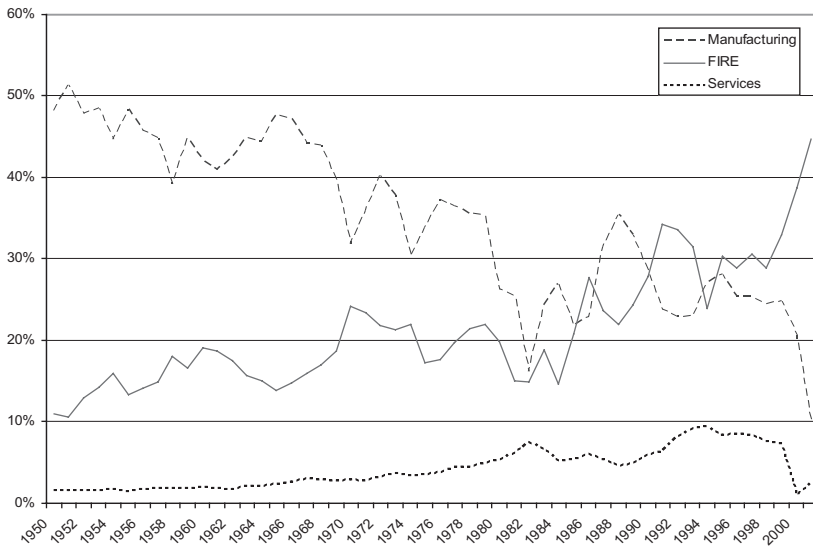


**Figure 1** Relative industry shares of employment in US economy, 1950–2001.



**Figure 2** Relative industry shares of current-dollar GDP in US economy, 1950–2001.

probably increase the share of services in the economy, since the self-employed disproportionately work in services. However, the difference is not likely to be significant, as self-employed workers represent a relatively small share of the total economy.



**Figure 3** Relative industry shares of corporate profits in US economy, 1950–2001.

Employment data are the type of evidence most commonly marshalled in debates about how to characterize the nature of contemporary economic change. Because just three industries—manufacturing, FIRE<sup>7</sup> and services<sup>8</sup>—account for most of the change in the sectoral composition of the economy over the last 50 years, I report only these three industries here. Figure 1 shows relative industry shares of total employment between 1950 and 2001.<sup>9</sup> The steep decline of manufacturing is evident in this figure. Evident too is the stratospheric ascent of employment in services. But note that viewed through the lens of economic activity, finance is not particularly significant. FIRE is neither very large relative to other

<sup>7</sup> FIRE is the industry group comprised by finance, insurance and real estate. For the moment, I follow convention and report FIRE as an industry group rather than disaggregating finance and real estate. In the more detailed empirical analysis presented in sections three and five, I exclude real estate as a component of the financial sector of the economy. Which practice is more appropriate is a complex matter—real estate markets share many characteristics of financial markets, including their speculative nature. At the boundary, the distinction between ‘financial’ and ‘non-financial’ sectors of the economy is ambiguous. In the present context, my purpose is to ensure comparability between my analysis and the analyses typical of the activity-centred view. In subsequent sections, where I am more concerned with precision, my purpose is to construct a *conservative* estimate of financialization.

<sup>8</sup> To avoid confusion, here and throughout I refer to the broader category of industries comprising the service sector (public utilities, transport, communications, wholesale, retail, FIRE and services) as *the service sector*, *the service economy*, or *service industries*, while referring to the narrower industry simply as *services*.

<sup>9</sup> Data on full-time equivalent employees are from the *National Income and Product Accounts*, Table 6.5.

industries, nor does it register significant growth over the period. Thus, this evidence is consistent with an interpretation of recent developments in the economy as reflecting the rise of the service sector, post-industrialism, or (a little more tenuously) the information economy. These data do *not* point to financialization as an apt way of understanding economic change in recent decades.

Another kind of evidence—less common than employment data—mobilized in debates about how to characterize the evolution of the economy in recent decades relies on shifts in the contribution of different sectors to GDP (e.g. Bell, 1973). GDP is both a measure of what is produced *and* a measure of national income. In theory, the two concepts are equivalent: the market value of goods and services produced should equal the income earned in producing those goods and services. As such, the Bureau of Economic Analysis (BEA) estimates GDP using two independent methods—the first is based on adding up the value of output produced and the second is based on adding up incomes, including profits. In practice, when the GDP data are assembled there is a small discrepancy between the measure constructed on the basis of output and the measure constructed on the basis of income (US Department of Commerce, 2002). For purposes of this paper, GDP is a *hybrid* measure, reflecting both economic activity (output) and accumulation (the profit component of national income).

Figure 2 shows relative industry shares of current-dollar GDP between 1950 and 2001.<sup>10</sup> I again report data for only those three industries that account for most of the change in the sectoral composition of the economy. Like Figure 1, Figure 2 shows the decline in manufacturing over the post-war period. Similarly, the figure shows the dramatic growth of services, the largest industry in the economy on this measure. But now FIRE also appears as an industry in which significant growth has taken place over the post-war period. These data could be interpreted as supporting the rise of the service sector, post-industrialism, the information economy *and* financialization.

A third type of evidence for structural change in the economy is presented in Figure 3, which shows data on relative industry shares of corporate profits between 1950 and 2001 for manufacturing, FIRE and services.<sup>11</sup> Profit data are considerably more volatile than employment data. Nevertheless, the picture of structural change in the economy that emerges is nearly the mirror image of the data presented in Figure 1, with the relative position of services and FIRE inverted. Again, the decline of manufacturing is dramatic in this figure. But now FIRE is the dominant sector of the economy, with services accounting for a relatively small share of total profits. This result is not in itself inconsistent with standard characterizations of economic change—finance is,

<sup>10</sup> Data on industry contributions to current-dollar GDP are from the BEA's *Gross Product Originating* series.

<sup>11</sup> Data on corporate profits by industry are from the BEA's *Gross Product Originating* series. Here and throughout the paper, profits are reported *before* taxes and dividends are paid.



after all, a service, and a rather information-intensive one at that. But it does suggest a different emphasis. Rather than the rise of the service sector, post-industrialism, or the information economy, it is financialization that comes sharply into view when profit data rather than employment or GDP are the focus of analysis.

### 3. Evidence for financialization

In this section, I turn to a more systematic evaluation of the evidence for the financialization of the US economy. It is first necessary to distinguish the concept of financialization as I use it here from various ways that the concept is deployed in related literatures. Numerous researchers have used the term in exploring various aspects of the rise of finance, but the literature on financialization is at present a bit of a free-for-all, lacking a cohesive view of what is to be explained. Some writers, for example, use the concept of financialization to refer to the ascendancy of 'shareholder value' as a mode of corporate governance (Froud *et al.*, 2000; Lazonick and O'Sullivan, 2000; Williams, 2000). For other scholars, the concept references the growing dominance of the capital markets over systems of bank-based finance (Phillips, 2002). A third view in the literature—harkening back to the beginning of the 20th century (e.g. Hobson, [1902] 1971; Hilferding, [1910] 1981; Lenin, [1916] 1988)—is that financialization reflects the increasing political and economic power of a *rentier* class (Duménil and Lévy, 2002; Epstein and Jayadev, forthcoming; Greider, 1997). Finally, the term is sometimes used to describe the explosion of financial trading associated with the proliferation of new financial instruments (Phillips, 1996).

Here, I follow Arrighi (1994) in defining financialization as a pattern of accumulation in which profit-making occurs increasingly through financial channels rather than through trade and commodity production. One advantage of such a definition is that it is capable of encompassing alternative usages of the term: in a world where accumulation occurs predominantly through financial activities, one would expect systems of corporate governance to reflect the imperatives of financial markets. Similarly, one would expect that social actors occupying strategic positions *vis-à-vis* privileged sites of accumulation would accrue political and economic power. Finally, one would also expect a rapid pace of financial innovation, as well as financial flows that dwarf real economic activity. A related strength of this definition is that it lends itself to systematic empirical evaluation using some of the best data on the US economy we have available—in particular, that provided by the *National Income and Product Accounts*, among other data sources.<sup>12</sup>

While long-term structural shifts in the economy are typically conceptualized in sectoral terms, an adequate understanding of financialization requires both a sectoral and an extra-sectoral perspective. The growing weight of finance in the

<sup>12</sup> See Krippner (2005) for a detailed discussion of the data sources used in this paper.

economy is reflected in the expansion of banks, brokerage houses, finance companies and the like, but *equally* it is reflected in the behaviour of non-financial firms. In this regard, a number of researchers suggest that the origins of the current turn to finance can be found in the crisis of profitability that beset US firms in the 1970s (e.g. Arrighi, 1994; Fligstein, 2001; Magdoff and Sweezy, 1987). Confronted with labour militancy at home and increased international competition abroad, non-financial firms responded to falling returns on investment by withdrawing capital from production and diverting it to financial markets. Thus, an adequate conception of financialization must track the activities of *both* financial and non-financial firms. A purely sectoral approach that focuses only on the financial industry misses much of what is important in an account of the financialization of the US economy.

