



Unpacking the U.S. Labor Share

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PREFACE

This working paper is one of a collection of papers, most of which were prepared for and presented at a festschrift conference to honor the life's work of Professor Thomas Weisskopf of the University of Michigan, Ann Arbor. The conference took place on September 30 - October 1, 2011 at the Political Economy Research Institute, University of Massachusetts, Amherst. The full collection of papers will be published by Elgar Edward Publishing in February 2013 as a festschrift volume titled, *Capitalism on Trial: Explorations in the Tradition of Thomas E. Weisskopf*. The volume's editors are Jeannette Wicks-Lim and Robert Pollin of PERI.

Since the early 1970s, Tom Weisskopf has been challenging the foundations of mainstream economics and, still more fundamentally, the nature and logic of capitalism. That is, Weisskopf began putting capitalism on trial over 40 years ago. He rapidly established himself as a major contributor within the newly emerging field of radical economics and has remained a giant in the field ever since. The hallmarks of his work are his powerful commitments to both egalitarianism as a moral imperative and rigorous research standards as a means.

We chose the themes and contributors for this working paper series, and the upcoming festschrift, to reflect the main areas of work on which Tom Weisskopf has focused, with the aim of extending research in these areas in productive new directions. The series is divided into eight sections, including closing reflections by our honoree himself, Professor Weisskopf. Each section except for the last includes comments by discussants as well as the papers themselves.

The eight sections are as follows:

1. Reflections on Thomas Weisskopf's Contributions to Political Economy
2. Issues in Developing Economies
3. Power Dynamics in Capitalism
4. Trends in U.S. Labor Markets
5. Discrimination and the Role of Affirmative Action Policies
6. Macroeconomic Issues in the United States
7. Applications of Marxist Economic Theory
8. Reflections by Thomas Weisskopf

This working paper is 2 of 3 included in Section 6.

- Jeannette Wicks-Lim and Robert Pollin

Unpacking the U.S. Labor Share

James Heintz

In his classic paper, “Marxian Crisis Theory and the Rate of Profit in the Postwar U.S. Economy,” Thomas Weisskopf presented a detailed empirical decomposition of the factors behind the declining rate of profit observed at that time (Weisskopf, 1979). A decline in the rate of profit is central to Marxian crisis theory and to radical analysis of U.S. economic history, specifically the collapse of the 'Golden Age' of U.S. capitalism. Weisskopf found that the rising strength of labor, as captured by the distribution of income between capital and labor, was a critical determinant of the falling rate of profit. However, Weisskopf also found that labor's strength at this time was 'defensive' as opposed to 'offensive', in that labor was able to preserve its income in the face of adverse terms of trade movements. Put another way, labor did not aggressively raise its real wage, but rather prevented a deterioration when price changes began to threaten the profitability of U.S. producers.

In the spirit of Weisskopf's detailed analysis, this paper examines trends in the U.S. labor share in recent decades. In so doing, it extends the empirical analysis into the era of neoliberal dominance, deregulation, and concerted attacks on the bargaining strength of labor. However, it also takes seriously Weisskopf's insistence in his earlier paper that aggregate trends need to be unpacked to get at the distributive dynamics behind macroeconomic variables such as the profit rate or labor's share of income. Therefore, I dissect the U.S. labor share in three ways: (1) like Weisskopf, the paper looks at how price movements affect the interpretation of the functional distribution of income between labor and capital; (2) it examines what happens to labor share if we focus on production and non-supervisory workers, as opposed to labor income broadly construed; and (3) it explores how fundamental structural changes to the U.S. economy - deindustrialization and the rise of a service economy - have affected the share of income going to labor.

BACKGROUND

An enduring observation about the U.S. economy is that the labor share of national income appears to remain remarkably constant over long periods of time, despite significant shifts in economic performance, policies, the distribution of power, and institutions. The constancy of the labor share seems to contradict other trends that would lead us to expect a deterioration in the position of working people as a whole. For example, real hourly wages of non-supervisory workers peaked in the early 1970s and subsequently declined on average throughout the 1970s and 1980s. Only in the 1990s did this trend begin reverse itself, but not enough to return to real wages their earlier heights. Similarly, in recent years, fewer workers have access to job-related benefits and the quality of those benefits has been declining. Alan Greenspan, former Chairman of the U.S. Federal Reserve, pointed to the role of growing insecurity among American workers as an explanation of subdued rates of inflation in the 1990s, the so called 'traumatized worker' hypothesis.¹ However, it is difficult to tease out these developments from the patterns observed in the labor share. This raises questions about the use of the labor share as an indicator of the relative strength of labor.

