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**Shifting Sources and Uses of Profits:
Sustaining U.S. Financialization with Global Value Chains**

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1. Introduction

Research on global value chains has contributed to an understanding of how globalized production processes are governed. The focus has been on the nature of the lead firms, their relation to supplier firms and the prospects for “industrial upgrading” by these suppliers. This has connected the research to questions of economic development and business management. But to date the value chain literature has not considered in any detail the implications of globalized production for the flow of funds or what has become widely known as “financialization.” Williams (2000) is quite critical about this lacuna in the global value chains framework:

[T]he concept of commodity chain, as popularized by Gereffi and Korzieniewicz (1994), was widely accepted as unproblematic even though this was a completely inadequate way to represent the financially motivated matrix choices of a firm like Ford which variably combines component production, car assembly, finance, car rental and after-market services. (Williams 2000, p. 6)

This paper is an effort to begin to fill the void to which Williams refers. I focus in particular on U.S. lead firms and their low-cost suppliers. I argue that the enormous expansion of global value chains has brought a lowering of input costs to lead firms, allowing them to maintain and even increase cost markups, and thus profit rates, even during a period when domestic (U.S.) product market prices were not moving upward at historical rates. This shift in the sources of profits—from domestic product markets to foreign input markets--has had a number of financial implications. For one, it has contributed to the maintenance of profit rates and the increase in the profit share of national income in industrialized countries. This has coincided with a decline in manufacturing in most

countries, and thus has permitted companies to return a greater share of net revenues to shareholders rather than reinvesting these revenues in new productive capacity. In the financialization literature this is attributed to the “shareholder value revolution” that began in the 1980s. In the global value chains literature, the process is seen as the increasing focus on “core competence,” a managerial strategy that became popular around the same time.² Second, export revenue growth in developing countries resulting from the expansion of global supply chains has been converted into rapid expansion of manufacturing productive capacity in low-wage countries and, in turn, into capital flows from the low-wage to the industrialized countries. The latter constitutes a “reverse capital flow,” supporting asset values in the industrialized countries and especially the U.S. This provides further impetus to the process of financialization.

This paper is thus an effort to go beyond the inclusion of financial activities in “matrix choices” of firms, in order to explore the interdependence of the processes of the globalization of production and financialization, that is, to link the issue of corporate governance to that of supply-chain governance. I find that the globalization of production by U.S. firms has helped to sustain higher levels of financialization of the U.S. non-financial corporate sector and financialization creates greater incentives for cost-reducing and flexibility-enhancing globalized production by U.S. lead firms. To put it differently, the sustainability of a “finance-led growth regime”--questioned, for example, by Boyer, 2000 and Watson, 2007--is enhanced by the successful governance of global value chains.

² For early discussion of shareholder value, see Rappaport (1986) and on core competence, see Prahalad and Hamel (1990).

This paper contains five sections. In section 2 we briefly review the processes of financialization and global value chains. In section 3 we take up the issue of the shifting sources of profit and in section 4 we look at the changing uses of profit. These sections focus largely on the U.S. and its international trade. Section 5 looks briefly at the situation from the perspective of the leading low-wage trading partner of the U.S., China, and its trade, investment and capital flows. Section 6 concludes. The task of linking value chain analysis to the issue of financialization is complicated by data limitations. In particular, while lead firm profit data are readily available, precise measures of these firms' reliance on imports within global value chains are not public. Information on costs and revenues of supplier firms in many low-income countries are difficult to trace.³ Supplier market structures have not been widely measured. As a result, in this paper I use a number of proxy measures to identify the links between global value chains and financialization. Nonetheless, the picture suggests a strong link between governance of global value chains and the dynamics of corporate governance in the case of the U.S. since the mid-1980s.

2. Financialization and globalization: definitions and origins

Financialization and globalization of production have both been much discussed. Since both terms also have multiple meanings, it is useful to briefly explain their use in this paper. Financialization is defined in three ways in the recent literature: (a) A greater share of gdp or

³ In some cases – for example the recent case of Mattel inc. and its sale of unsafe toys in the U.S. – the identity of supplier firms is not known even to the buyer. Mattel relies on Chinese vendors who outsource to companies whose identity is not necessarily known to Mattel.

net worth in the industrialized countries is accounted for by the financial sector;⁴ (b) Gross international capital flows have grown much faster than world output and faster than trade in goods and services;⁵ (c) Non-financial firms have increasingly used finance rather than production as both a source and a use of their funds.⁶

In this paper I will consider mainly (c), that is, the increasingly financial emphasis of non-financial corporations or, as Stockhammer (2004, p. 7) puts it “the engagement of non-financial businesses in financial markets.” This new focus is not just the provision of financial services as part of the corporations’ product lines, but in the increase in the share of assets of the firm that are financial and the increased use of firm profits to raise shareholder returns, either through dividend payments, share buybacks, and even through mergers and acquisitions.

Many analysts see financialization as the defining characteristic of the world economy of the last 25 years, and offer at least two explanations of the surge in the importance of finance in the macroeconomy at the level of the nonfinancial firm. The most fully developed explanation is the shareholder value revolution, according to which the assertion of shareholder rights beginning in the 1980s shifted power in corporate governance from managers to shareholders, bringing to the fore a concern with the maximization of shareholder value. This resulted in a change in corporate strategy from the Chandlerian concern with firm growth through retaining profits and reinvesting them, to an emphasis on

⁴ Epstein and Jayadev (2005, p. 50), for example, define financialization as a rise in the rentier share of national income, where rentier share is the profits of financial firms plus interest income earned in the rest of the economy.

⁵ See, for example, Eatwell and Taylor (2002)

⁶ See, for example, Stockhammer (2004) and Crotty (2005).

shareholder value and short-run return on investment through downsizing the firm and distributing a greater percentage of profits back to shareholders with the use of higher dividend payments, an increased volume of share buybacks. Share buybacks raise share prices by reducing the supply of outstanding shares. A decline in labor union bargaining power and the expansion of stock options in CEO compensation are also cited as factors consistent with this managerial shift. While most of the research on financialization finds that it is well established in corporate practices in many countries, Froud et al. (2000) express skepticism of the extent to which it has in fact boosted shareholder returns.

A second explanation--and not incompatible with the first--is that financialization resulted from a change in the gap between the rate of return on manufacturing investment and the rate of return on investments in financial assets.⁷ On the side of returns in finance, real interest rates got a boost in the late 1970s with tight monetary policy and the deregulation of financial markets. Interest rate ceilings on deposits were removed, encouraging banks and money market funds to invest in higher return (and riskier) assets such as "junk bonds".⁸ On the side of manufacturing, the emergence of Japan as a major U.S. competitor beginning in the late 1970s cut into profits directly, especially in automobiles and electronics. Indirectly, the increased investment in manufacturing, beginning with Japan and then across East Asia, eventually brought chronic global excess capacity, lowering the rate of return on manufacturing and services investments.

⁷ See Dumenil and Levy (2005), Crotty (2005).

⁸ Lazonick and O'Sullivan (2000).

With both sides of the finance/industry divide moving in favor of finance, the incentives for investment switched from industry to finance. According to Dumenil and Levy (2005, p. 39) “the rise of interest rates biased capital allocation in favor of financial investment...capitals ‘rushed’ toward financial corporations when the profit rate in this sector soared.” There were two dimensions of the transformation. One is that the net worth of financial corporations rose steadily relative to the net worth of non-financial corporations. Second, traditionally non-financial firms became more like financial holding companies, with a spectrum of financial services and financial investments swamping production in terms of their contribution to company revenues.