This paper uses two distinct measures to gauge financialization. First, I examine sources of revenue for non-financial firms, demonstrating the growing importance of 'portfolio income' (comprising income from interest payments, dividends and capital gains on investments) relative to revenue generated by productive activities. Second, turning to a more traditional sectoral analysis, I examine the growing importance of the financial sector as a source of profits for the economy, comparing financial to non-financial profits. It should be noted that each of these measures has its own limitations, but taken together they provide what I will argue is persuasive evidence of the financialization of the American economy.

### 3.1 *Portfolio income*

One indication of financialization is the extent to which non-financial firms derive revenues from financial investments as opposed to productive activities. In the following analysis, I gauge the significance of financial revenues for non-financial firms by constructing a ratio comparing portfolio income to corporate cash flow. *Portfolio income* measures the total earnings accruing to non-financial firms from interest, dividends and realized capital gains on investments. *Corporate cash flow* is comprised of profits plus depreciation allowances.<sup>13</sup> Thus, the ratio of portfolio income to corporate cash flow reflects the relationship, for non-financial firms, between the return generated from financial versus productive activities.<sup>14</sup>

<sup>13</sup> Typically, accountants report cash flow net of dividends and income taxes (i.e. cash flow = retained earnings + depreciation allowances). Since I am primarily interested in the *generation* of surplus rather than its distribution, I report cash flow *before* taxes and dividends have been paid.

<sup>14</sup> One important adjustment made to the profit data in constructing this measure should be noted. While interest income is a component of corporate profits in the *National Income and Product Accounts*, I remove interest income from the profit concept used here so that the cash flow measure exclusively reflects *non-financial* sources of income. The BEA removes the other two components of portfolio income, dividends and capital gains, in calculating the profit concept used in the *National Income and Product Accounts*. The objective of the BEA in reporting profit data is to measure revenues earned on the basis of *current* production. For details, see US Department of Commerce (2002).

There are two reasons for using corporate cash flow as a point of comparison to portfolio income rather than simply reporting profits, a somewhat less unwieldy and more intuitive measure. The first is that portfolio income is a pure revenue stream, whereas profits are reported net-of-cost, making a comparison between the two somewhat misleading. Ideally, to make the two series fully comparable, portfolio income would be reported after the costs associated with managing financial transactions (office space, salaries, etc.) had been subtracted. However, given data limitations, it is impossible to allocate costs of production between real and financial activities. As such, rather than profits, what is needed is a measure of the total capital available to the firm, which is arguably what corporate cash flow captures.<sup>15</sup>

Understanding why this so requires a brief explanation of the concept of depreciation. Depreciation is based on the idea that capital is constantly being used up in the process of production. If a manufacturing firm uses a given piece of machinery for 10 years, for example, then each year some of the value represented by the machine is depleted. In order to encourage investment, the Internal Revenue Service (IRS) compensates for the value of the capital used up in production by allowing firms to subtract a depreciation allowance from their total earnings in order to calculate taxable profits. Yet while capital depreciates continually over the lifetime of capital, firms do not ‘pay’ the cost of depreciation continually, but only as capital is retired and replaced—in this example, at the end of 10 years. Thus, in any given year, the total capital available to the firm consists of profits subject to tax *plus* depreciation allowances (which can be thought of as profits not subject to tax).

The second reason for using corporate cash flow instead of profits in constructing the portfolio income measure is closely related. It concerns the progressive liberalization of depreciation allowances.<sup>16</sup> Depreciation allowances are not only intended as an incentive to investment; they have also been a major vehicle for delivering tax breaks to business. Over the post-war period, Congress has repeatedly mandated that the IRS shorten expected service lives—the length of time over which capital is assumed to wear out—allowing firms to depreciate investments

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<sup>15</sup> It should be emphasized that, even augmented by depreciation allowances, corporate cash flow is still a net-of-cost measure: wages, salaries, the cost of materials used in production, etc., have all been subtracted from revenues in computing cash flow. Thus, the portfolio income measure should not be interpreted as literally representing the ‘share’ of the non-financial sector’s available capital generated by financial investments. Rather, the total capital available to non-financial firms provides a meaningful metric against which we can compare the growth of portfolio income. In this sense, the measure computed here is similar to a measure often used to describe the financialization of the household sector, the ratio of the value of financial assets to disposable income. The numerator represents a (potential) revenue stream, whereas the denominator is net of a major household expenditure (income taxes). Nevertheless, a comparison of the two tells us in some meaningful way how ‘large’ a quantity the value of financial assets represents. The intuition here is analogous.

<sup>16</sup> The argument here closely follows Block’s (1990) unpublished investigation of depreciation and national income accounting.

more quickly (and hence take larger deductions from earnings in order to calculate taxable profits). While we lack solid empirical studies of depreciation patterns in many industries, the industries for which studies do exist suggest that the service lives assumed by IRS depreciation allowances have diverged rather dramatically from actual patterns of capital use. This is attested to by the fact that the BEA's independent estimates of service lives are considerably longer than those assumed by IRS depreciation (Block, 1990). While the BEA does attempt to correct for this discrepancy in assumed service lives when incorporating the IRS source data into its measure of profits, the BEA procedure also contains other assumptions that make its estimate of depreciation as large or larger than IRS estimates of depreciation.<sup>17</sup> The result is that, relative to the immediate post-war period, profits in recent years are significantly understated in these data. Thus, in order to eliminate the possibility that an increasing ratio of portfolio income to profits could be an artifact of changes in the tax treatment of depreciation, I add depreciation allowances back into profits to calculate corporate cash flow.<sup>18</sup>

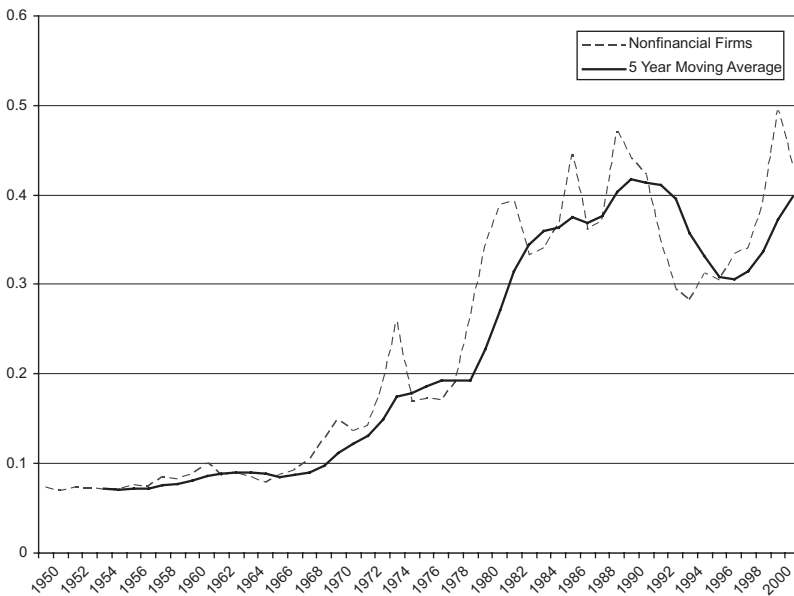
Figure 4 shows the ratio of portfolio income to corporate cash flow among non-financial firms between 1950 and 2001.<sup>19</sup> A 5-year moving average is shown with the annual data. An increasing trend indicates a higher share of revenues coming from financial relative to non-financial sources of income and hence is consistent with a greater degree of financialization. The ratio is remarkably stable in the 1950s and 1960s, but begins to climb upward in the 1970s, and then increases sharply over the course of the 1980s. In the late 1980s, the ratio peaks at a level that is approximately *five times* the levels typical of the immediate post-war decades. The ratio retreats somewhat from the high levels obtained during the 1980s in the first half of

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<sup>17</sup> In particular, the BEA's capital consumption adjustment converts depreciation from a historical-cost to a replacement-cost basis. As Block (1990) notes, there is no *a priori* theoretical justification for preferring depreciation figures based on replacement cost to historical-cost depreciation. *In addition*, there are serious methodological difficulties associated with using the capital consumption adjustment in the present context (see Krippner, 2005 for details). Profits are reported here *without* the capital consumption adjustment.