The apparent consistency of the labor share is not a new phenomenon. Keynes, writing about the British and U.S. labor shares in the late 1930s, observed that “the stability of the proportion of the national dividend accruing to labor, irrespective apparently of the level of output as a whole and of the phase of the trade cycle ...

is one of the most surprising, yet best-established, facts in the whole range of economic statistics” (Keynes 1939: 48). Michal Kalecki (1938) argued that the labor share was held constant by two trends that, in his estimation, directly off-set one another: (1) the growing monopoly power of business, which would reduce labor share by raising the ability of capital to claim a larger income share, and (2) the fall in the price of raw materials relative to value-added, which raises labor share by lowering the value of capital’s claim on output.²

In neoclassical theory, constant returns to scale production functions, such as the commonly used Cobb-Douglas formulation, yield constant labor shares of income when firms maximize profits in competitive markets. The constant labor share has also been seen as an indicator of the existence of a “natural” rate of unemployment – higher wages are off-set by growing unemployment which eventually disciplines wage demands, keeping over-all labor share constant in the long-run (see, for example, Layard, Nickell, and Jackman 1994). Both equilibrium unemployment and the factor shares of income remain constant in the long-run and are independent of both capital accumulation and technological progress.

Still others emphasize the need for a capitalist economy to balance productivity improvements with broad-based income gains in order to avoid a crisis in which too much is produced and too little sold. For example, many theorists operating broadly in the framework of the French *régulation* school suggest that, during the 'Golden Age' of U.S. capitalism, there was a need to balance productivity improvements, which lower unit labor costs and raise profitability, with wage growth, which potentially squeezes profits but supports aggregate purchasing power, in order to avoid a crisis of over-production or under-consumption (Aglietta, 1982; Boyer and Juillard, 2002). When wages grow at the same rate as labor productivity, the labor share remains constant.

This paper takes a different approach and argues that the empirical premise of these explanations – that the constant long-run labor share reflects a stable distribution of income among factors of production – is misleading. Behind the seemingly unperturbed trends in labor’s share of national income lurk dramatic changes in the U.S. economy and its labor markets: a shift towards non-wage forms of compensation; a deterioration in the “terms of trade” for U.S. workers; important structural changes in the composition of national income; and a redistribution of labor income between segments of the labor force. This paper documents these dynamics and reflects on their implications for the well-being of workers and their families.

THE U.S. LABOR SHARE: BASIC TRENDS

Aggregate labor share is typically measured as total compensation of paid employees expressed as a percentage of national income. Compensation includes non-wage benefits in addition to wages and salaries. The definition of 'employee' is broad, and includes highly remunerated managers in addition to rank and file production workers. The definition of compensation used by the U.S. Bureau of Economic Analysis in compiling these data therefore includes realized stock options and taxable fringe benefits which are not part of the pay package of a typical worker (Krueger, 1999). Figure 1 shows trends in the aggregate labor share for the U.S. economy over the last half century, from 1960 to 2010. The chart also includes the labor share of the private business sector - excluding the public sector. In the system of national accounts, the labor share of the public sector is, by definition, 100 percent, since public production is valued at its labor input. As a consequence, an expansion of the size of the state in the economy raises the labor share.

Figure 1. U.S. labor share and wage share, economy-wide and private business sector, 1960-2010

