

"... people are at last compelled to face

## With Sober Senses

their real conditions of life, and their relations with their kind." -Karl Marx, *Manifesto of the Communist Party*

A publication of Marxist-Humanist Initiative



### Lies, Damned Lies, and Underconsumptionist Statistics

Andrew Kliman, September 16, 2010

I'm in the process of writing a book on the latest global economic crisis. This has given me the opportunity to take a careful look at underconsumptionist writers' support—or rather, lack of support—for some of their most important claims. The issues I'll discuss below have to do with the underlying long-run causes of the crisis. Is the crisis ultimately rooted in contradictions of the capitalist system of production, or is it ultimately rooted—as the underconsumptionist camp claims—in falling pay for workers and/or a fall in their share of national income?

The evidence I'll present here shows that the underconsumptionist account of the underlying causes of the crisis is incorrect for three reasons. First, the share of national income received by the U.S. working class hasn't changed over the last 40 years, and it is a good deal higher than in 1960. Second, during the last three decades (the period for which reliable data exist), compensation of U.S. workers has risen—by as much as 35%, according to one measure—even after we adjust for inflation.

Third, the evidence shows that the lynchpin of the underconsumptionist theory of economic crisis—the supposed inability of productive investment spending to grow faster than personal consumption spending in the long run—is simply false. Because this is supposedly impossible, the underconsumptionist camp claims that slower growth of personal consumption, caused by the (alleged) relative or absolute decline in workers' pay, cannot be counterbalanced, in the long run, by quicker growth of productive investment spending. But the evidence I will present below shows that business investment spending in the U.S. grew almost five times as fast as personal consumption spending grew during the *seventy-five* year period between 1933 and 2008.

#### **Workers' Non-Falling Share of National Income**

The notion that the latest economic crisis is an irreducibly financial crisis, a crisis of a particular form of capitalism dominated by finance—instead of a crisis of capitalist production—has become rather popular among radical economists. (See my essay "[Appearance and Essence](#)" and the longer study published by Marxist-Humanist Initiative, "[The Persistent Fall in Profitability Underlying the Current Crisis](#).") John Bellamy Foster and Fred Magdoff, two writers for *Monthly Review*, a left-Keynesian underconsumptionist publication, have recently fused the financial-crisis notion with underconsumptionism:

"It was the reality of economic stagnation beginning in the 1970s ... that led to the emergence of 'the new financialized capitalist regime,' ... whereby demand in the economy was stimulated primarily 'thanks to asset-bubbles.' ... But such a financialized growth pattern was unable to produce rapid economic advance for any length of time, and was unsustainable....

"A key element in explaining this whole dynamic is to be found in the falling ratio of wages and salaries as a percentage of national income in the United States. Stagnation in the 1970s led capital to launch an accelerated class war against workers to raise profits by pushing labor costs down. ... Chart 3 shows a sharp decline in the share of wages and salaries in GDP [gross domestic product] between the late 1960s and the present." ("[Financial Implosion and Stagnation: Back To The Real Economy](#)", *Monthly Review* 6:7, Dec. 2008, John Bellamy Foster and Fred Magdoff)

Foster and Magdoff's Chart 3 makes use of official U.S. government data to show that wages and salaries fell from about 52% of gross domestic product in 1960 and 53% in 1970 to about 46% in 2007. It looks convincing—unless you also look at the government's categories and realize that Foster and Magdoff have left out big and growing chunks of working people's incomes. Data for these other components of workers' incomes are readily available. In fact, they're reported in the same table that Foster and Magdoff used to get their wage and salary figures.

<http://gesd.free.fr/wolfflens.pdf>

In a piece published at the same time in Monthly Review's *MRZine*, Rick Wolff reproduces Foster and Magdoff's Chart 3 and employs it as a basis for his own analysis. ("[Capitalism's Crisis through a Marxian Lens](#)", *MRZine*, Dec. 14, 2008.) More recently, Wolff and Stephen Resnick have based their conclusion that "real wages paid workers in manufacturing remained more or less constant and even fell a bit from [the late 1970s] to today" on wage and salary data alone, disregarding the other components of working peoples' incomes (p. 176 of Stephen Resnick and Richard Wolff, "[The Economic Crisis: A Marxian Interpretation](#)", *Rethinking Marxism* 22:2, April 2010, pp. 170-86.)