Largely coincidental with financialization in the 1980s was a growing tendency by firms to break up the process of producing goods and services and locate different parts in different locations depending on costs, markets, logistics or politics. This globalization of production has been variously described as “slicing up the value chain,” “vertical disintegration,” “offshoring,” and the “globalization of production.” Global value chains are production processes that may be managed by lead firms through vertical integration, through arm’s-length subcontracting with supplier firms, or through various intermediate forms of arrangements.⁹ Although offshore outsourcing has a long history for U.S. companies (for example, according to Hamilton et al. (2006), the creation of Asian suppliers for large U.S. retail firms began in the late 1960s) it was in the 1990s that managing the

⁹ See Gereffi et al. (2005).

global supply chain became in itself an important “strategic asset” for U.S. companies in their competition with low-cost and flexible Japan and increasingly innovative Europe.¹⁰

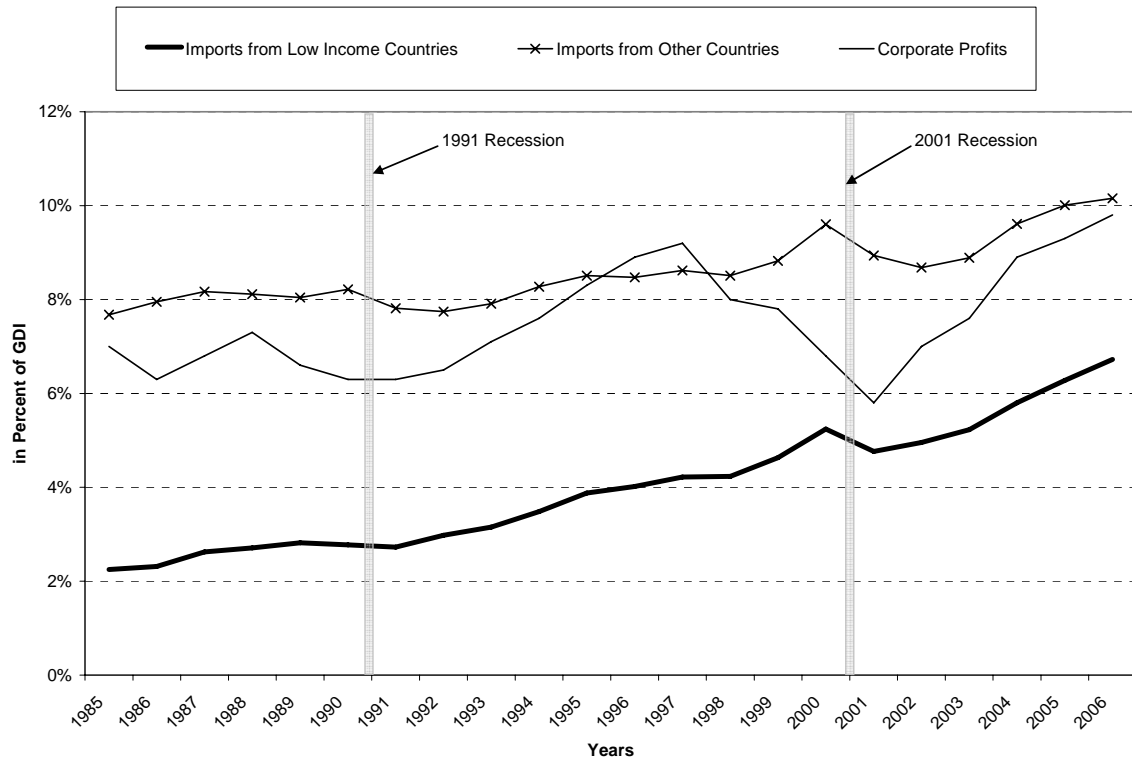
Most attempts to measure the magnitude of the phenomenon of vertical disintegration have captured only parts of the process. Some analysts focus on intra-firm imports and others on the import of intermediate goods whether these are intra-firm or arm’s-length. As a share of total trade, U.S. intra-firm trade has been fairly constant at around 40% of imports since the early 1980s. U.S. “related party trade”, defined as trade between entities in which a U.S. firm has at least 5% ownership on both sides, is particularly high for some regions (Latin America, especially Mexico) and is rising rapidly from low levels for others (East Asia, in particular Korea and China). Nonetheless, the relative constancy of intra-firm trade in total U.S. trade indicates that arm’s-length trade continues to dominate U.S. trade flows. Economists measure offshore outsourcing by the extent of imported inputs as a share of total input use at the level of specific sectors. By this method—relying mainly on input-output tables—offshore outsourcing has grown slowly but steadily over 20 years and some manufacturing sectors have been found to rely on imports for up to 30% of their inputs in the early 2000s. For services, the range is between 5 and 13 percent of total inputs.¹¹ Using slightly different measurement techniques, Bardhan and Jaffee (2004) find that imported intermediates accounted for 38 percent of U.S. imports in 1997. Yi (2003) calculates that trade in intermediates accounted for over 50 percent in the growth of U.S. trade in the period 1962-1997.

¹⁰ Lynn (2005), p. 123.

¹¹ See Milberg et al. (2007) for analysis of the 2000-2003 period and a review of other studies.

Trade in intermediates can take place on an intra-firm or arm's-length basis. So the focus on intra-firm or related party trade only captures a part of the offshore outsourcing phenomenon. Similarly, a focus on trade in intermediates understates the importance of global production networks. The U.S. is not simply an assembly economy. Many of the imports within U.S.-led global value chains are fully finished goods with labels of U.S. corporations attached. Many "manufacturing" firms now do no manufacturing at all, providing only brand design, marketing and supply chain and financial management services. Thus a better measure of offshore outsourcing may simply be imports from low-wage countries. These are shown for the U.S. in Figure 1 as a percentage of U.S. gross national income. This measure leaves out offshoring activity among industrialized countries, but nonetheless overcomes the problem of looking only at intermediates or only at intra-firm trade. Also shown in Figure 1 are other U.S. imports. Since the early 1990s, the share of U.S. imports coming from low income countries has grown more rapidly than imports from other countries. Imports from low income countries rose from less than three percent in 1980 to almost seven percent of gross domestic income in 2006. At the same time, imports from other countries rose from 8 to 10 percent of income. While China accounts for a significant portion of the rise in U.S. imports from low-income countries, U.S. imports of manufactured goods has soared from across East Asia and Latin American, especially Mexico.

Figure 1: U.S. Imports and Profit Shares, 1985 – 2006



Note: Low Income Countries are countries other than the Euro area, Canada, Japan, United Kingdom and OPEC. Imports and corporate profits are depicted as shares of gross domestic income.

Sources: Income, Corporate Profits and Imports are taken from the National Income and Product Accounts of the U.S. as reported by the Bureau of Economic Analysis (BEA). Country breakdown of imports follows [The Economic Report of the President](#), published annually by the U.S. government.