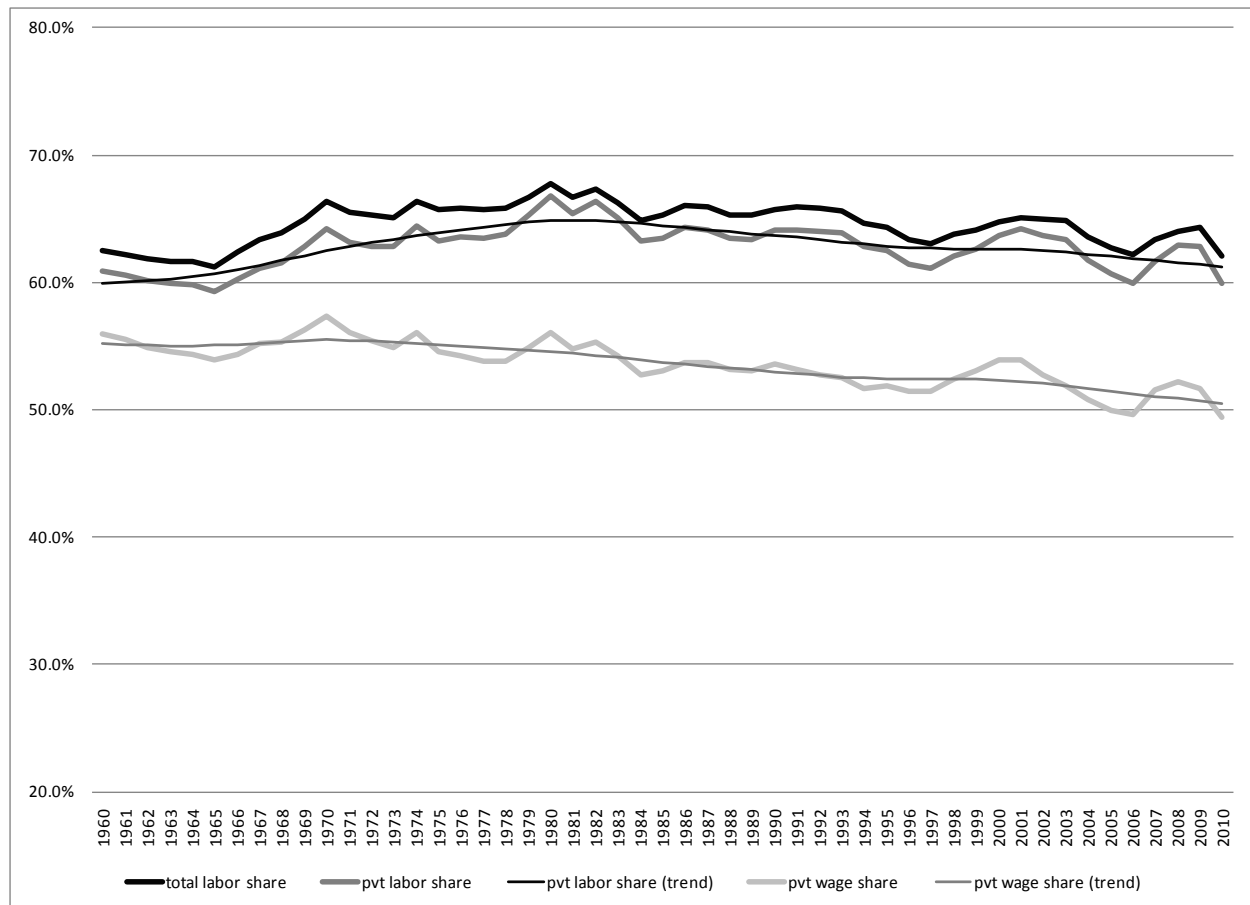


Figure 1 incorporates an estimate of the long-run trend in the private labor share, calculated by applying a Hodrick-Prescott filter to the series. The total share for the entire economy lies above the labor share for the private business sector, as expected, but the two series follow each other closely. There is evidence of a modest upward trend during the 1960s and much of the 1970s, and a modest downward trend beginning in the 1980s. The upward movement is consistent with Weisskopf's 1979 analysis of the labor share during the 1960s, but the long-run trend suggests a decline in the labor share since the 1980s.³

Figure 1 also shows trends in what I will call the 'wage share' - total wages and salaries paid expressed as a percent of national income, excluding non-wage compensation. We see a gradual downward trend in the wage share over this same period - and, at least in the initial decades, a widening gap between the labor share and the wage share. The expansion of non-wage compensation kept labor share relatively steady despite a modest downward trend in the wage share of national income. This suggests a substitution from wages to non-wage compensation, a shift supported by favorable tax treatment for certain categories of benefits. Beginning in the first half of the 1980s, the compensating support from an expansion of non-wage compensation drops off. Both the labor share and the wage share start falling - admittedly at a slow rate.

PRICE MOVEMENTS AND LABOR'S TERMS OF TRADE

In his analysis of the role that changes in the strength of labor play in influencing profit rates, Weisskopf stressed the importance of taking into account movements in the price of wage goods and movements in the price of output. The average price of the goods and services which workers consume can behave differently from the average price associated with productive output for a number of reasons. Wage goods may be imported or their prices strongly influenced by the presence of economic rents, disproportionate to the existence of such rents in the output produced. As Keynes wrote in a 1939 article, 'Relative Movements of Real Wages and Output,'

Our argument assumed that, broadly speaking, labor is remunerated in terms of its own composite product, or at least the price of wage goods moves in the same way as the price of output as a whole. But no one has supposed that this was strictly the case or was better than an approximation; and it may be that the proportion of wage goods, which are not the current product of the labor in question and the prices of which are not governed by the marginal costs of such product, is so great as to interfere with the reliability of our approximation (Keynes, 1939, p. 43). The labor share is typically measured as *nominal* value of labor compensation divided by *nominal* national income. However, the real value of labor income, defined in terms of the purchasing power of wages, depends on a different set of prices than the real value of output, or in the case of national income, value-added. Labor share can therefore be defined as:

$$(1) L_s = \frac{P_w WN}{P_y Y}$$

in which L_s is the labor share, P_w is the price of wage goods, W is the average real wage rate, N is the level of employment, P_y is the price of output (or, in this case, value-added), and Y is real national income. It is commonplace to assume that $P_w = P_y$, as described in the passage by Keynes above, in which case labor share reduces to:

$$(2) L_s^{real} = \frac{WN}{Y} \text{ if } P_w = P_y.$$

Labor share is often interpreted as if the expression in (2) holds - a constant labor share means that labor has maintained its share of real income. However, in reality, labor share is more correctly defined by the expression in (1). In this case, differential movements in prices have important implications for how we interpret the labor share.

These shifts in relative prices can be thought of as changes in "labor's terms of trade". Workers sell their labor, the value of which derives from the value added that they produce. Workers then take the income generated by the sale of labor and purchase goods and services to sustain themselves and their families. When the prices of wage goods rise relative to the price of the value added produced, labor's "terms of trade" can be said to be deteriorating. Falling terms of trade have important implications for how we think of the labor share of national income. A constant labor share - measured as nominal compensation divided by nominal national income - can be associated with worsening living standards when the workers' terms of trade are falling. Based on this discussion, labor's terms of trade (λ) can be expressed as:

$$(3) \lambda = \frac{P_Y}{P_W}$$

This gives us the following general expression for deriving the 'real' labor share from labor's terms of trade and the nominal labor share.