What is left out when one restricts one's attention to wages and salaries alone? First, many employers pay health and retirement benefits, and employers pay Social Security and Medicare taxes. All this is part of employees' "total compensation." Since the U.S. population is getting older and living longer after retirement, and since health-care costs are rising especially quickly, these additional components of total compensation have increased twice as fast as wage and salary income since 1970. In effect, workers are drawing less of their total compensation now, and saving more of it for when they're older.

Second, the government pays people, especially the working class, a lot of "social benefits": Social Security and Medicare benefits, veterans' benefits, and other items such as welfare assistance and unemployment insurance benefits. As the population has gotten older and as more people have come under the Social Security system, these social benefits have also increased as a share of GDP. Of course, working people are also putting more money into the Social Security and Medicare funds than they used to. So we need to subtract what they contribute through their taxes; in other words, we should add to total compensation only the *difference* between social benefits provided by government and the tax contributions that partly pay for them. I'll call this difference "net government social benefits."<sup>1</sup> Since 1970, these net benefits have increased almost four times as fast as wage and salary income.

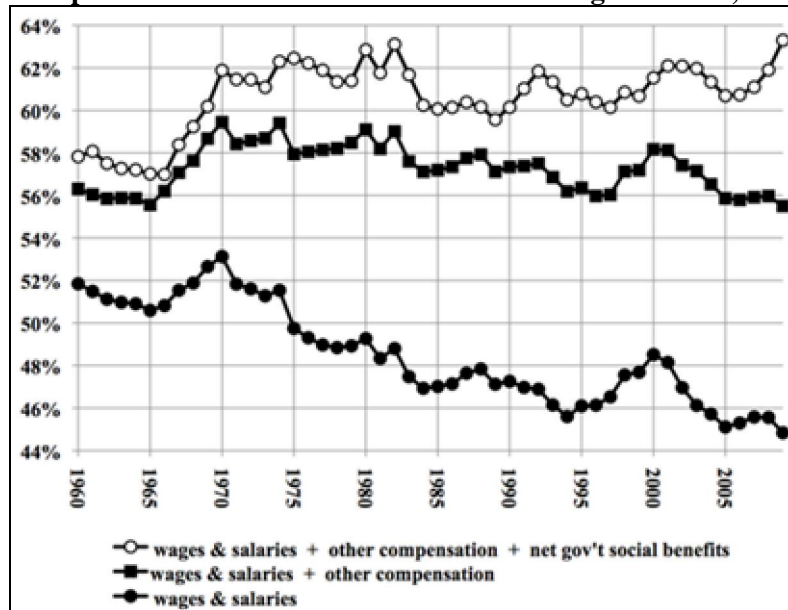
Figure 1 compares Foster and Magdoff's results with the results we get when we look at total compensation and when we also add in net government social benefits. Between 1960 and 2009, the wage and salary share of GDP fell by 7.0 percentage points, but the total compensation share fell by only 0.8 points, and the total-compensation-plus-net-government-social-benefits share *rose* by 5.5 points. Between 1970 and 2009, the wage and salary share of GDP fell by 8.3 percentage points, but the total compensation share fell by only 3.9 points, and the total-compensation-plus-net-government-social-benefits share *rose* by 1.4 points.

I do not mean to imply that working people are living well. That isn't the case. But the reason it isn't the case doesn't have to do with the alleged but nonexistent decline in the share of national income they receive. It has to do with a sharp decline in GDP growth that began in the mid-1970s and has more or less persisted ever since. Since GDP isn't growing fast and working people are getting a close-to-constant share of it, their incomes aren't growing fast.

---

<sup>1</sup> I have counted all net government social benefits as income of workers and working-class people because the data that would be needed to apportion it between them and other recipients are not available. The overwhelming majority of the net benefits do accrue to workers and working-class people; on average, about three-fourths of the net benefits consist of assistance to the poor and to low-income and disabled workers, and net retirement, disability, and veterans' benefits make up the majority of the remaining net benefits. Because my estimates overstate workers' income only slightly, it cannot plausibly be argued that their share of GDP has declined by any significant extent since 1970.