<sup>18</sup> There is, of course, the possibility that larger depreciation allowances are not simply a reflection of tax changes, but also reflect an *actual* shortening of service lives, especially as computer equipment and software have become a more significant component of investment expenditures. Unfortunately, this represents an empirical problem that is not particularly tractable with the available data. To the extent that larger depreciation allowances *are* justified by a real shortening of service lives, the reported measure is a *conservative* estimate of financialization (because adding depreciation allowances into the denominator results in a smaller value for the overall ratio, especially in recent decades). I am indebted to James Crotty for this point.

<sup>19</sup> Data on portfolio income are from the IRS, Statistics of Income, *Corporation Income Tax Returns*. Data on corporate profits are from the *National Income and Product Accounts*, Table 6.16. Data on depreciation allowances are from the *National Income and Product Accounts*, Table 6.22.

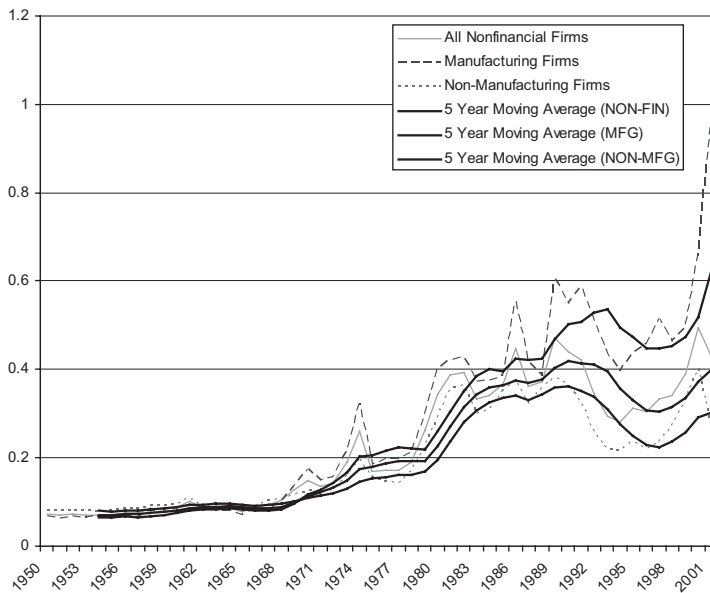


**Figure 4** Ratio of portfolio income to cash flow for US non-financial corporations, 1950–2001.

the 1990s before recovering in the second half of the 1990s. While there is considerable volatility in the measure, what is most striking about the graph is the dramatic divergence in the structure of the economy between the immediate post-war period and the period beginning in the 1970s.

Figure 5 presents these data disaggregated by manufacturing and non-manufacturing sectors of the economy.<sup>20</sup> For purposes of comparison, the data for all non-financial firms are also reported in Figure 5. The graph indicates that, beginning in the 1970s, manufacturing leads the trend in this measure for the non-financial economy as a whole. Given that increased labour militancy, intensified international competition and declining profitability were especially serious problems in the manufacturing sector during the 1970s (see Marglin and Schor, 1990), we would expect to observe manufacturing firms relying on financial sources of income to a greater extent than non-financial firms as a whole in this period (cf., Arrighi, 1994; Fligstein, 2001; Magdoff and Sweezy, 1987). While manufacturing subsequently staged something of a recovery from its dismal performance in the 1970s and the first half of the 1980s (Brenner, 2002), the sector continues to lead the trend in the portfolio income measure through 2001, the last year for which data are available. This may reflect the extent to which firms in highly cyclical manufacturing

<sup>20</sup> Data sources are the same as for Figure 4.



**Figure 5** Ratio of portfolio income to cash flow for US manufacturing and non-manufacturing industries, 1950–2001.

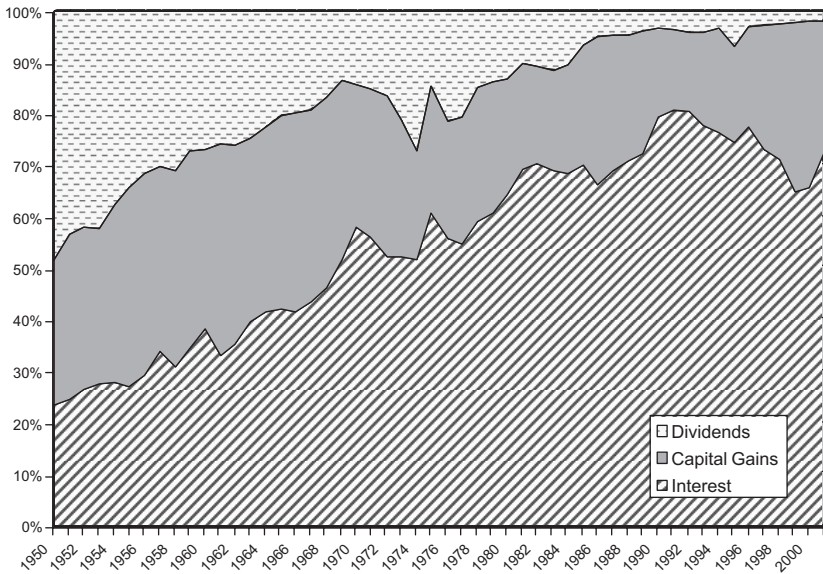
industries increasingly depend on financial revenues to subsidize profits from productive enterprise.<sup>21</sup>

Finally, Figure 6 breaks out the components of portfolio income, reporting the share of the total accounted for by each. It reveals that the upward surge in portfolio income in the last three decades was largely accounted for by increases in the interest component, rather than by capital gains, which merely held steady over the period, or dividends, which lost share relative to the other two components. This is a surprising result, and it argues strongly against reducing financialization to developments in the stock market. While there clearly is a relationship between financialization and the bull market of the 1980s and 1990s, it is a more indirect one than is commonly assumed, at least as reflected by this measure.

### 3.2 Financial and non-financial profits

I have examined one measure of financialization that gauges the behaviour of non-financial firms. Yet financialization should be reflected *both* in the behaviour of non-financial firms and in the overall growth of profits in the financial sector.

<sup>21</sup> This phenomenon is well documented with respect to the auto industry. See Froud *et al.* (2002; cf., Hakim, 2004).



**Figure 6** Share of total portfolio income accounted for by individual components for US non-financial corporations, 1950–2001.

Thus, a second perspective on the process of financialization is sectoral in nature, *comparing the profits generated in financial and non-financial sectors of the economy*. This section argues that, above and beyond the increasing weight of financial activities in generating income streams for non-financial firms, the financial sector itself has become an increasingly privileged site of accumulation in the economy.

I previewed the sectoral composition of profits for purposes of illustration earlier in the paper, but here it is necessary to be considerably more careful in how measures of profitability are constructed and interpreted. In particular, it is important to take into account some of the problems associated with depreciation already discussed in conjunction with the portfolio income measure. As noted, the liberalization of depreciation allowances in recent years results in profit figures that are artificially low relative to figures from the 1950s and 1960s. Even more troubling, depreciation allowances are not evenly distributed across firms, but will be highest for firms in capital-intensive industries, like manufacturing. Thus, these problems will bias a comparison of the financial and non-financial sectors, overstating the growth of financial relative to non-financial profits, especially in recent years. In short, corporate profit data present *too favourable* an estimate of financialization.