$$(4) L_s^{real} = \frac{P_W WN}{P_Y Y} \lambda$$

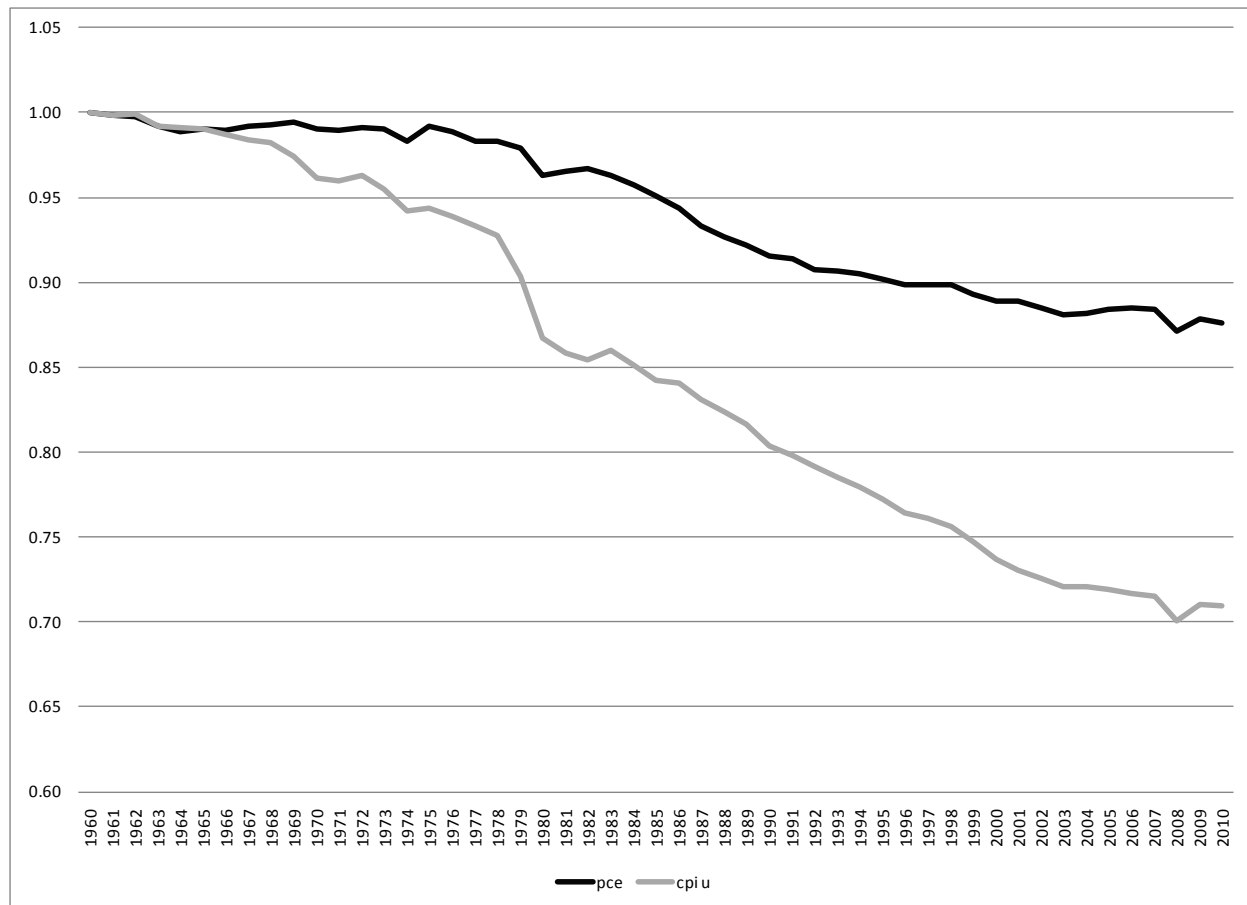
To explore how labor's terms of trade may have changed over time, and the implications for our interpretation of the U.S. labor share, indices for national income and wage goods need to be identified. The price index for national income - based on value-added - is the most straight-forward and I use the GDP deflator as a measurement of . For the price of wage goods, there exist a broader set of choices. In this paper, I consider two price indices: the CPI for all urban consumers and the price index associated with personal consumption expenditures (PCE) in the national accounts.

The choice of a price index for wage goods is not trivial. The CPI-U is based on a fixed consumption basket, but the nature of goods and services which households consume has changed over time. In recent years, the CPI-U has been adjusted to reflect changes in quality (so-called 'hedonic price adjustments') and some degree of substitution within categories of goods and services. In contrast, the PCE price index is based on a variable basket of goods and services - specifically, the actual expenditures made. This reduces the challenge of accounting for quality changes and substitution possibilities associated with fixed basket indices. However, if households react to higher prices by purchasing inferior substitutes, the PCE will exhibit a smaller price increase due to the increased prevalence of inexpensive goods. Unlike the CPI-U, the PCE includes both purchases made by households and purchases made on behalf of households. As a result, healthcare expenditures carry more weight in the PCE than the CPI-U. This is particularly relevant given the expansion of non-wage compensation previously discussed.

The use of two price indices for consumer goods provides us with a range of estimates for the trend in labor's terms of trade. Figure 2 plots the ratio of the GDP price deflator to the PCE index and the ratio of the GDP price deflator to the CPI-U from 1960 to 2010, with the ratio of the two indices set equal to one in 1960. If the price of wage goods changed at the same rate as the price of value added, we would expect these ratios to be equal to one and remain constant. However, in both cases the ratio of the GDP price deflator to the relevant index of wage goods fell over time - indicating a deterioration in labor's terms of trade. The fall is much more pronounced for the ratio based on the CPI-U compared to that based on the PCE, reflecting differences in the way the prices of wage goods are measured.