3. Shifting sources of profit

The motives for offshore outsourcing range from the pursuit of greater flexibility, to diversification of location in order reduce risk to the lowering of production costs. All of these goals should support company profitability. And in fact the last decade of heightened globalization of production has coincided with an increase in profits as a share of national income in all the major industrialized countries. Figure 1 shows the U.S. corporate profit share (measured as corporate profits as a percent of gross national income) for the period

1986-2006. After falling from post-World War II highs in the mid-1960s, the profit share recovered beginning in the mid 1990s. It has been higher during the last two business cycles than at any time since the 1960s. In other industrialized countries, the rise in the profit share has been even more pronounced than in the U.S.¹²

What is behind this rise in the share of national income going to corporate profits? Corporate profits depend on the ability of corporations to raise their markup prices above direct costs, as follows:

$$(1) \quad \mathbf{p} = (1+\mathbf{m})\mathbf{w}\mathbf{a}$$

Where \mathbf{p} = product price

\mathbf{w} = wage

\mathbf{a} = unit labor requirement

\mathbf{m} = markup

Rewriting in terms of the markup:

$$(2) \quad \mathbf{m} = (\mathbf{p}/(\mathbf{w}\mathbf{a})) - 1$$

Equation (2) shows that there are three channels to maintaining or raising the markup over costs: product price, input prices and productivity. Raising the product price is the traditional channel for firms with product market power. And demand-side conditions have been the focus of the theory of oligopoly pricing. Despite this theoretical focus on product markets and the demand elasticity, it would appear that over the past ten years the rising profit share has not depended on rising final goods and services prices. An increase in

¹² For an international comparison of labor shares across OECD countries, see IMF (2006), Figure 5.7.

price competition in product markets among oligopoly firms--especially in the retail sector, but also in sectors as technologically diverse as automobiles and computers--has made the firm's implicit cost of raising the price prohibitively high.

Non-price competition among large oligopoly firms has also been intense, as firms have turned to product differentiation and branding to solidify their product market power. Giant retail firms boast of a designer line of consumer goods, changing as seasons and fashions change. In the apparel industry, "fast fashion" is the name given to those firms that are able to alter each store's offerings within days, based on the latest trends and buying patterns at that particular store.¹³ Variety in consumer goods--from fancy coffees to household appliances to cell phones--has exploded, in part the result of greater flexibility in production and better data collection on consumption patterns. This ability of large firms to broaden product lines, so-called "mass customization", has been an effective corporate response to rising consumer power and the heightened demand for variety and quality.¹⁴

With oligopoly persistent across industries, price inflation (especially prices of non-energy goods and services) has nonetheless fallen steadily from its post-War peaks in the 1970s, and remained low across industrialized countries during the same period that the profit share has been rising. In a study of the low levels of price inflation, and even deflation in some cases, across the OECD countries, Rogoff (2005) notes that U.S. monetary policy -- the usual first explanation of inflation trends--has not been so tight but that input costs, including the cost of labor and non-labor inputs, have risen very slowly, with the exception

¹³ See Abernathy et al. (1999).

¹⁴ The more demanding consumer has been noted in the popular press but received little attention in scholarly research (see Cassidy 2005).

of occasional commodity price surges. Figure 2 shows the average annual percentage change in consumer prices, money supply and import prices for the U.S. over the period 1985-2006. We see that on average the inflation rate in the U.S. (based on the consumer price index excluding food and energy related goods) has been running at around 2 percent per annum since the mid-1990s. During the same period, money supply growth rose by over 7 percent per annum. We return to the role of import prices below.

Figure 2: Prices and Money Supply, Average Annual Growth, 1986-2006

| | 1986-1990 | 1991-1995 | 1996-2000 | 2001-2006 |
|-------------------|-----------|-----------|-----------|-----------|
| Consumer Prices | 4.43% | 3.54% | 2.38% | 2.14% |
| Import Prices | 5.36% | 2.02% | -1.37% | 0.70% |
| Money Supply (M2) | 5.65% | 1.84% | 8.62% | 6.19% |

Notes and Sources: Consumers Price Index Data is from the BLS and refers to the Base CPI for all urban consumers for all Items less food and energy. Import Prices data is from the BLS and refers to import price index for all items less petroleum. Money supply (M2) is from the IMF International Financial Statistics Database and comprises the sum of currency outside banks, demand deposits other than those of the central government, and the time, savings, and foreign currency deposits of resident sectors other than the central government

Price competition has increased while final goods and services markets have remained fairly concentrated by traditional measures of concentration. Nolan et al. (2002) identify a broad range of industries with high degrees of concentration as measured by market share, including commercial aircraft, automobiles, gas turbines, microprocessors, computer software, electronic games, as well as branded consumer goods, including soft drinks, ice cream, tampons, film and cigarettes, and services such as brokerage for mergers and acquisitions and insurance. These authors characterize the increase in industrial concentration internationally as a “global big business revolution.” This revolution, they write, “produced an unprecedented concentration of business power in large corporations headquartered in the high-income countries.” (Nolan et al., 2002, p. 1)

While branding and product variety have figured in corporate strategies, higher profits have also come from dramatic efforts to control of costs. In terms of equation (2), to maintain m without the traditional ability to raise p , then w or a must be reduced. Two issues have received a lot of attention, the relative stagnation of U.S. wages and the gains in productivity, especially those related to the introduction of new information technology.¹⁵ While these are not doubt of major importance, here I raise the possibility of a third source, which is international offshoring, that is, the management of global value chains.

There is a growing body of research on the issue of the impact of offshoring on profits. Firm level surveys, for example McKinsey Global Institute (2003), find that offshoring reduces costs to the firm by around 40% for the outsourced activity. Dossani and Kenney (2003, p. 7) report that a 40% cost saving represents the hurdle rate of return on services offshoring. A number of large firms they survey reported savings considerably higher than this. Lazonick (forthcoming, cited in Houseman, 2006) cites reports of 50-60% cost saving for offshoring of business, professional and technical services.¹⁶ Using U.S. sectoral data, Milberg et al. (2007) present estimates of a multivariate model of the profit share, adding a measure of offshoring while controlling for variables commonly used in models of the profit or wage share, including the sectoral share of total employment, labor productivity,

¹⁵ On U.S. wage stagnation, see Temin and Levy (2006). On the issue of the distribution of productivity gains, see Dew-Becker and Gordon (2005).

¹⁶ The evidence is not unambiguous. Gorg and Hanley (2004), using a sample of 12 Irish electronics manufacturers, find that firm-level profits are directly related to outsourcing for large firms (in employment terms) and not significantly related for the small firms in the sample. In a study of small- and medium-size Japanese firms, Kimura (2002) found no relation between subcontracting and profitability. In a study of German manufacturing firms, Gorzig and Stephan (2002) found outsourcing of materials to be associated with higher profits but outsourcing of services to be associated with lower profits.

and capital intensity. They find that offshoring has a statistically significant and positive relation to profits (measured as the “gross operating surplus”) at the level of specific sectors. Two recent papers on the labor share of income (the inverse of the profit share) find that trade openness has adversely affected the labor share in both industrialized and a large group of developing countries.¹⁷

It is likely that these studies understate the contribution of the operation of global value chains to corporate profits. For one thing, as discussed above, most measures of offshoring used in economic studies look only at either intra-firm trade or trade in intermediates. If we look at all imports from low-income countries as a share of national income (see Figure 1 above) we may find a larger effect. Imports from low-income countries have risen to almost 7% of gross domestic income. Using a crude figure of a 40% cost saving from foreign over domestic sourcing, this would translate to 2.8% of national income, a substantial magnitude in relation to the corporate profit share of income that was around 10% in 2006. Second, the cost savings from shifting to cheaper imports (especially in intermediate services) have to some extent been counted in the official statistics as productivity gains, implying that these gains are “misleading.”¹⁸ Thirdly, a growing share of U.S. profits comes from foreign operations—up to 30% in recent years. Although these profits are more than offset in the balance of payments by the flow of profits to foreign companies operating in the U.S., they are nonetheless a function of global production and sales strategies.