One possible solution is to rely on corporate cash flow instead of profits, as I did when examining the portfolio income of non-financial firms. By adding depreciation allowances back into profit figures, such a measure eliminates the risk that

financial profits appear high relative to non-financial profits solely as an artifact of the differential tax treatment of financial and non-financial firms. But while in using corporate cash flow previously, I was interested in capturing the total capital available to firms, here I am actually interested in profits. As a proxy for accumulation, corporate cash flow data suffer from the opposite bias to that of corporate profit data. In particular, while liberalized depreciation allowances overstate true depreciation, *true depreciation is not zero* and represents a cost borne by firms against profits. As before, this cost is not evenly distributed across firms, but will be highest in capital-intensive industries. Thus, corporate cash flow data produce an inflated estimate of profits in industries such as manufacturing, understating financial profits relative to non-financial profits. In sum, then, corporate cash flow data present *too conservative* an estimate of financialization.

Since the flaws of these two measures are symmetrical and offsetting, we can be confident that the true, unobserved ratio of financial to non-financial profits lies somewhere in between the two measures.<sup>22</sup> In Figure 7, I report both corporate profits and corporate cash flow as upper and lower bounds for financialization, respectively.<sup>23</sup> A 5-year moving average is shown with the annual data; an upwards trend in the ratio is consistent with greater degrees of financialization. On either measure, the ratio is relatively stable in the 1950s and 1960s but becomes more volatile beginning in the 1970s. The ratio increases gradually in the 1970s, followed by a sharp upward surge during the 'deal decade' of the 1980s. The ratio then retreats somewhat in the first half of the 1990s, but subsequently recovers and supersedes even the soaring levels of the previous decade by the end of the 1990s. At its highest point at the end of the period, the ratio ranges (depending on which measure one follows) from approximately *three to five times* the levels typical of the 1950s and 1960s.

#### 4. Financialization and the reorganization of corporate activity

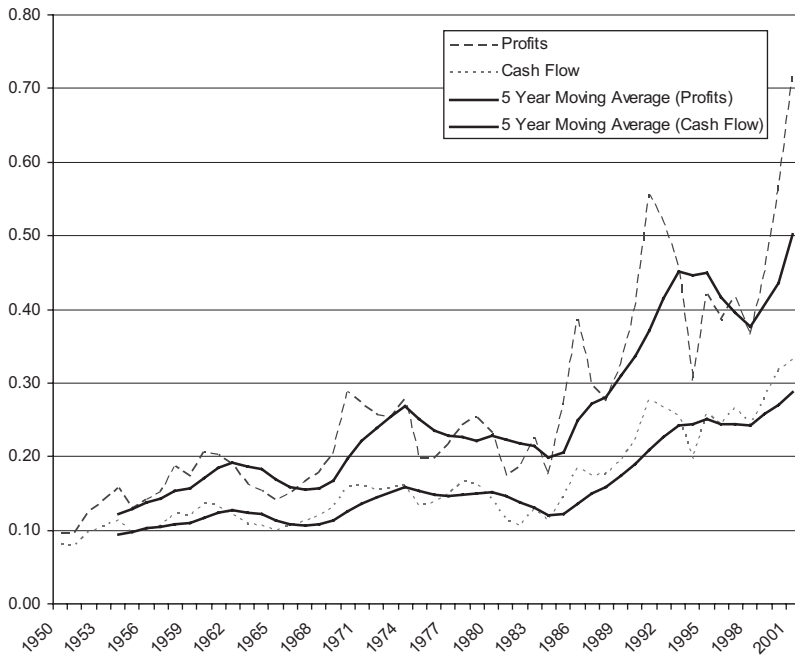
A general problem for scholars attempting to characterize recent changes in capitalism is the difficulty of distinguishing changes in the *organization* of economic activity from changes in the *substance* of those activities. There are two discrete developments to consider in this regard, both of which potentially threaten the

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<sup>22</sup> Here again it is important to acknowledge the possibility that depreciation allowances may be large in recent years partly as a result of increased investment in computer equipment and software (see footnote 18). To the extent that larger depreciation allowances reflect *actual* changes in the composition of investment and not merely changes in tax law, profit data represent a better approximation of the underlying phenomenon than cash flow data.

<sup>23</sup> Data on corporate profits and depreciation allowances are from the BEA's *Gross Product Originating* series.





**Figure 7** Ratio of financial to non-financial profits and cash flow in US economy, 1950–2001.

interpretation of the US economy as currently undergoing a process of financialization. The first issue is the growing trend among firms towards outsourcing certain activities previously performed ‘in-house’. Should the practice of contracting-out financial functions once executed in the finance departments of manufacturing corporations, for example, be counted as evidence for financialization (or, for that matter, for post-industrialism)? In this case, it is not the activity *per se* that is new, but simply its sectoral location *vis-à-vis* shifting firm boundaries—and consequently, where it is visible in the economic data. A second, related threat to the interpretation of the data as reflecting the financialization of the US economy revolves around the increasing prevalence of subsidiary ownership among large industrial corporations (Boies and Prechel, 2002). Here we must consider the possibility that changing ownership structures—and not a novel pattern of accumulation—have generated the results presented in the previous section of the paper.

#### 4.1 Outsourcing

To deal first with the outsourcing issue, the objection is that what appears in the data as ‘financialization’ may in reality be an artifact of the reorganization of firms, such that financial activities that once took place inside non-financial firms now

take place outside of them.<sup>24</sup> In this regard, it is important to consider to what extent outsourcing may compromise the results presented in this paper. While it is not possible to fully discount outsourcing as contributing to the trends observed in the data, the specific way in which I have constructed the evidence for financialization minimizes the risk that the results presented in the previous section are merely an artifact of corporate reorganization. I explain how this is the case with the aid of a concrete example.

The management of trade receivables represents a financial function that was formerly carried out within non-financial firms but is now typically outsourced to specialized financial firms. Trade receivables are short-term credits extended between a firm and its suppliers to facilitate interfirm trade. For example, Firm A purchases machinery from Firm B. Rather than accepting payment for the machinery immediately, Firm B ‘extends’ credit to Firm A for the amount of the sale. In order to make good on this debt, Firm A pays interest—as well as eventually the ‘principal’ on the loan—to Firm B. In the early post-war decades, trade receivables were very often carried on the books of non-financial firms. In more recent years, in contrast, non-financial firms commonly sell their receivables to financial firms that specialize in managing the risks associated with collecting on these debts. This development exerts a downward bias on the first measure—portfolio income—by depriving non-financial firms of a source of interest income. At the same time, the growth of a segment of the financial industry specializing in managing trade receivables generates profits in the financial sector, exerting an upward bias on the second measure of financialization, the ratio of financial to non-financial profits.

This very concrete example makes a general point: the biases of the two measures of financialization tend in opposite directions with respect to the implications of outsourcing. Thus, the fact that both measures show the same trend in spite of these opposite biases increases confidence that outsourcing does not account for the patterns observed in the data.

#### 4.2 *Subsidiary formation*

Another threat to the results presented in the previous section relates to a second form of corporate reorganization—that of subsidiary formation.<sup>25</sup> Subsidiary formation resembles the practice of outsourcing, but here the key relationship between firms is not contractual but one of *ownership*. A subsidiary is formed when a multidivisional firm sells one of its divisions, creating a separate legal entity in

<sup>24</sup> I am indebted to Dean Baker for bringing this issue to my attention.

<sup>25</sup> I am indebted to Mark Suchman for raising this objection.

which the parent company holds a controlling interest by maintaining majority (i.e. more than 50%) ownership of the subsidiary firm's stock.<sup>26</sup> Subsidiaries may also be acquired when a company purchases a majority stake in another firm (i.e. not previously organized as a division of the parent). Evidence suggests that subsidiary ownership is far from a trivial phenomenon in the US economy. Indeed, Boies and Prechel (2002) argue that the 'multi-layered subsidiary form' has replaced the multidivisional firm as the *modus operandi* of the contemporary American corporation. As such, the implications of this development warrant careful consideration. There are two separate issues here: first, the possibility that changing ownership patterns might artificially inflate dividends and thereby distort estimates of portfolio income; and second, the potential for the non-financial ownership of financial subsidiaries to blur the lines between sectors of the economy. I consider each of these issues in turn.