Interpreting the trends in Figure 2 along with the relationship presented in Equation (4) suggests that differences in the relative rates of change of the price indices would have contributed to a decline in the real labor share relative to the nominal labor share. The decline attributable to price movements would be most pronounced beginning in the 1980s - the same time period in which the nominal labor share begins to exhibit a long-run downward trend.

Figure 2. Labor's terms of trade index, based on the personal consumption expenditures (PCE) price index and the consumer price index, 1960-2010



What do these trends shown imply about our interpretation of the labor share? Profit-seeking businesses will care more about the price of output or value-added than the cost of living and, from this perspective, the nominal labor share provides guidance of whether capitalist firms are feeling a profit squeeze. Since the labor share computed from nominal values of compensation and national income is relatively constant (raising modestly in the initial decades and falling slightly afterwards), there is no evidence of a significant profit squeeze, particularly in the later decades. However, in terms of labor's well-being, the real labor share provides a better guide. Here there is clear evidence of a decline, once price movements have been taken into account. Had labor been able to defend its living standards so as to keep the real labor share constant, this would have meant that the nominal labor share would have had to increase, causing a pronounced profit squeeze. This did not happen over the period examined here. The defensive strength of labor, identified by Weisskopf in his analysis of the profit share, has evaporated.

What is behind the fall in labor's terms of trade? Table 1 shows the annualized change in average prices, derived from both the PCE index and the CPI, for specific categories of goods and services consumed by households over the two most recent trough-to-trough business cycles (1991 to 2009). Consumer durables and certain categories of non-durable goods, e.g. clothing, actual show a nominal price *decrease* over this time

period. The prices of these goods have been subject to growing international production and imports from outside the U.S. Therefore, imports of consumer goods, specifically manufactured goods, do not appear to be driving the reduction in labor's terms of trade. However, a number of categories of goods and services do show above average price increases over this period - housing, gasoline, medical care, financial services. The price dynamics of these goods are subject to economic rents of various kinds. It appears that pressure from economic rents for critical consumer goods and services have pushed up the cost of living for U.S. workers. These higher costs did not squeeze profits, but rather reduced the real income of working people.

Table 1. Change in the personal consumption expenditure (PCE) price index and the consumer price index (CPI-U), 1991-2009, annualized rates of change

	PCE	CPI		PCE	CPI
Durables	-1.4%	-0.3%	Housing/shelter	3.0%	3.0%
Non-durables	-0.5%	2.4%	Healthcare	3.3%	4.3%
Clothing	-1.1%	-0.4%	Financial services	3.0%	3.8%
Gasoline	4.2%	4.0%	Whole index	2.1%	2.6%

Source: U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.

Note: Aggregate categories of goods and services are not fully comparable between the PCE and CPI series.

WHO COUNTS AS LABOR?

As others have noted (Phillips, 1960; Krueger, 1999), the category of labor used to calculate the U.S. labor share is broad: ranging from top level management to low-paid contingent workers. Wage inequality - e.g. between high-skilled and low-skilled employees - has been on the rise in recent decades. Therefore, a constant labor share could mask long-run distributive shifts in the U.S. economy. There is also the issue of the self-employed whose income is treated as proprietor's income, despite the fact that a share of the income of most self-employed individuals is derived from their own labor. This latter issue was a particular concern in the first half of the 20th century when there was on-going migration from family farms into urban wage employment. This would be treated as a transfer of national income from capital to labor, even if the quantity and value of labor services remained the same. Some have suggested using a rule of thumb, counting about two-thirds of proprietor's income as labor compensation (Johnson, 1954).⁴ Doing so helps explain some of the increase in labor share in earlier decades. However, over the period of time considered in this paper, proprietor's income, as a share of national income, has remained relatively constant (i.e. averaging 10.8% of private national income from 1960 to 1984, and 10.7% from 1985-2010), and standard adjustments for self-employed labor income would not affect the observed trends.