**Figure 1**  
**Components of Workers' Incomes as Percentages of GDP, U.S.**



Sources: [Economic Report of the President 2010](#), table B-1 (GDP), table B-29 (all other data).

### Workers' Non-Falling Real Compensation

Foster and Magdoff then write that the fall in the wage-and-salary share of GDP “reflected the fact that real [i.e., inflation-adjusted] wages of private nonagricultural workers in the United States (in 1982 dollars) peaked in 1972 at \$8.99 per hour, and by 2006 had fallen to \$8.24 (equivalent to the real hourly wage rate in 1967), despite the enormous growth in productivity and profits over the past few decades.”

One problem with this statement is that, once again, Foster and Magdoff are looking only at the trend in wages and salaries, not at the trend in the total compensation of a working population that is receiving a larger and larger share of its compensation after retirement. Another problem is that there are different ways of adjusting for inflation. Not surprisingly, Foster and Magdoff have chosen the method that makes the growth in real pay seem smaller. To remove the effect of the portion of pay increases that is due to inflation, they use the Consumer Price Index for urban wage earners (CPI-W). A readily available alternative is the Personal Consumption Expenditures (PCE) price index that the government publishes along with the GDP. I’m not suggesting that one price index is better than another. My point is rather that Foster and Magdoff should have informed readers of the different methods of inflation adjustment and the different results to which they lead.

A third problem is that they use pay data for “production and nonsupervisory workers” in the private sector. Several years ago, the U.S. government announced that it would discontinue publication of this series (though it later decided not to do so), partly because the category didn’t make much sense to the people who answered the government’s survey questions. As the [Department of Labor noted in 2005](#), “the production and non-supervisory worker hours and payroll data have become increasingly difficult to collect, because these categorizations are not meaningful to survey respondents. Many survey respondents report that it is not possible to tabulate their payroll records based on the production/non-supervisory definitions.”

As I will discuss a bit later, the production/nonsupervisory data also lead to a very peculiar conclusion concerning pay inequality. In light of that problem and the doubtful quality of the survey responses on which these data are based, it is dangerous to draw conclusions from them.

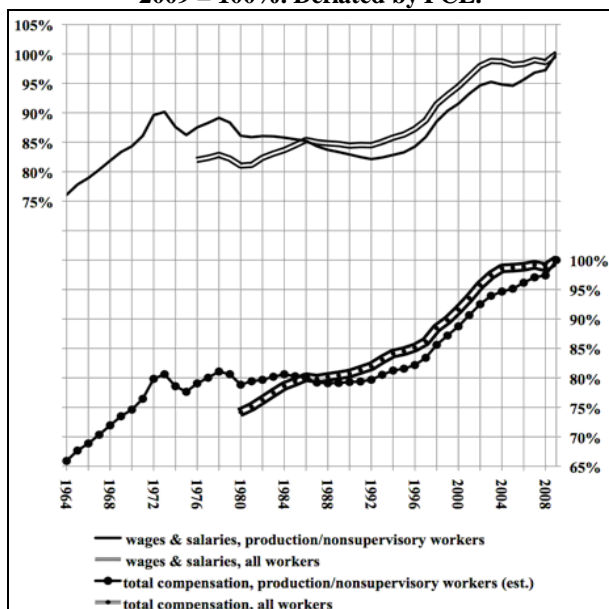
For this reason, Figures 2a and 2b also consider compensation data for all U.S. workers in the private sector. Data on their wages and salaries are available only for the period since 1976. Data on their total compensation are available only for the period since 1980, and since total compensation data for

production/nonsupervisory workers are not available at all, it is difficult to say what happened to total compensation during the 1972-2006 period with which Foster and Magdoff are concerned. But I have taken my best guess.<sup>2</sup>