¹⁷ IMF (2006), Guscina (2006) and Harrison (2002).

¹⁸ Houseman (2006). Another implication of this misattribution is an overstatement of U.S. GDP, since productivity gains figure into domestic, not foreign output.

Orthodox economics has identified the advantages of offshore outsourcing as the result of technological change (in particular the internet) that lower the cost and raise the efficiency of managing a global supply chain. From the perspective of the standard theory of international trade, the fragmentation of production, including the offshoring of intermediate services, constitutes a deepening of the division of labor which enhances the gains from trade beyond those achieved when trade is limited to final goods and services.

According to Arndt and Kierzkowski (2001, pp. 2, 6):

spatial dispersion of production allows the factor intensity of each component, rather than the average factor intensity of the end product, to determine the location of its production. The international division of labor now matches factor intensities of components with factor abundance of locations...[E]xtending specialization to the level of components is generally welfare-enhancing.

The orthodox models typically assume full employment, balanced trade, limited international capital mobility and the compensation of losers in a country by the winners from the expansion of trade. Heterodox economists have generally avoided these assumptions and have identified the logic of offshoring in the structural asymmetries in the evolution of input markets along global value chains. Specifically, the creation of monopsonistic buyer relations in global supply chains has allowed some shifting in the source of corporate profits: from traditional oligopoly pricing power in product markets to oligopsony power in global supply chains in which lead firms have greater control over input prices and greater flexibility due to the presence of multiple suppliers. Milberg (2004) describes the market structure asymmetry as endogenous to lead-firm governance strategy. Heintz (2006) proposes a model of unequal exchange, in which lead-firm branding effort is a

function of lead firm bargaining power in the value chain. In terms of the cost markup equation above, let variable costs, $c = wa$, where w is the wage and a is the unit labor requirement. Suppose $c = (r)w^*a^* + (1-r)wa$, where r is the share of inputs produced offshore, an asterisk designates foreign, and is assumed that foreign production costs are lower than U.S. costs, that is $dc/dr < 0$. Indirectly, the move offshore or even its threat can lower wage demands and dampen domestic wages. That is, if $w = w(r)$, where $dw/dr < 0$, that is as outsourcing rises, U.S. wages fall, reinforcing the positive relation between offshoring and the markup.¹⁹

It is difficult to assess the structure of markets or the degree of competition along global value chains, since there is very little direct information on market structure across a range of supplier markets. Using data on 339 firms over the period 1980-1995 in Brazil, India, Jordan, Korea, Malaysia, Mexico and Zimbabwe, Glen et al. (2003) find that profits are less persistent than for a sample of industrialized countries, indicating a greater degree of competition in the developing country markets. Mayer (2000) looked at sectors from a global perspective and documented the number of countries entering a sector as a measure of increased competitive conditions. He finds the greatest amount of entry was in low and medium technology industries since the mid 1980s.

Given this paucity of direct information, another approach is to observe the movement of the unit prices of imported goods and services relative to final goods prices. Increasingly oligopsonistic conditions in supplier markets would be expected to be reflected

¹⁹ See Burke and Epstein (2001) on the impact of threat effects on U.S. wage bargain outcomes.

in falling import unit values. Excluding food and oil, U.S. import prices have fallen very slightly on average since the mid-1990s (see Figure 2). But import price deflation is much more pronounced in major manufacturing sectors in which global value chains are most developed. Figure 3 shows import prices (relative to U.S. domestic consumer prices) over the period 1986-2006 for two-digit SITC manufacturing industries. Only two sectors--and those most closely associated with commodities (specifically petroleum and iron) rather than manufacturers--experienced import price increases. Relative import price declines were smallest in manufacturing sectors most intensive in foods, metals and wood. Import price declines were greatest in those sectors which have both the technological and the value chain characteristics identified with profitable offshore outsourcing--computers and electrical and telecommunications products. But many of the non-electronics manufacturing sectors showed large and persistent import price declines, especially those with well-developed global value chains and high rates of import penetration in the U.S. Clothing, footwear, textiles, furniture, miscellaneous manufacturers (which includes toys) and chemicals all experienced import price declines (relative to U.S. consumer prices) over two decades of more than 1% *per year* on average, or 40% over the period 1986-2006. While these data do not prove the existence of oligopsony power in the global value chains, they are consistent with it. They are also consistent with a number of studies that have identified declining terms of trade of developing country manufacturers as the consequence of a "fallacy of composition," whereby the expansion of manufacturing export capacity in one country makes sense for that country alone, but when many countries expand at the same time, the resulting excess capacity

creates declining prices globally.²⁰ The greater the capacity overhang, the greater is the ability of lead firms to exert oligopsony power in input markets. From the lead-firm perspective, excess capacity and the steady arrival of new entrants in supplier markets serve the purpose both of cost reduction and of greater flexibility (with the possibility of multiple suppliers). According to Lynn (2005):

[A] growing number of large firms today view the rise and fall of prices for inputs like labor and raw materials not as a problem to be smoothed out by shelling out capital to bring more activities under the direct control of the firm's management, but rather as a never-ending opportunity to ratchet down costs and hence perpetuate profit margins. And so today's top firms are increasingly designed to play country against country, supplier against supplier and worker against worker. General Electric CEO Jeffrey Immelt put it succinctly in a recent annual report. The "most successful China strategy," he wrote, "is to capitalize on its market growth while exporting its deflationary power." (Lynn, 2005, p. 153).

²⁰ See Blecker and Razmi (2006) and Kaplinsky (2005).

Figure 3: Relative Import Price of Manufacturers, Ave. Ann. Percent Change, 1986-2006

| Sectors | 1986-2006 average annual percent change (%) |
|---|--|
| 33---Petroleum, petroleum products and related materials | 7.45% |
| 28---Metalliferous ores and metal scrap | 3.34% |
| 68---Nonferrous metals | 3.14% |
| 25---Wood pulp and recovered paper | 1.15% |
| 24---Cork and wood | 1.07% |
| 67---Iron and steel | 0.83% |
| 54---Medicinal and pharmaceutical products | -0.01% |
| 63---Cork and wood manufactures other than furniture | -0.21% |
| 73---Metalworking machinery | -0.23% |
| 72---Machinery specialized for particular industries | -0.25% |
| 11---Beverages | -0.41% |
| 74---General industrial machinery, equipment, & machine parts | -0.55% |
| 66---Nonmetallic mineral manufactures | -0.55% |
| 05---Vegetables, fruit and nuts, fresh or dried | -0.58% |
| 01---Meat and meat preparations | -0.62% |
| 52---Inorganic chemicals | -0.86% |
| 03---Fish, crustaceans, aquatic invertebrates, and preparations thereof | -0.91% |
| 51---Organic chemicals | -1.02% |
| 64---Paper and paperboard, cut to size | -1.03% |
| 69---Manufactures of metals | -1.03% |
| 59---Chemical materials and products | -1.05% |
| 78---Road vehicles | -1.11% |
| 83---Travel goods, handbags and similar containers | -1.16% |
| 87---Professional, scientific and controlling instruments and apparatus | -1.36% |
| 65---Textile yarn, fabrics, made-up articles, n.e.s., and related prod | -1.43% |
| 89---Miscellaneous manufactured articles | -1.49% |
| 82---Furniture and parts thereof | -1.60% |
| 55---Essential oils; polishing and cleansing preps | -1.63% |
| 85---Footwear | -1.64% |
| 84---Articles of apparel and clothing accessories | -1.84% |
| 81---Prefabricated buildings; plumbing, heat & lighting fixtures | -1.96% |
| 88---Photographic apparatus, equipment and supplies and optical goods | -2.13% |
| 62---Rubber manufactures | -2.23% |
| 77---Electrical machinery and equipment | -2.89% |
| 07---Coffee, tea, cocoa, spices, and manufactures thereof | -3.27% |
| 76---Telecommunications & sound recording & reproducing apparatus & equipment | -4.81% |
| 75---Computer equipment and office machines | -7.81% |

Note: Import price movements are calculated as relative to changes in U.S. consumer prices. Sector numbers listed are two-digit SITC.