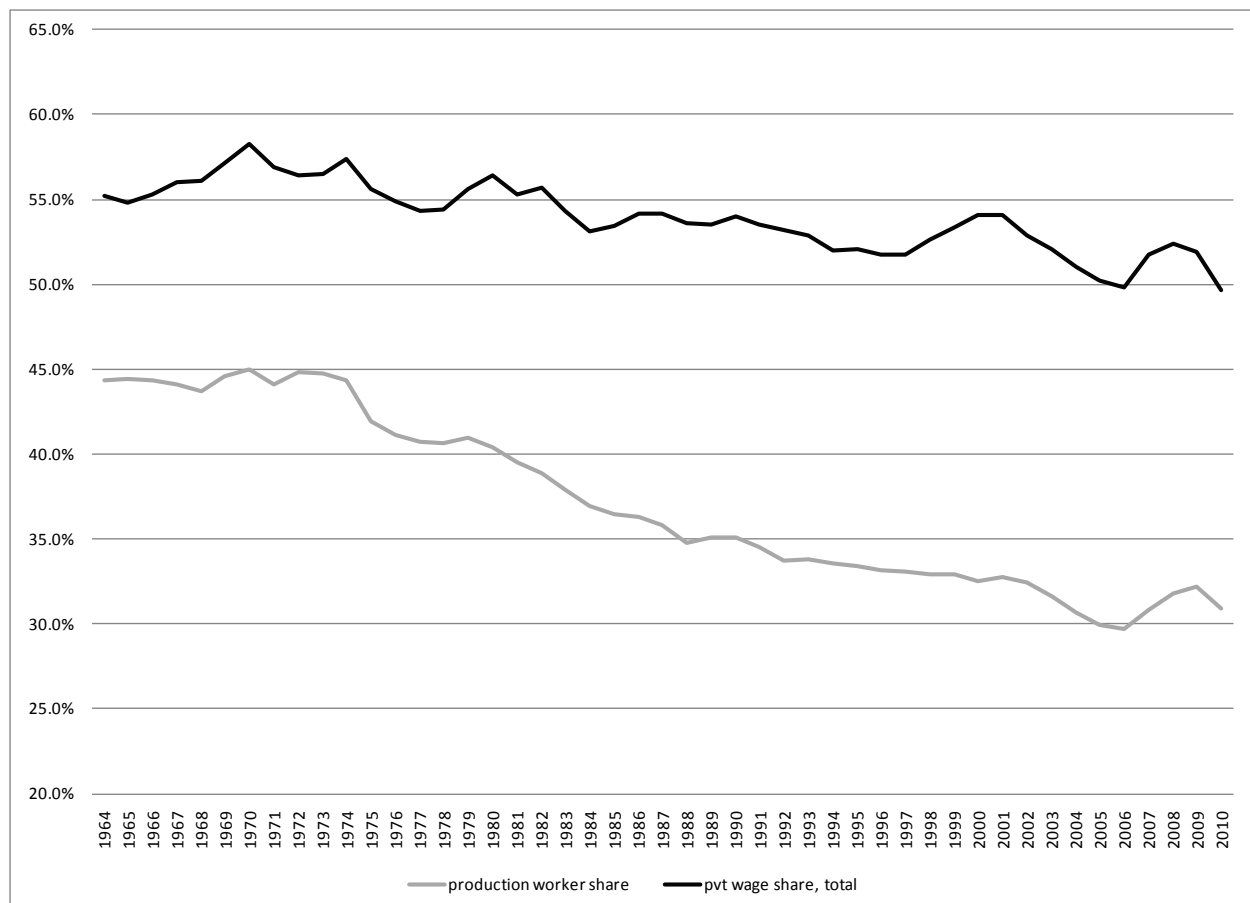
Greater inequality between categories of wage employees is a more significant phenomenon in recent years. One approach to take this into account is to analyze trends in the compensation of production and non-supervisory workers relative to national income. Detailed information on the contribution of production and non-supervisory workers to national income is not readily available. Therefore, construction of a labor share estimate for this group of workers is not a simple task, and would be sensitive to the methodology used to allocate national income between different groups of workers. Instead, the labor income of production workers can be expressed as a share of *total* national income, and trends in this measurement tracked over

time. Some have argued that the salaries of supervisory and management staff are better classified as a general overhead expense or as a component of capital income (Kalecki, 1938; Weisskopf, 1979; Mohun, 2006). Therefore, the labor share of production workers could be considered a better measure of the “true” labor share, in the sense that it better reflects payments to labor as a factor of production, rather than payments to individuals who oversee the labor process or manage various aspects of a capitalist firm.

To identify the trends in the labor share of production workers, we focus on the wage share of income. The limited availability of data on non-wage compensation for production workers over a relatively long-time period makes this simplification necessary. Data on the hours and earnings of non-supervisory production workers from the Bureau of Labor Statistics were used to estimate total wage income of production workers in the non-farm private sector. Total income for the equivalent segment of the economy was taken from the system of national accounts.⁵

Figure 3 shows trends in the total wage share of the private business sector and the wage share which can be attributed to production and non-supervisory workers. Beginning in the early 1970s, the wage share of production workers, relative to total national income, began to exhibit a downward trend. This trend is more pronounced than the downward movement in total wage share. Indeed, the gap between the total wage share and the production worker share widens over this period, indicating that non-production, supervisory workers account for an increasing share of labor's wage income.

Figure 3. Total wage share and wage share of production workers, 1964-2010



The fall in the wage share of production workers reflects the combined effects of several changes in the U.S. economy. First, real wages of production workers declined over much of this period. Downward pressure on the wages of production workers and growing inequality among labor as a whole have contributed to the observed trends in wage share. However, labor share is not solely determined by wages, but also by the level of employment. The downward trend in the wage share of production also indicates that employment of production workers has lagged the growth in employment of non-production and supervisory workers. Such a change could be driven by an increase in the intensity of management over the labor performed by production workers (e.g. Bowles and Jayadev, 2006). Alternatively, in an increasing globalized economy, the U.S. producers have been specializing in high-value added segments of the production chain which use non-production workers more intensely (e.g. engineering or research and design), while the actual production is subcontracted out to producers around the globe (Feenstra and Hanson, 2001). Such specialization would also increase the ratio of non-production to production workers.