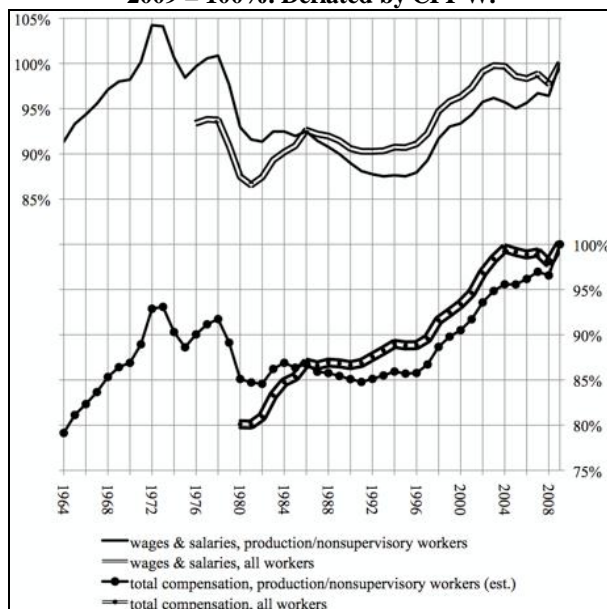
Figure 2a uses the PCE index to estimate real (i.e., inflation-adjusted) compensation. This adjustment procedure leads to the unambiguous conclusion that real compensation has *risen*, not fallen, whether we consider wages and salaries or total compensation, and whether we consider just production and nonsupervisory workers or private-sector workers. Since 1972, production and nonsupervisory workers' real wages and salaries have risen by 12%, and their real total compensation has risen (according to my estimate) by 25%. Real wages and salaries of private-sector workers as a whole have risen by 22% since 1976, and their real total compensation has risen by 35% since 1980.

Figure 2b adjusts for inflation by using the CPI-W. Once again, when we focus on total compensation, we find that workers' pay has *risen*. Real total compensation of all private-sector workers has risen by 25% since 1980 and (my estimate of) real total compensation of production and nonsupervisory workers has risen by 8% since 1972. Real wages and salaries of all private-sector workers have also *risen*, by 7% since 1976. The only series that declines is the one for the wages and salaries of production and non-supervisory workers, which has fallen by 4% since 1972. This is the series that Foster and Magdoff chose to present.

**Figure 2a**  
Compensation Indexes, Private Industry Workers, U.S.  
2009 = 100%. Deflated by PCE.



**Figure 2b**  
Compensation Indexes, Private Industry Workers, U.S.  
2009 = 100%. Deflated by CPI-W.



Sources [to Figs. 2a and 2b]: Data on average hourly earnings (wages and salaries) of production and nonsupervisory workers come from Table B-8 of the Bureau of Labor Statistics' Employment Situation release, at [bls.gov/webapps/legacy/cesbtabs8.htm](http://bls.gov/webapps/legacy/cesbtabs8.htm). Other total compensation data and wage and salary data come from the Bureau's "Employment Cost Index, Historical Listing, Continuous Occupational and Industry Series, September 1975 - March 2010," Tables 5 and 9, available at [bls.gov/web/eci/ecicois.pdf](http://bls.gov/web/eci/ecicois.pdf). I have averaged the quarterly figures for each year. PCE stands for the personal consumption expenditures price index, reported in the National Income and Product Accounts, Table 1.1.4, line 2, which is published by the Bureau of Economic Analysis ([www.bea.gov](http://www.bea.gov)). CPI-W stands for the consumer price index for urban wage earners and clerical workers (published by the Bureau of Labor Statistics and available at [www.bls.gov/cpi/](http://www.bls.gov/cpi/)). I have averaged the monthly figures for each year.

<sup>2</sup> To obtain my estimates, I first computed the ratio of total compensation to wages and salaries for all private-sector workers since 1980, estimated the trend in the ratio, and "backcasted" it to 1964. The resulting series measures the growth of their total compensation in relationship to their wages and salaries. I then assumed that production and nonsupervisory workers' total compensation grew in relationship to their wages and salaries at the same rate, and therefore multiplied their wages and salaries by this ratio to obtain an estimated index of their total compensation.