Source: U.S. Department of Labor, Bureau of Labor Statistics online database.

The oligopsony structure of input markets in global value chains also has specific implications for the governance of these chains. In the Coase tradition, internalization is explained as the result of transactions costs minimization in which organizing production within the firm is more efficient than by means of the market. With the current trend apparently in the opposite direction, that is, with more arm's-length relationships within the value chain for particular commodities, the Coasian logic would imply that there has been a reduction in transactions costs in market-based relations. These are attributed to technological and legal developments that make markets more efficient (Langlois, 2003).

An alternative interpretation presented here is that externalization has developed from the logic of vertically integrated markets, with continued pressure on competition among suppliers, offloading of risk, and increased focus on “core competence” all aimed at raising shareholder value. Specifically, when suppliers have the capacity to act as monopolists there will be a greater incentive for buyers to internalize supply production. When there is a high degree of competition among suppliers, then arm's-length relations between buyer and supplier are more likely. According to Strange and Newton:

If there are a large number of competitive suppliers of raw materials and/or intermediate goods, then the corporation might well choose to externalize production in order to (a) reduce the risks associated with the commitment of resources, and (b) save capital for other activities. One might also put forward a further advantage, namely that a monopsonistic buyer would be able to push down the prices of supplies to marginal cost and thus extract the full profits from the sales of the final goods from a smaller capital stake—i.e. the buyer would show a higher return on capital. If there were but a few suppliers, in contrast, then there would be a situation of bilateral monopoly (or oligopoly) and conventional internalization arguments might dictate vertical integration (Strange and Newton, 2006, p. 184).

From our perspective, the managerial focus on core competence is the flip side of the picture we have presented here of the development of oligopsony markets for inputs which no longer yield rents and thus are, from the lead firm perspective, better subcontracted at arm's length. As Watson (2007, p. 4) writes, "Disinvestment is the only certain way off increasing shareholder value: that is, selling off or closing down all but the most profitable parts of the business. This is guaranteed to generate higher returns on capital employed, thus providing a rationale for an increase in the stock price." The point is that offshoring has had a dual role, one being the support of cost markups, the other being the shrinking of the scope of productive activities of the firm. As we will see in the next section, both of these aspects of corporate strategy support the process of financialization.

4. Shifting uses of profit

The shift in the source of profits also has implications for their use. Specifically, the increased reliance on low-cost imports for cost control has reduced the need for reinvestment of profits domestically, and thus eased the traditional managerial pressure against returning earnings back to shareholders.²¹ I argued in the previous section that the asymmetry of market structures along global value chains has provided an incentive for arm's-length relations as opposed to vertical foreign direct investment. With a higher profit share and thus a significant growth in profit income in the past ten years—partly the result of offshore outsourcing--U.S. nonfinancial companies have been "awash in cash" and have faced a decision over what to do with these funds.²² The traditional managerial strategy of using

²¹ Outward foreign direct investment would be an offsetting factor.

²² Bates et al. (2006) report a 129% increase in the cash ratio of U.S. industry over the period 1980-2004.

retained earnings to finance new investment had resulted in relatively high levels of investment out of profits and considerable power for top-level managers. Studies of industrial organization in the 1970s stressed that managers preferred internal funds to external borrowing because it raised managerial discretion over the use of funds and allowed managers to focus on company growth over the long-term rather than short-term shareholder returns.²³

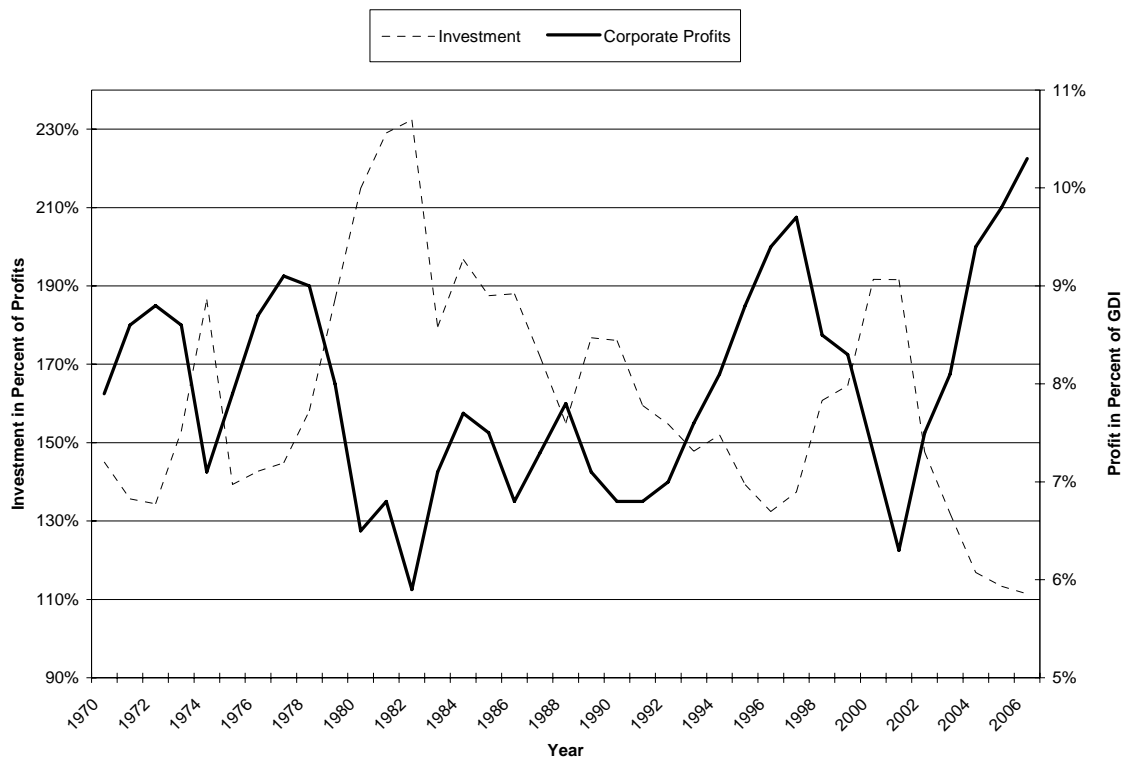
With the shareholder value movement, beginning in the 1980s, efforts were made to reduce discretion of managers, as pressure rose to return earnings to shareholders, both through higher dividend payouts and higher share prices. The boosting of CEO compensation with stock options was intended to better align manager and shareholder interests. By the mid-1980s, the structure of the flow of funds of the nonfinancial corporate sector in the U.S. was beginning to change. By the 1990s, this was reflected also in lower rates of investment in plant and equipment out of total after tax profits. We can see these trends in the national income accounts data and the Federal Reserve's flow of funds data on the nonfinancial corporate sector. Figure 4 below shows that as the U.S. corporate profit share rose to new highs in the peaks of the last two business cycles, investment as a share of corporate profits fell to new lows.²⁴ Figure 5 below shows that dividend payments and share buybacks have risen steadily (with cyclical fluctuations) as a share of internal funds in the

²³ See, for example, Marris (1964).