Others have pointed to similar dynamics lurking behind a nearly constant labor share. For example, Krueger (1999) uses regression analysis to control wages for potential experience and education. He shows that the labor share based on his estimate of 'raw' labor, purged of human capital type variables, has also declined. Analysis along these lines demonstrates that labor's share of income is itself unequally distributed and this reality must be taken into account when making claims about the functional distribution of national income and other indicators of inequality.

LABOR SHARE AND STRUCTURAL CHANGE

Changes in the total labor share might not simply be a reflection of a changing distribution of income between capital and labor. Instead, it can also represent a change in the composition of industrial sectors in the economy (Dunlop, 1966). Different industrial sectors exhibit a wide range of labor shares. If a low-share sector expands relative to a high-share sector, then total labor share will fall, even if there has been no other change in the dynamics governing the distribution of income. Such structural shifts can be important to take into account when interpreting movements in the aggregate labor share.

If we examine average sectoral labor shares over the period 1991 to 2010, the lowest labor shares are in agricultural activities and finance. Durable goods manufacturing and some categories of private services have the highest average labor shares. Historically, durable goods manufacturing jobs were well-paid and often unionized. The category 'other private services' includes higher-end service jobs, for example, various professional services (e.g. accounting, legal services, etc). Within the broad sectors used in the U.S. national income and product accounts, labor shares range widely - from a low of 31 percent to a high of 84 percent. An analysis of aggregate labor share will hide this diversity.

Overall changes in total labor share can be decomposed into various components to assess how important changes in industrial composition really are in influencing the observed trends. We separate two components of the overall year-to-year changes in the labor share: (1) changes that can be attributed to shifting industrial composition and (2) changes that can be attributed to shifts in the labor share within a particular industry.¹ The sum of these changes gives us a measurement of the total contribution of these two components. Table 2

presents the sum of these annual changes over each trough-to-trough business cycle from 1961 to 2009, as determined by the National Bureau of Economic Research, with the cut-offs expressed as specific years. From 1971 to 1982 there were three business cycles. For the purposes of this exercise, I sum across the three cycles from 1971 to 1982 to keep the time periods in Table 2 roughly the same length.

Table 2. Decomposition of changes in total private labor share over recent business cycles

Sector	1961-70	1971-82	1983-91	1992-01	2002-9	All years
	Change attributable to within sector shifts in labor share					
Agriculture & forestry	0.1%	0.0%	0.1%	0.1%	-0.1%	0.3%
Mining & extraction	0.0%	-0.4%	0.3%	-0.3%	0.1%	-0.3%
Construction	0.1%	-0.1%	-0.2%	-0.4%	0.3%	-0.3%
Durable goods manufacturing	1.1%	1.0%	-0.9%	0.6%	-0.8%	1.0%
Nondurable goods manufacturing	0.4%	-0.5%	0.2%	-0.3%	-0.4%	-0.6%
Transportation/communication	0.2%	0.1%	-0.6%	1.2%	-1.0%	-0.1%
Trade, wholesale and retail	0.4%	0.9%	-0.4%	-0.8%	-0.2%	-0.1%
Finance, insurance, real estate	0.5%	0.4%	0.2%	0.6%	-0.1%	1.6%
Other private services	0.6%	1.1%	-0.1%	-0.3%	-0.4%	0.9%
Total	3.3%	2.5%	-1.4%	0.4%	-2.6%	2.3%
	1961-70	1971-82	1983-91	1992-01	2002-9	All years
	Change attributable to shifts in industrial composition					
Agriculture & forestry	-0.3%	-0.1%	-0.2%	-0.3%	0.1%	-0.7%
Mining & extraction	-0.2%	1.1%	-1.1%	0.0%	0.1%	-0.1%
Construction	0.5%	-0.7%	-0.1%	1.0%	-0.8%	-0.2%
Durable goods manufacturing	-1.3%	-2.9%	-1.9%	-3.0%	-1.2%	-10.3%
Nondurable goods manufacturing	-1.0%	-0.9%	-1.3%	-2.0%	-0.4%	-5.8%
Transportation/communication	-0.2%	0.1%	-0.4%	-0.1%	0.1%	-0.5%
Trade, wholesale and retail	0.5%	-0.9%	0.0%	-2.0%	-0.6%	-3.0%
Finance, insurance, real estate	0.2%	0.5%	0.7%	0.3%	0.0%	1.7%
Other private services	1.8%	2.5%	4.2%	6.3%	3.1%	17.9%
Total	0.0%	-1.2%	-0.3%	0.2%	0.3%	-1.0%
Combined change from both sources across all sectors	3.3%	1.2%	-1.6%	0.6%	-2.3%	1.2%

Source: U.S. Bureau of Economic Analysis.

Beginning with the effect of within sector changes in the labor share, the calculation in Table 2 show that, over the full period 1961 to 2009, a 2.3 percentage point increase in the total private labor share can be at-

tributed to changes in the labor shares within each sector. Put another way, if industrial composition had not changed, the labor share would have been 2.3 percentage points higher today than it was in 1960. However, the increase in labor share occurred during the first two periods in Table 2 - from 1961 to 1982. In later periods, including the most recent business cycle, labor share has fallen, holding industrial composition constant.