The practice of 'spinning off' divisions into subsidiaries directly affects the interpretation given to the portfolio income data: as the majority stock owner, the parent company receives dividends paid out by the subsidiary corporation. Since dividend income is a component of portfolio income, part of the upward trend in that measure in the last two decades could simply reflect this form of corporate reorganization rather than the growing orientation of non-financial firms to financial markets. However, it should be noted that the timing of subsidiary formation does not correspond closely to the trend in portfolio income observed in Figure 4, suggesting that if subsidiary formation has contributed to these results, it does not *determine* them. More specifically, Boies and Prechel (2002, p. 302) note that while the largest 100 industrial corporations created 703 new subsidiaries between 1981 and 1987, the rate of subsidiary formation more than doubled between 1987 and 1993, with 1796 new subsidiaries formed. Comparing these figures to the data on portfolio income reported in Figure 4, we note that portfolio income surged upwards during the first half of the 1980s, but then slowed just as subsidiary formation was itself accelerating dramatically in the late 1980s and early 1990s. In addition, the analysis presented in Figure 6 weakens the plausibility of this alternative explanation for the upward trend in the portfolio income measure: dividends account for a *decreasing* share of total portfolio income over the post-war period.<sup>27</sup> Finally, it should also be noted that, whatever the role of

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<sup>26</sup> It should be noted that not all such 'spin offs' result in the creation of subsidiaries—a company may choose not to retain majority ownership of a division that is put up for sale. I am indebted to Harland Prechel for clarifying this and many other aspects of subsidiary formation.

<sup>27</sup> It should be noted that the basic point holds even when foreign-source dividends are considered. Foreign-source dividends maintain—but do not increase—their share of total portfolio income over the period. Data on foreign-source dividends are not shown here but are available from the author upon request.

subsidiary formation in contributing to portfolio income, this phenomenon does not affect the second measure of financialization—the ratio of financial to non-financial profits—as dividends are *not* included in the profit data.<sup>28</sup>

A related problem to consider is how non-financial ownership of financial subsidiaries might affect estimates of financialization by blurring the lines between financial and non-financial sectors of the economy. As with the issue of dividends, the implications of this problem diverge for our two measures of financialization. The divergence, in this case, results from the way in which economic units are assigned an industry classification for purposes of incorporation into national economic data. Industrial classifications may be determined on an *establishment* or on a *company* basis. An establishment is an economic unit at a single physical location. A company is comprised of one or more establishments owned by the same legal entity, regardless of physical location. Establishments are assigned an industrial classification on the basis of their principle product. While companies may own establishments in many different industries, companies are assigned to an industrial classification on the basis of the activity that generates the largest revenue in *all* establishments. Thus, where data are reported on a company basis, individual establishments may be misallocated to whatever industry dominates revenues for the entire company.

The data used in constructing the portfolio income measure are reported on a company basis; the ratio of financial to non-financial profits is on an establishment basis. Thus, the latter measure is *not* affected by the problem of subsidiary ownership. Unless the non-financial parent and financial subsidiary literally occupy the same physical space—a prospect that seems unlikely—subsidiary ownership will have no bearing on the results reported. Portfolio income data, in contrast, *are* affected by patterns of subsidiary ownership. In cases where non-financial parents acquire financial subsidiaries, the revenues of these financial subsidiaries may be incorrectly attributed to non-financial parents, potentially inflating the estimate of financialization reported in Figure 4. Thus, to the extent that such acquisitions have accelerated in recent years, it is possible that the upward trend in portfolio income reflects changing forms of ownership rather than a truly novel pattern of accumulation. However, because this particular measure is intended to show the *dependence of non-financial corporations on financial sources of revenue*, I would argue that, in this case, changing forms of ownership *do* reflect a novel pattern of accumulation (e.g. Froud *et al.*, 2002). In short, while the portfolio income measure is reported on a company basis primarily because of data limitations, including the income of financial subsidiaries owned by non-financial corporations in portfolio income seems appropriate *given what the measure seeks to capture*.

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<sup>28</sup> Dividends *received* by corporations are removed from profit data by the BEA because they do not reflect income from current production. Similarly, dividends *paid* by corporations do not affect this analysis as I report profits prior to any distributions.

To summarize, corporate reorganization—analyzed either in terms of outsourcing or subsidiary formation—merits careful consideration in terms of its implications for the central results of this paper. However, the fact that the effect of corporate reorganization is not uniform but varies across the two main indicators of financialization provides reassurance that while outsourcing and subsidiary ownership may contribute to these results, they do not by themselves account for them. In particular, outsourcing affects the two measures of financialization in opposite directions, whereas problems associated with subsidiary formation were shown to affect only the portfolio income measure and not the ratio of financial to non-financial profits. In addition, I suggested that we should not be unduly alarmed with respect to the implications of subsidiary ownership for the portfolio income measure. With respect to the dividend issue, the shape of the portfolio income graph does not closely correspond to the timing of subsidiary formation. Dividends also account for a decreasing share of portfolio income. With respect to non-financial ownership of financial subsidiaries, including the income of these subsidiaries as a component of the portfolio income of non-financial firms seems appropriate. I conclude that corporate reorganization does not pose a *fundamental* threat to the results presented here.

## 5. Financialization and the globalization of production

A final issue to consider is how the structural shift in the economy documented in this paper intersects with the global reorganization of production. Another objection to the argument presented here is that what we are observing as the ‘financialization’ of the US economy is in fact a result of the spatial restructuring of economic activity where production increasingly occurs offshore but financial functions continue to be located in the domestic economy.<sup>29</sup> It is important to note that both of the measures developed in this paper, which rely exclusively on domestic data, are vulnerable to such an objection. In the case of portfolio income, the sharp upward trend in the measure could be a reflection not of a genuine expansion of financial relative to productive sources of income, but rather the *relocation* of manufacturing activities (and associated income flows) outside the boundaries of the US economy. In the case of the sectoral analysis of profits, the growing weight of financial relative to non-financial profits might similarly be generated by the increasing importance of US non-financial profits earned abroad (which are *not* included in the reported measure). If such scenarios accounted for the trends observed in this paper, we might still refer to the US economy as having been ‘financialized,’ but the term would not then signal a new way of characterizing current developments in the US economy, but rather could be subsumed into already

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<sup>29</sup> I am indebted to Erik Wright for raising this objection.

existing literatures on deindustrialization and the changing international division of labour (Bluestone and Harrison, 1982; Frobel *et al.*, 1980).

There are, however, reasons to be sceptical of the claim that the findings reported here are better understood in terms of processes associated with the globalization of production. With regard to portfolio income, there is no reason to assume *a priori* that the movement of production offshore (and associated income flows) has outpaced revenues generated by increased investment in foreign financial instruments. Similarly, with regard to the sectoral analysis of profits, there is also no *a priori* reason to expect that non-financial profits dominate financial sector profits earned abroad. We know that with the development of the Eurodollar market in the 1960s, banking activities soon followed manufacturing offshore (Helleiner, 1994); the internationalization of US financial capital has continued apace in more recent years (Sassen, 2001). With respect to both measures, more fundamentally, the activities of US firms abroad are fairly insignificant relative to the size of the domestic economy, in spite of popular beliefs to the contrary (Hirst and Thompson, 1999). Nevertheless it is important to examine the data on this question.

In the analysis that follows, I use *domestic* portfolio income or profits to refer to the portfolio income or profits generated by economic activity undertaken inside the territorial US. I use *foreign-source* portfolio income or *US profits earned abroad* to refer to portfolio income or profits earned by US corporations outside of the territorial US. I use *global* portfolio income or profits to refer to portfolio income or profits earned in the territorial US *plus* foreign-source portfolio income or profits earned abroad by US corporations (i.e. global portfolio income = domestic portfolio income + foreign-source portfolio income; global profits = domestic profits + US profits earned abroad). The same conventions apply to the labels used to describe Figures 8–11.

### 5.1 *Global portfolio income of US non-financial corporations*

Beginning with the portfolio income measure, a first cut at the problem involves recalculating the measure by incorporating foreign-source income from financial and productive activities into the numerator and denominator of the ratio, respectively. There are serious data limitations involved in such a calculation: the appropriate data must be drawn from three different sources and are available at the correct level of industry disaggregation for only a handful of years: 1978, 1980, 1982, 1984, 1986, 1990, 1992–1999.<sup>30</sup> In spite of the relatively limited number of data points, the period covered is a critical one in terms of the crisis of manufacturing, which precipitated a significant movement of production offshore (Brenner, 1998). Thus, these

<sup>30</sup> See Krippner (2005) for complete details on the construction of this measure.

data should be sufficient to evaluate the hypothesis that what is driving financialization is not a substantive change in the nature of the economy but rather the spatial reorganization of economic activity associated with globalization.