²⁴ One possible explanation for the decline in the investment rate out of profits is that companies were investing abroad instead of in the domestic economy. The official statistics on U.S. outward foreign direct investment indicate that this does not account for much of the use of profits.

nonfinancial corporate sector, taking off in the early 1980s from a plateau of around 20% and reaching about 90% by 2006.

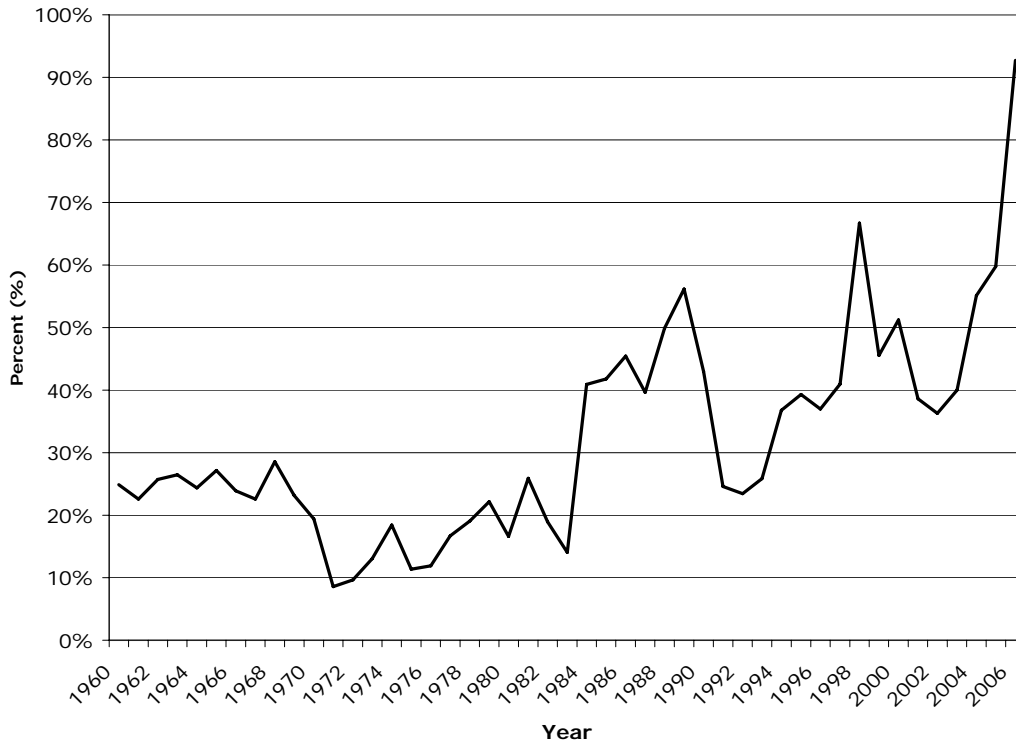
Figure 4: U.S. Corporate Investment and Profit Shares, 1970 – 2006



Note: Investment is shown as share of corporate profits. Corporate profits are shown as share of gross domestic income.

Source: National Income and Product Accounts of the U.S. as reported by Bureau of Economic Analysis (BEA).

Figure 5: Dividends plus Share Buybacks as a Percentage of Internal Funds, U.S. Nonfinancial Corporations, 1960-2006.



Source: Schedule Z.1 of the Flow of Funds Account from the U.S. Federal Reserve Bank online database.

Another potential use of corporate funds is for mergers and acquisitions. Like dividends and share buybacks, merger and acquisition activity has reached record levels over the last two business cycles. For the first five months of 2007, global M&A transactions valued \$2 trillion, almost double the value for the same period in 2006. But it is not just the value of these transactions that has hit historic highs. As a recent report in The Financial Times notes, “[N]ot only has the overall volume of M&A been rising, but the proportion of those deals funded entirely by cash is on the rise as well. In the first quarter of 2004, all-cash deals were less than a third of all M&A by value. By the first quarter of this year they accounted for half.” (Larsen, 2007) Heightened M&A activity is not just an indicator of

financialization and (in this case) liquidity, but also a cause of financialization itself. It was the hostile takeover movement in the 1980s that solidified the shift to a “portfolio view” of the large nonfinancial corporation. Finally, with domestic requirements for plant and equipment investment reduced, non-financial corporations have diversified into finance itself. Since the early 1980s, nonfinancial corporations have increased their relative investment in financial assets. This financial investment picked up in the late 1990s, and by around 2000, nonfinancial corporations as a whole held more than half of their assets in the form of financial assets.²⁵

A snapshot of individual U.S. corporations in 2006 suggests that higher levels of shareholder value are associated with greater import reliance in global value chains. Computer hardware and software manufacturers and retailers, two sectors that rely heavily on sophisticated global value chain arrangements, were among those returning the highest percentage of dividends and share buybacks in relation to net income. These include Cisco, Microsoft, Hewlett Packard, Dell and Intel and retailers Federated and Home Depot. Cisco was among the first U.S. manufacturers to largely abandon manufacturing through the use of foreign contract manufacturers in order to focus on sales and service. Already by the late 1990s Cisco owned only 2 of the 34 foreign plants it contracted for manufacturing. Microsoft has well-established offshore software development, including in India, and the design and manufacture of its XBOX video game consoles has been managed by the Asian contract manufacturer Flextronics. Dell, the PC assembler that revolutionized mass

²⁵ Crotty (2005), p. 90 and Crotty (2007), Figure 1.

customization in the PC market, purchases 4,500 different parts from 300 suppliers. Hewlett-Packard purchases some of its highest technology components from Taiwanese suppliers.²⁶

At the bottom in this sample are companies that rely less on low-wage offshore outsourcing, including oil companies (Chevron, Marathon, Valero), technical service providers (Ingram Micro, Fedex), insurance (Berkshire Hathaway), pharmaceuticals (Abbott, Wyeth) and power plants (AES). Many of these firms are in fact among leading U.S. exporters, not its importers. Wal-Mart deserves mention because they are so heavily reliant on foreign contract manufacturers. They are the leading importer from China, with reported imports of \$18 billion in 2004 and \$27 billion in 2006.²⁷ From the perspective of dividend and share buyback activity in 2006, Wal-Mart falls in the middle of our sample at 73.9%.

²⁶ Lynn (2005), chapter 5.