Turning to the effect of changes in industrial composition, we find that the aggregate impact, summed across all sectors, is relatively modest. For all years, the total impact of changes in sectoral composition sum to a fall of one percentage point. However, these aggregate effects hide the sector specific changes. The rapid expansion of 'other' services (i.e. primarily the higher end of service activities) would have raised labor share by nearly 18 percentage points - even if within sector labor share did not change. However, this is countered by the contraction of manufacturing activities - both durable and non-durable goods. A 16.1 percentage point reduction in labor share can be attributed to the decline in these two sectors' share of national income. The changes associated with the remaining sectors are more modest. The aggregate result appears to show little contribution to labor share dynamics from structural changes in the U.S. economy, but this hides a very dynamic story at the sectoral level.

CONCLUSIONS

This paper had one central objective: to unpack the aggregate labor share and to look behind the common assumption that the U.S. labor share has remained relatively constant during large stretches of the country's history. What I have tried to show is that, a number of dynamic factors have been operating behind the aggregate indicator. These factors are not trivial and have enormous importance for how we interpret movements, or lack of such movements, in the labor share. Specifically, behind the seemingly mild upward or downward trends we observe in recent decades lies a sizeable redistribution of labor income, significant structural changes, and critical movements in labor's terms of trade.

Weisskopf had shown that labor's defense strength contributed to a falling rate of profit from the mid 1960s to the mid-1970s. However, the analysis presented here indicates that the defense strength of labor is gone. The relatively stable labor share, measured using nominal values of compensation and income - both nationally and sectorally - imply that there is little on-going pressure on profitability. If anything, profit shares have been growing in recent years. However, labor's real income has fallen, due to the more rapid increase in the price of wage goods. These adverse price movements have largely been due to the role of rents in the economy. The distributive adjustments that have been made in response to the pressures from economic rents has fallen on the shoulders of labor, not capital.

This paper has highlighted the fact that labor income is unequally distributed and has become more so in recent years. This makes it increasingly difficult to draw clear welfare conclusions from changes in the functional distribution of income. A constant labor share may simply mean that the best-paid employees have seen their incomes rise at the expense of more vulnerable workers. These distributive dynamics can be characterized in multiple ways: from low-skilled to high-skilled workers, from production workers to the non-production, supervisory class of employees, or from traditional manufacturing to high-end services.

At the time of this writing, the U.S. continues to struggle with a prolonged economic crisis, triggered by the meltdown in financial markets which became evident in 2007 and 2008. Looking to the future as the U.S. economy emerges from the crisis, we can speculate on how the dynamics discussed in this paper may play out. Although the crisis had its origins in the financial sector, financial institutions have recovered and are well-placed to continue to seek out and protect the rents on which they flourish. This crisis, like no other recession in recent history, has led to claims that this downturn marks the beginning of the end of U.S. economic dominance. The rise of China and other emerging economies foreshadow a different economic future, with a redistribution of economic power around the world. Such a reshuffling of the global order will undoubtedly involve large-scale adjustments in the U.S. economy. Who will bear the brunt of adapting to these structural changes? If labor's defensive strength is gone, what does this imply for the future? Grappling with these questions is well beyond the scope of this paper and would be inescapably speculative. Nevertheless, what this paper can contribute is an insistence, à la Weisskopf, that macroeconomic analysis of distributive conflict remains essential, but we need to look into, behind, and beyond the usual variables to really see what is going on.

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¹ Alan Greenspan noted that growing insecurity among workers, due in part to technological changes, would have contributed to wage moderation and less inflationary pressure, despite low unemployment, in his monetary policy report to Congress in July 1997 (<http://www.federalreserve.gov/boarddocs/hh/1997/july/testimony.htm>).

² In Kalecki's framework it is a reduction in the ratio of "turnover" (the total value of output including intermediate inputs) relative to income (total value added) that lowers capital's share. This occurs because Kalecki defines the degree of monopoly power in terms of capital's ability to claim a particular share of total turnover, not income. Therefore, if turnover falls at a given level of monopoly power, the labor share of income rises.

³ This analysis is based on the long-run trends in the labor share, derived from observed values of the labor share over five decades. The chapter by Michael Reich, this volume, discusses recent trends in the labor share in which he emphasizes the decline in the labor share since 2001.

⁴ Johnson (1954) assumed 65 percent of proprietor's income represented labor income.

⁵ The BLS series on employment, hours of work, and wage of production and non-supervisory workers excludes work done on farms. Therefore, the contribution of farms to private national income had to be removed. To do this, the non-farm fraction of total proprietor's income was used to estimate compensation of employees among non-farm proprietorships and other contributions to national income from non-farm proprietorships.

¹ The change in labor share that can be attributed to shifts in industrial composition is computed as the change in share of national income from time 't-1' to time 't', multiplied by the industry-specific labor share in time 't-1'. The change in labor share that can be attributed to shifts in the industry-specific labor share is computed as the change in the industry-specific labor share from time 't-1' to time 't', multiplied by the income share in time period 't'. The sum of these two terms is equal to the total change in labor share from time 't-1' to time 't'.