Figure 8 presents the portfolio income measure recalculated to reflect the global economic activities of US non-financial corporations—that is, incorporating both domestic *and* foreign-sources of income.<sup>31</sup> For purposes of comparison, I also plot the same data points using the original domestic measure. An examination of Figure 8 shows that the domestic and global portfolio income measures track each other very closely. As mentioned, this reflects the large size of the domestic economy relative to international activity: the results for the domestic economy dominate the trend for the global measure.

This being the case, it is informative to examine the foreign-source data separately. An examination of the ratio of foreign-source portfolio income to cash flow generated abroad (i.e. calculated so as to exclude domestic economic activity), shown in Figure 9, reveals a striking fact: financialization is even more strongly in evidence in the offshore activities of US non-financial corporations than is the case for the domestic economy considered in isolation.<sup>32</sup> While some care is required in interpreting these data given the relatively restricted number of years for which data are available, these results are not consistent with the claim that financialization in the domestic economy is simply an artifact of the offshoring of production.

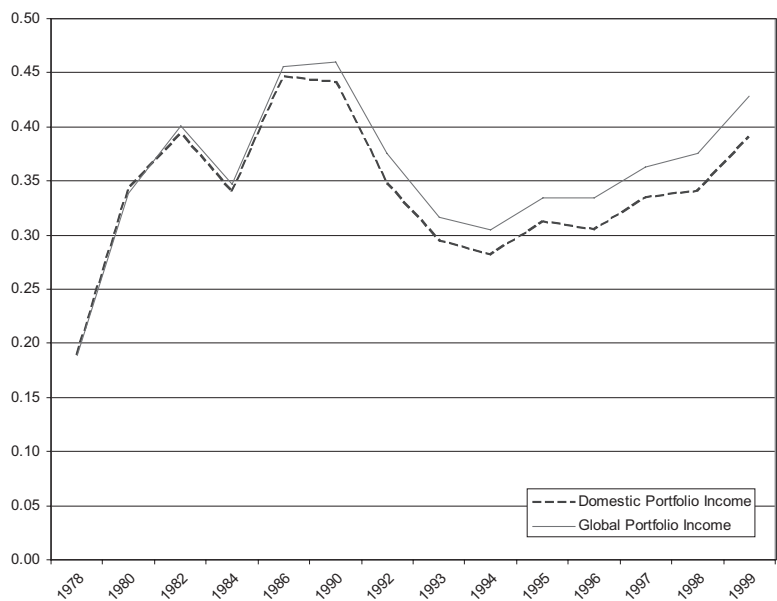
## 5.2 Global financial and non-financial profits of US corporations

A similar analysis can be performed with respect to the sectoral analysis of profits by recalculating the ratio of financial *versus* non-financial profits including US profits earned abroad in the measure. For this analysis of the global profits of US corporations, data are available appropriately disaggregated by industry for *all* years between 1977 and 1999.<sup>33</sup> As before, given the restricted number of years for

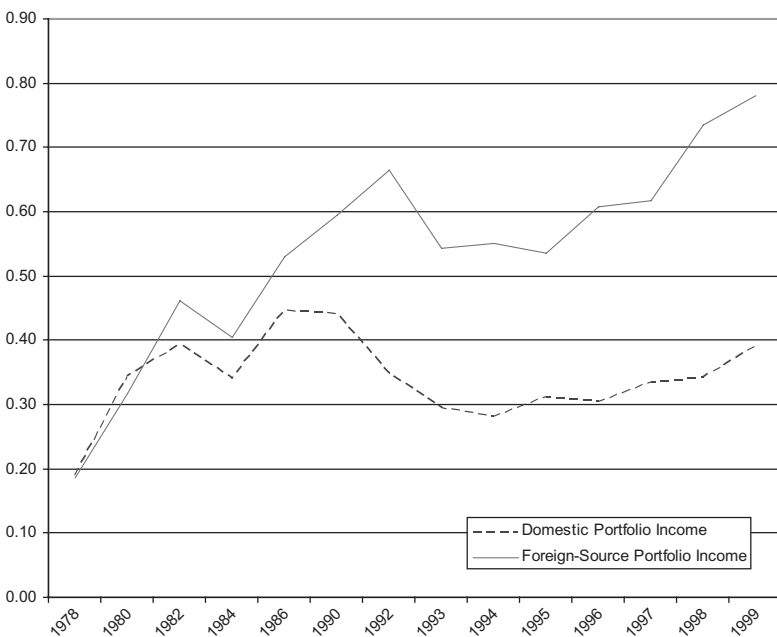
<sup>31</sup> Data sources for domestic portfolio income, corporate profits, and depreciation allowances are described in footnote 19. Data on dividends paid to US corporations by foreign corporations are from the *Corporation Income Tax Statistics*. Data on interest earned on foreign investments, depreciation allowances claimed against foreign income taxes, and foreign taxes paid by US corporations are from the *Foreign Tax Credit* data. Data on US profits earned abroad for 1982 to 1999 are from the *Balance of Payments*, Table 16. Data for 1977–81 are taken from *US Direct Investment Abroad: Balance of Payments and Direct Investment Position Estimates, 1977–81*, Table 10.

<sup>32</sup> Data sources for foreign-source portfolio income, foreign taxes paid, depreciation allowances claimed against foreign taxes, and profits earned abroad by US corporations are the same as for Figure 8.

<sup>33</sup> Data complications result from the way foreign taxes are reported in this data. Examination of the data suggests that these problems do not compromise the basic results shown in Figures 10 and 11. Space considerations prevent a full discussion of these problems here; see Krippner (2005) for details.