²⁷ Scott (2007)

Figure 6: Dividends, Share Buybacks and Net Income, Selected Fortune 100 Companies, 2006 (\$ billions unless otherwise noted)

| Company | Net Income | Dividends | Share Buy-Backs | Div. and Buy-Backs to Net Income Ratio |
|------------------------|------------|-----------|-----------------|--|
| Safeway | 1.0 | 0.1 | 1.8 | 197.2% |
| Archer Daniels Midland | 3.8 | 0.9 | 6.1 | 184.4% |
| Dupont | 6.9 | 7.0 | 4.7 | 171.7% |
| Cisco | 21.2 | 0.0 | 35.4 | 167.3% |
| Microsoft | 48.4 | 43.1 | 36.1 | 163.9% |
| HP | 13.7 | 4.6 | 14.3 | 137.5% |
| Dell | 14.0 | 0.0 | 18.8 | 134.0% |
| Procter and Gamble | 31.3 | 13.3 | 27.7 | 131.1% |
| Intel | 30.0 | 6.4 | 30.8 | 123.8% |
| ConocoPhillips | 51.1 | 25.1 | 35.5 | 118.5% |
| Pfizer | 51.1 | 25.1 | 35.5 | 118.5% |
| Honeywell | 6.1 | 3.3 | 3.8 | 117.9% |
| Boeing | 7.9 | 3.6 | 5.3 | 113.0% |
| Walt Disney | 10.8 | 2.3 | 9.7 | 111.1% |
| Federated Dept. Stores | 4.6 | 0.6 | 4.4 | 109.5% |
| Sysco | 4.2 | 1.5 | 2.7 | 101.4% |
| Sprint Nextel | 4.0 | 2.4 | 1.6 | 101.1% |
| Home Depot | 20.4 | 4.1 | 16.4 | 100.0% |
| PepsiCo | 20.5 | 6.9 | 13.1 | 97.9% |
| Northrup Grumman | 5.0 | 1.6 | 3.0 | 93.1% |
| Coca-Cola | 22.2 | 12.2 | 8.3 | 92.4% |
| McKesson | 2.7 | 0.4 | 2.1 | 92.0% |
| Lockheed Martin | 7.2 | 1.9 | 4.6 | 90.5% |
| Bristol Myers | 12.2 | 10.9 | 0.2 | 90.5% |
| Cardinal Health | 6.0 | 0.3 | 5.0 | 88.7% |
| Sunoco | 2.8 | 0.5 | 2.0 | 87.7% |
| McDonald's | 10.8 | 3.6 | 5.8 | 87.1% |
| Verizon | 28.6 | 21.8 | 2.3 | 84.6% |
| Caterpillar | 10.3 | 2.9 | 5.8 | 84.1% |
| Johnson and Johnson | 43.1 | 16.4 | 17.5 | 78.9% |
| Abbott | 13.9 | 8.0 | 2.7 | 76.8% |
| Exxon Mobil | 133.9 | 34.4 | 68.4 | 76.8% |
| UPS | 17.5 | 6.0 | 7.3 | 76.0% |
| Altria Group | 52.2 | 29.0 | 10.7 | 76.1% |
| Wal-Mart Stores | 83.8 | 42.9 | 19.1 | 73.9% |
| Kroger | 3.5 | 0.1 | 2.3 | 70.3% |
| United Technologies | 13.9 | 3.4 | 5.3 | 63.0% |
| Medco Health Solutions | 2.5 | 0.0 | 1.6 | 62.1% |
| AT&T | 32.2 | 14.7 | 5.0 | 61.2% |
| Dow | 12.4 | 6.4 | 0.8 | 58.1% |

| | | | | |
|--------------------|-------|------|------|--------|
| Alcoa | 6.1 | 2.6 | 0.7 | 53.4% |
| Costco | 4.5 | 0.5 | 1.9 | 53.3% |
| Best Buy | 4.3 | 0.6 | 1.7 | 52.6% |
| Motorola | 13.1 | 2.0 | 4.7 | 50.6% |
| Chevron | 52.9 | 17.4 | 8.8 | 49.6% |
| Wyeth | 15.6 | 6.3 | 0.8 | 45.3% |
| Walgreen's | 6.8 | 1.0 | 1.9 | 42.1% |
| Target | 11.8 | 1.4 | 3.4 | 41.1% |
| Lowe's | 11.4 | 0.7 | 3.5 | 37.2% |
| Marathon Oil | 11.4 | 1.9 | 1.7 | 31.9% |
| Valero Energy | 11.6 | 0.5 | 3.0 | 30.1% |
| GE | 41.6 | 6.9 | 2.8 | 23.5% |
| Johnson Controls | 4.0 | 0.8 | 0.0 | 20.9% |
| Hess | 4.6 | 0.7 | 0.0 | 15.2% |
| CVS/Caremark Rx | 5.1 | 0.6 | 0.0 | 11.8% |
| FedEx | 6.9 | 0.4 | 0.4 | 11.3% |
| Berkshire Hathaway | 39.3 | 0.0 | 0.0 | 0.0% |
| Ingram Micro | 0.6 | 0.0 | 0.0 | 0.0% |
| AES | -3.3 | 0.0 | 0.0 | 0.0% |
| Time Warner | -82.2 | 1.3 | 15.9 | -21.0% |

Note: Includes Fortune 100 companies with online available balance sheet information. Source: Company annual reports and public tax filings.

5. International finance

Rising profit rates and the profit share of the non-financial corporate sector in the U.S. have been associated with a growing import propensity, and a growing trade deficit. The U.S. trade deficit reached \$758 billion in 2006, more than six percent of GDP and is running at a higher rate in 2007. By definition, the U.S. import surplus involves an export surplus elsewhere, and the largest U.S. bilateral deficit is with China. In 2006, the U.S. ran a \$235 billion deficit with China, based on imports of \$287 billion and exports of \$52 billion. Most of these imports were demanded directly by U.S. corporations, such as Wal-Mart, Nike and Mattel and a number of apparel, electronics and automotive companies. About 25 percent of U.S. imports from China are “related party” imports, meaning they are between parties with at least a 5% common ownership interest. Those without affiliates in China

often order from large Chinese contract manufacturers or from vendors who subcontract to Chinese firms. In the electronics sector, Chinese production is dominated more by foreign investors from Asia. The booming exports to the U.S. have generated a rapid accumulation of foreign currency reserves in China and their subsequent investment in the US. China's foreign reserves have quintupled since 2002, reaching \$1.08 trillion in 2006 and \$1.4 trillion by September of 2007. Chinese trade surpluses require that the Chinese central bank purchase these dollar earnings with Chinese Yuan in order to retain the fixed value of the Yuan.

These foreign currency reserves, like those funds of the nonfinancial corporations in industrialized countries, must be invested with concern for return and risk. Thus one attraction of U.S. assets for the Chinese is the safety of U.S. Treasury securities. Another goal of recycling surpluses into U.S. capital markets has been to prop up the value of the dollar, which in turn sustains the competitiveness of Chinese exports. But Chinese purchases of U.S. assets have become increasingly diversified. While U.S. Treasury securities still dominate purchases, the purchase of such securities fell by 30 percent between 2003 and 2006. The share of corporate stocks and bonds rose to 15% of total Chinese purchases of U.S. assets in 2006, up from 4.5% in 2000 and just 3.1% in 2001. And the last few years have seen a number of major outright purchases of U.S. companies aimed at gaining access to U.S. markets or resources, beginning with the purchase by Lenovo in 2005 of IBM's personal computer division by for \$1.25 billion (plus the assumption of \$500 million IBM

debt).²⁸ The Lenovo purchase was followed by the offer (later rescinded) by China National Offshore Oil Company to purchase the US oil company Unocal. China recently created a \$300 billion China Investment company to invest its reserves in assets with yields above that of U.S. Treasury securities. Among its first purchases were a \$3 billion interest in the Blackstone Group, a non-controlling (8%) share of the initial public offering for the hedge fund and a similar investment in Barclays Bank (U.K.). These investments are driven by a variety of interests, including access to financial market expertise. But not far down the list is a concern for return on equity. With the decline in Blackstone's share price in the weeks following the Blackstone offering, a Chinese blogger was quoted in The New York Times as follows: "The foreign reserves are the product of the sweat and blood of the people of China, please invest them with more care!" (Bradsher, 2007)