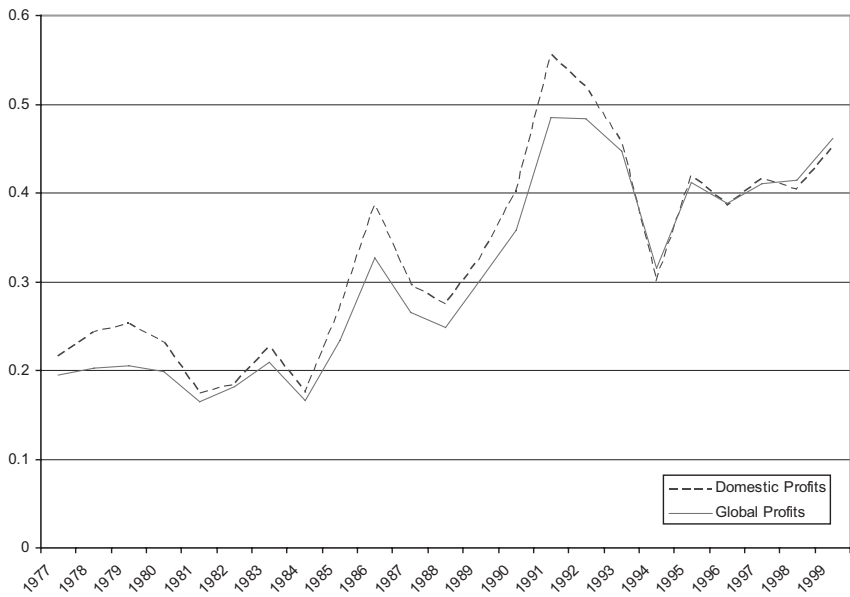


**Figure 8** Ratio of global and domestic portfolio income to cash flow for US non-financial firms, 1978–99.

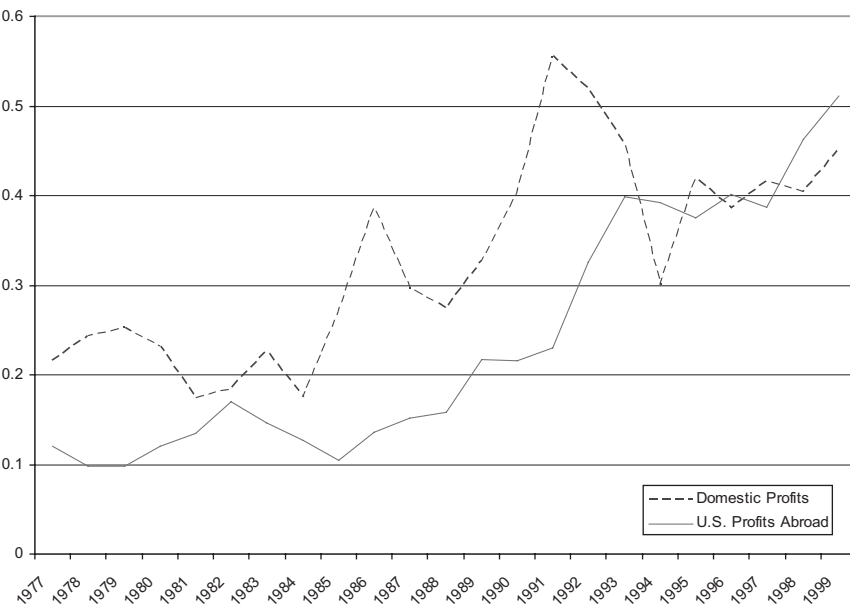


**Figure 9** Ratio of foreign-source and domestic portfolio income to cash flow for US non-financial firms, 1978–99.





**Figure 10** Ratio of financial to non-financial global profits earned by US corporations, 1977–99.



**Figure 11** Ratio of financial to non-financial profits earned abroad by US corporations, 1977–99.

which data are reported, some caution should be used in extrapolating results reported on the basis of domestic data alone to these results. However, data from a 22-year period beginning in the late 1970s should be sufficient to evaluate the hypothesis that what appears in the US as ‘financialization’ reflects the spatial reorganization of production when viewed globally.

Figure 10 presents the results of this analysis, which closely track the results obtained when examining domestic profits alone, also reported here for purposes of comparison.<sup>34</sup> Based on the data, it does not appear that including profits earned abroad into the measure significantly attenuates the observed trend toward the increasing weight of the financial sector in the economy.

As was also the case with the analysis of portfolio income, this result in part reflects the fact that US profits earned abroad are relatively insignificant when compared to profits earned in the domestic economy. But, independently of the magnitudes involved, we still might be interested in analyzing the ratio of financial to non-financial profits for firms operating abroad. Figure 11 shows the ratio of financial to non-financial profits earned abroad by US corporations.<sup>35</sup> I again report the domestic data for comparison. While the ratio of financial to non-financial profits earned abroad starts from a lower level relative to the domestic ratio, the measure climbs sharply, overtaking domestic profits by the end of the 1990s. Here, too, financialization is evident.

## 6. Conclusion

The aim of this paper has been to suggest an alternative way of characterizing recent developments in the US economy by substituting an accumulation-centred perspective for the more standard activity-centred view of economic change. The result of shifting our ‘lens’ in this way is that financialization—rather than the rise of the service economy or post-industrialism—emerges as the most important ‘fact’ about the economy. Such characterizations tend to be freely coined and even more freely used. Indeed, there is no shortage of labels to describe the nature of recent economic change: globalization, neo-liberalism, post-fordism, flexible specialization, the new economy—all in addition to post-industrialism. Is it prudent to add financialization to a long list of such neologisms? In this regard, two features of this research programme rescue it from mere label-mongering: (1) the exercise is

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<sup>34</sup> Data on US profits earned abroad for 1982–99 are from the *Balance of Payments*, Table 16. Data for 1977–81 are taken from *US Direct Investment Abroad: Balance of Payments and Direct Investment Position Estimates, 1977–81*, Table 10. Data on foreign income taxes paid by US firms operating abroad are from the *IRS Corporate Foreign Tax Credit* and from the *Corporation Income Tax Returns*.

<sup>35</sup> The data sources are the same as for Figure 10.

grounded firmly (as firmly, I believe, as is possible, given data limitations) in empirical evidence; and (2) financialization proves to be a *useful* concept for working through a number of difficult theoretical problems. By way of summing up, I discuss each of these points in turn.

In suggesting that the trajectory of the US economy in recent decades is aptly characterized in terms of a process of financialization, my central empirical claim is that accumulation is now occurring increasingly through financial channels. This is precisely what the data show. During the 1980s and 1990s, the ratio of portfolio income to corporate cash flow ranges between approximately *three and five times* the levels characteristic of the 1950s and 1960s. The ratio of financial to non-financial profits behaves similarly. In both cases, the first half of the 1990s represent something of a retreat from the dramatic degree of financialization in evidence during the 1980s. But, also in both cases, a resurgence appears to be underway by the end of the period; and even during the first half of the 1990s, what is most striking about the data is the divergence they show from the immediate post-war decades. While important differences also exist between the two measures (the behaviour of the 1970s is quite different across Figures 4 and 7, for example), the fact that both measures share in common the same basic trend enhances confidence that the fundamental patterns discussed here are robust in spite of the specific limitations of each individual measure.

Nevertheless, two caveats are in order. First, it is necessary to be explicit about what I am *not* asserting: specifically, that financialization represents an entirely novel phase of capitalism. The data presented in this paper relate only to *post-war* economic development; they do not allow us to form a judgement as to the role of finance in earlier periods. Certainly, the writings of Hobson ([1902] 1971), Hilferding ([1910] 1981), Lenin ([1916] 1988), and—more recently—Braudel (1982) and Arrighi (1994) would tend to suggest that financialization is a recurrent phase in the evolution of capitalist economies. Fully exploring the historical precedents for the current turn to finance is a rich exercise (Arrighi and Silver, 1999), but one that lies considerably beyond the scope of the present paper.

The second caveat is related to the first. Just as this paper does not suggest that financialization is a 'new' phase of capitalism, neither do these data allow us to draw any conclusions regarding the *permanency* of the trends documented here. In particular, data are not available that would enable us to say anything definitive about whether financialization has been sustained following the bursting of the stock market bubble in 2001. But whatever these data finally reveal, the longevity of this phenomenon *already* signals its importance in understanding the contemporary US economy. Indeed, while the stock market mania of the 1980s and 1990s is clearly associated with the financialization of the US economy, it would be a mistake to *reduce* financialization to developments in the stock market. The data show that financialization preceded the 'take-off' in the stock market by a full decade; if the

past is any guide, financialization may continue even after the market ceases to dazzle. This possibility appears more likely in light of the fact that increases in portfolio income, one of our two measures of financialization, largely reflect growth in interest income and *not* increases in capital gains or dividends. Nevertheless, this paper makes no attempt to forecast for how long or under what circumstances financialization will sustain itself—or reverse course.

While the primary objective of this paper has been to establish evidence for financialization, it is appropriate to close by considering some of the broader implications of this development. As I noted at the outset of this paper, there are innumerable ways of mobilizing data in order to characterize the most salient developments that mark an era. In this respect, profit data have a certain intuitive appeal—presumably, patterns of accumulation shape the evolution of economies in the long run. But employment data have an equally legitimate claim to represent what is most significant about the economy. Work, after all, is central to our lived experience of capitalist social relations. In this sense, I have argued that perspectives on economic change, such as post-industrialism and financialization (others could readily be added to the list), have to be justified not in terms of some absolute truth they reveal about the world but in terms of their *usefulness* with respect to specific theoretical problems. Different ways of ‘seeing’ the salient shifts that constitute long-term change in the economy produce new questions for investigation, and can potentially help to resolve impasses in areas of ongoing research. I now want to illustrate this proposition by providing two examples of longstanding debates in the social sciences where a view of economic change centred on financialization suggests novel approaches to persistent questions.

For the better part of a century, researchers have concerned themselves with the problem of who controls the modern corporation. Berle and Means’ (1932) famous thesis was that with the wide diffusion of stockownership, managers displaced owners at the helm of the economy. Such a development was considered progressive because managers were insulated from the most vicious social consequences of profit maximization—hence economic development assumed a more benign, if technocratic (e.g. Galbraith, 1967), character. While early interventions in this debate were directed at discerning the continued presence of a unified capitalist class in control of the core functions of the modern economy (Domhoff, 1967; Useem, 1984; Zeitlin, 1974), the implications of different forms of control for various aspects of corporate behaviour quickly became a central focus of research. This literature rejected the simple distinction between owners and managers posed by Berle and Means (1932) to examine the control of non-financial corporations by banks and other financial institutions. In an influential contribution, Kotz (1978) explored the implications of bank control for corporate strategy *vis-à-vis* debt financing and participation in mergers and acquisitions.