One implication of our discussion of global value chains and financialization is that the current global payments imbalances are mutually reinforcing, as reduced (imported) input prices support cost markups and rates of return that attract capital inflows from abroad. Specifically, imported inputs raise profits and margins which in turn attracts (domestic and foreign) capital. On the flip side, imported inputs increase supplier-country (e.g. Chinese) exports, creating an expansion of foreign reserves holdings by those countries. This link among globalized production, corporate rates of return and international payments has not been adequately acknowledged by those who have predicted an imminent hard landing for

²⁸ Note that this case provides another good example of divestment of manufacturing by a U.S. firm in order to focus on "core competence," in this case business consulting services. According to Mark Loughridge, chief financial officer at IBM, the deal "helps IBM focus on enterprise and SMB [small and medium-size business] segments where we can best leverage our value-add." (cited in PC World magazine, 2005)

the dollar. The argument here is that because of these connections between trade and profitability, the international payments imbalances may be more sustainable than standard debt-to-gdp-ratio calculations would indicate. Some have also pointed to the nature of financialization in the state-owned enterprise (SOE) sector in China, in particular the large undistributed profits, have brought excessive saving and a higher Chinese current account surplus. One response, proposed by those on both sides of the western political spectrum, would be more government spending out of these profits, for example on a greater public provision of social protection.²⁹

The process described here may be sustainable from the point of view of the dynamics of foreign debt, but it is not necessarily desirable from a social perspective. In particular, the situation has contributed to rising inequality in the both the industrialized countries and in much of the developing world, and certainly in China. Most studies of trade and income distribution focus on the increase in the ratio of wages of skilled to unskilled workers. The focus here has been on the share of national income going to corporate profits. We saw that globalized production is contributing to a rising profit share in the U.S. and to an accumulation of profits in the form of foreign exchange reserves in China. Such heightened inequality may not be sustainable, and gets to the heart of political debates and struggles over the effects of globalization.³⁰

²⁹ See Kujis (2005), Hung (2007).

³⁰ Watson (2007, p. 17) comments that shareholder value strategies are likely to become a “site of political struggle” for similar reasons, that is heightened income and wealth inequality. Another issue in the sustainability debate is whether Yuan revaluation (vis-à-vis the dollar) would necessarily bring U.S. trade balance improvement of the magnitude normally predicted. Even ignoring short-run J-curve effects, the revaluation might simply trigger a shift in sourcing from China to other locations, perhaps raising costs to U.S.

6. Conclusion: The interdependence of globalized production and financialization

Analysis of global value chains often leaves aside the financial implications, and studies of financialization tend to leave as implicit the link to production and investment. In this paper, I have focused narrowly on the U.S. and its reliance on Chinese manufacturing to demonstrate that there is a link between the globalization of production and financialization, although not a simple causal relation from one to the other. The globalization of production has clear implications for pricing, profits, wages and investment at the level of the firm and these have supported the process of financialization. Pressures for financialization and increased short-run shareholder returns have, in turn, spurred greater globalization of production, as firms have divested the less competitive aspects of their production or relocated parts of the production process in order to lower costs. The interdependence between the two processes is only likely to grow in both scale and scope, as services offshoring begins to expand very rapidly and as more countries participate in complicated global value chains.

The literature on financialization to date has left unanswered the question of how the financialized system sustains itself. As Lazonick and O'Sullivan put it: "What is the continuing capacity of US corporations to support stock prices through 'downsize and distribute' strategies?" Lazonick and O'Sullivan (2000) are skeptical that there is such a "continuing capacity," writing that "the experience of the United States suggests that the pursuit of shareholder value may be an appropriate strategy for running down a company—

firms and thus the value of U.S. imports, lowering Chinese exports and raising exports by other countries (e.g. Vietnam). In effect this would be a transfer of rents from U.S. company stockholders to producers in the other countries who capture the export markets.

and an economy. The pursuit of some other kind of value is needed to build up a company and an economy.” Boyer (2000, p. 142) notes that while his simulation model of U.S. economic growth is profit-led and stable, nonetheless “the more extended the impact of finance over corporate governance...the more likely is an equity-based regime to cross the zone of structural stability .” This pessimism is reflected in the literature on the effects of financialization. Stockhammer (2004) finds that financialization “contributed to” a slowdown in investment by nonfinancial corporations (especially in the U.S. and France) and can thus be blamed for the slowdown in economic growth in those countries since 1980. Crotty (2007), in a study of firm behavior in the American nonfinancial corporate sector also finds a negative relation between financialization and investment in machinery and equipment. And a large literature on finance and economic development attributes slow growth in developing countries and the recurrence of financial crises on excessive financial liberalization and the financialization it has brought, especially to emerging market economies.³¹

The persistence of financialization needs a broader explanation since its theorization has been largely based on a once-for-all conception of the move from “retain and reinvest” to “downsize and distribute.” In this paper I argued that what many analysts of financialization fail to consider are the changes in the structure of production, and specifically the rise of global value chains that have provided the continued capacity of the major industrialized countries to sustain profit growth within the confines of a financialized system. Thus while a

³¹ See, for example, Arestis et al.(2005)

common presumption in the financialization literature is that finance is the “tail” wagging the production “dog,” it is not possible to make the case that the revolution in corporate governance or the liberalization of capital accounts *caused* the international vertical disintegration of production because it preceded it chronologically.³² The two processes have emerged in force in the past 25 years and it is more reasonable to see the two as interdependent tendencies.³³ Financialization has encouraged a restructuring of production, with firms narrowing their scope to “core competence.” And the rising ability of firms to disintegrate production vertically and internationally has allowed firms to maintain cost markups--and thus profits and shareholder value--even in a context of slower economic growth. The argument put forth here is not that globalized production triggered financialization, but that global production strategies have helped to sustain financialization.³⁴ Corporate governance and global value chain governance are linked and our understanding of each of these processes can be strengthened by a deeper exploration of this interdependence.

³² Note also that there is an older literature on the relation between financial institutions and production relations based on Gershenkron’s (1962, pp. 38-50) study of the institutional foundations of economic development, according to which financial institutions are the result of the specific production system. Zysman (1983) filled out this picture and identified different sets of financial institutions as enabling of three distinct systems of industrial relations, the Anglo-Saxon, the Japanese, and the French. Palpacuer et al. (2005) provide a rare recent sectoral analysis along these lines.

³³ Montgomerie (2007) also questions the idea of a single direction of causation, arguing that financialization is “an entry point into an analysis of a dynamic system of social interaction, rather than a static description of unitary will and collective logic.” (Montgomerie (2007, p. 6).

³⁴ The analysis also has implications for the relation between international trade and economic growth which merit further research. Our analysis of the contemporary U.S. situation--whereby a growing trade deficit is integral to retaining profits, markups and domestic market share-- contrasts starkly with some classic heterodox writings on open economy macroeconomics, such as Kalecki or Hobson.

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