While Kotz’s results were largely suggestive, subsequent researchers explored the behavioural implications of financial control of non-financial corporations more

systematically. But methodological difficulties in establishing both control and its consequences are legion (e.g. Zeitlin, 1974); thus, results from this research programme have been somewhat inconclusive.<sup>36</sup> One result that is *not* inconclusive, however, is that financial institutions sit at the centre of the corporate network. An examination of interlock data reveals that banks are the most highly interlocked firms in the economy, meaning that shared directorships most often involve bank executives (see Mintz and Schwartz, 1985). But, as Mizruchi (1996) acknowledges, it is not clear what these interlocks ‘do.’ Do non-financial corporations place financial directors on their boards in order to secure access to loan capital, as resource dependency theory suggests (Burt, 1983; Pfeffer and Salancik, 1978)? Or do bank directors sit on non-financial boards in order to monitor—and shape—the behaviour of non-financial clients (Kotz, 1978; Mintz and Schwartz, 1985; Mizruchi and Sterns, 1994a)? In short, *who is controlling whom?* Put differently, are interlocks cause *or* consequence of corporate strategy? Disagreement over such issues has continued without clear resolution (Mizruchi, 1996). More recently, related questions have been posed in the literature on the rise of the ‘shareholder value’ model of the firm: has this strategy come from ‘inside’ non-financial corporations, initiated by management, or has it been imposed on non-financial firms by financial sector ‘outsiders’ (cf., Davis and Thompson, 1994; Fligstein, 2001; Zorn *et al.*, 2004)?

Part of the difficulty here reflects the fact that even where it is possible to detect relationships between financial and non-financial firms, instances of ‘control’ are often not directly observable (Mintz and Schwartz, 1985). But the perspective on financialization outlined in this paper suggests that there may be other ways of making sense of corporate behaviour. Indeed, one of the virtues of the financialization perspective is precisely that it attempts to transcend a purely sectoral understanding of the firm. In this sense, the position articulated here harkens back to the early 20th-century literature on finance capital (Hobson, [1902] 1971; Hilferding, [1910] 1981; Lenin, [1916] 1988). Rather than asserting bank dominance over industrial firms—as in much of the contemporary bank control literature—these early theorists of financialization emphasized the ‘union’ of industrial and financial capital in a ‘new social type.’ As Zeitlin (1976, p. 900; emphasis added) observed, ‘Neither “financiers” extracting interest at the expense of industrial profits nor “bankers” controlling corporations, but *finance capitalists* on the boards of the largest banks and [non-financial] corporations preside over . . . investments, organizing production, sales, and financing, and appropriating the profits of their integrated activities.’

While Zeitlin was primarily interested in assessing the class character of this ‘union,’ here the point is to note the convergence between financial and non-financial

<sup>36</sup> See Fligstein (2001), Mizruchi (1996), Mizruchi and Stearns (1994b) and Stinchcombe (1990) for sharply contrasting views of what this literature has accomplished.

firms under financialization. While evidence of financial control of non-financial corporations remains elusive, the increasing dependence of non-financial firms on financial activities as a source of revenue is critical for understanding the behaviour of these firms. Indeed, the very elusiveness of the control debate reflects the fact that the distinction between forces operating 'inside' and 'outside' non-financial corporations is becoming increasingly arbitrary. Non-financial corporations are beginning to resemble financial corporations—in some cases, *closely*—and we need to take this insight to our studies of corporate behaviour. While the data presented here indicate the broad relevance of this approach, aggregate-level data undoubtedly mask significant variation. Thus, firm-level research exploring how the financialization of non-financial corporations has changed corporate behaviour is an important area for future work.<sup>37</sup>

A second area of current research where financialization has important implications concerns the relationship between globalization and the state—one of the most vexed issues in all of social science. Two broad perspectives have emerged in this literature corresponding to what Hobson and Ramesh (2002) have identified as 'structuralist' and 'agent-centric' approaches. The first of these associates globalization with an unequivocal loss of state power to define economic and social policy and protect citizens from the ravages of the global market. Popular writers (e.g. Greider, 1997) have been the most vocal champions of this perspective, but it is well represented in the scholarly literature as well (Cerny, 1996; Gill and Law, 1988; Strange, 1996). Critics of this view have reasserted the agency of state actors, suggesting that both the degree of global economic integration and its effect on the state have been overstated. In particular, the lion's share of economic activity in the advanced industrial economies is still oriented towards domestic markets; moreover, foreign investment is concentrated *between* advanced industrial economies, undermining any expectation of a 'race to the bottom' (Gordon, 1988; Hirst and Thompson, 1999; Wade 1996). Given these findings, it is difficult to square the supposed effects of globalization on the state with the rather limited extent to which international economic integration is in evidence—particularly in large economies such as the US.

One context in which these debates play out with particular intensity concerns transformations occurring in contemporary welfare states. There is now a voluminous literature detailing the impact of increased economic globalization—especially *vis-à-vis* heightened international capital mobility—on welfare state retrenchment.<sup>38</sup> This literature has reproduced in broad strokes the positions represented in the wider debate on globalization and the state, although in recent years

<sup>37</sup> For a promising beginning, see the important work of Froud *et al.* (1998, 2002) on the auto industry.

<sup>38</sup> See Guillen (2001), Ó Riain (2000) and Stryker (1998) for three recent reviews.

a number of researchers working in this area have staked out intermediate positions (e.g. Hicks, 1999; Huber and Stephens, 2001; Swank, 2002). Against globalization sceptics, these scholars have argued that international economic integration *has* occurred, if in a more limited and moderate fashion than is often implied. But the relationship between globalization and the welfare state is generally understood to be indirect (but see Garrett and Mitchell, 2001). Swank (2002) argues that international capital mobility has the potential to exert pressure on the welfare state, but such pressure is mediated in complex ways through domestic political institutions. Similarly, Huber and Stephens (2001) suggest that international capital mobility has undermined the ability of the state to wield supply-side and monetary policies in support of investment, resulting in higher unemployment, and hence strains on the revenue base supporting welfare state expenditures. Hicks (1999) finds that the relationship between globalization and welfare state retrenchment is *non-linear* in nature: increases in foreign direct investment are associated with an acceleration of welfare-state spending up to a certain threshold, and beyond that threshold a deceleration. Hicks (1999, p. 212) explains this result by suggesting that increased openness generates demands from citizens for 'protection' from the vicissitudes of international markets (cf., Garrett, 1998), but too much openness may embolden business interests, constraining the ability of the state to respond to such demands.

This research represents a welcome attempt to soften the terms of what has been a polarizing debate, but these researchers still must deal with the same basic problem as that confronted by more ardent proponents of the structuralist view. Even if the causal relationships are indirect, how do these scholars square what they acknowledge to be a modest degree of international economic integration with such significant effects on state structure? In this regard, another way around the impasse in the globalization literature is to examine contemporary welfare state transformations through the lens of financialization (see Arrighi and Silver, 1999). For although only a relatively small share of US firms participate to any significant degree in the global economy, the growing importance for non-financial firms of financial sources of revenue documented in this paper extends very broadly across the economy, and may be the *functional equivalent* of international capital mobility. That is, because financialization has lessened the dependence of non-financial firms on productive activities, it may have also reduced the dependence of these firms on their (domestic) workforces, in much the same way as is supposed to have occurred via placements of capital offshore. The point should not be overstated—production is, of course, still occurring in the American economy and to imply that it is somehow unimportant to non-financial firms would represent a gross exaggeration. But, at the same time, it is not hard to envisage how processes associated with financialization might have eroded the 'social pact' between capital and labour that provided crucial support for the welfare state during much of the post-war period—even, perhaps, more effectively than capital mobility *per se* (Silver, 2003;

Silver and Arrighi, 2001). Whether or not detailed empirical research actually bears out this thesis, we must conclude that, alongside investigations of its role in shifting centres of corporate control, financialization also promises new insights into the relationship between globalization and the state.

Why not proceed directly to such topics—of obvious social and political interest—rather than labour over the data on corporate profits, an exercise that at first glance seems somewhat removed from more pressing tasks? In closing, it is once again worth quoting Merton's famous essay: 'In sociology as in other disciplines, pseudofacts have a way of inducing pseudoproblems, which cannot be resolved because matters are not as they purport to be' (1959, p. xv). If financialization is to make an appearance in the major social science debates of the day—as is already occurring, and will no doubt continue to occur—we must first establish its existence, as well as develop more precise knowledge of its timing and magnitude, through careful empirical work. In such an endeavour rests the principal contribution of this paper.

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