The upshot of the above analysis is that, in order to arrive at the conclusion that workers' real pay has declined, one must do *all* of the following:

- (1) look only at wages and salaries, not the more meaningful total compensation figures;
- (2) use the CPI-W to adjust for inflation, while ignoring the PCE, the use of which yields the opposite conclusion; and
- (3) look only at the production and nonsupervisory workers series, which is of doubtful validity, and not (also) the figures for all workers.

But even when one does all this, one still cannot obtain the result that the pay of U.S. workers has fallen in real terms during the era of “financialized capitalism”—i.e., since the 1980s. Real wages and salaries of nonproduction and supervisory workers have risen by 9% since 1981, the year in which Ronald Reagan took office. It might help to comment here on the notion that the pay of regular workers, working-class workers, has fallen or stagnated. If we consider total compensation—which is the pay measure that matters—there is little evidence of a decline or stagnation. Assuming for the moment that the figures for production and nonsupervisory workers validly measure regular workers' compensation, the estimates in Figures 2a and 2b suggest that their real total compensation is higher now than in the early 1970s. But it is only slightly higher when the CPI-W is the index used to adjust for inflation. So can we say that the rise in real compensation of all workers is mostly due to a rise in the compensation of managers and professionals?

It is difficult to answer this, in part because of the dubious validity of the data on compensation of production and nonsupervisory workers. One problem, noted above, is that the quality of survey information about such workers is questionable. Another is that the production and nonsupervisory workers series suggests that inequality of pay has not increased since 1986, a conclusion very much at variance with other data.

If we look at the period between 1986 and 2009 in Figures 2a and 2b, we see that production and nonsupervisory workers' wages and salaries, and wages and salaries of workers as a whole, have increased by the same percentage. This implies that the wages and salaries of the better-paid “nonproduction” and “supervisory” employees increased by the same percentage as well. So the relative gap between better-off and less-well-off workers didn't increase—if we assume that the data on production and nonsupervisory workers are valid.

**Table 1**  
**Compensation of Private Industry Workers, U.S. (in March of year indicated)**

|   | total percentage change    |                     |                            |                     |
|---|----------------------------|---------------------|----------------------------|---------------------|
|   | deflated by CPI-W          |                     | deflated by PCE            |                     |
|   | total<br>compen-<br>sation | wages &<br>salaries | total<br>compen-<br>sation | wages &<br>salaries |
| all private industry workers, 1980-2010                       | 24.7%                      | 13.5%               | 34.5%                      | 22.4%               |
| all private industry workers, 1986-2010                       | 14.8%                      | 7.6%                | 25.4%                      | 17.5%               |
| production and nonsupervisory workers,<br>1986-2010           |                            | 7.5%                |                            | 17.0%               |
| management, business, and financial<br>occupations, 1986-2010 | 18.9%                      | 14.8%               | 29.8%                      | 25.3%               |
| professional and related occupations,<br>1986-2010            | 19.4%                      | 12.2%               | 30.3%                      | 22.5%               |
| sales and related occupations, 1986-2010                      | 9.1%                       | 3.6%                | 19.1%                      | 13.1%               |
| office and administrative support<br>occupations, 1986-2010   | 21.8%                      | 12.9%               | 33.0%                      | 23.3%               |
| service occupations, 1986-2010                                | 10.3%                      | 2.9%                | 20.4%                      | 12.3%               |
| goods-producing industries, 1986-2010                         | 12.1%                      | 3.0%                | 22.4%                      | 12.5%               |
| service-providing industries, 1986-2010                       | 16.0%                      | 9.6%                | 26.7%                      | 19.7%               |
| transportation and warehousing industries,<br>1986-2010       | 1.3%                       | -9.2%               | 10.5%                      | -0.9%               |
| utilities industries, 1988-2010                               | 24.2%                      | 9.1%                | 35.4%                      | 18.9%               |

CPI-W = consumer price index for urban wage earners and clerical workers. PCE = personal consumption expenditures price index. Index numbers for the first quarters of the indicated years are used above. See Tables 2a and 2b for data sources.

However, other data published by the same government agency, the Bureau of Labor Statistics (BLS), flatly contradict this conclusion. A very large majority of private-sector “nonproduction” and “supervisory” employees work in “management, business, and financial occupations.” And a very large majority of the rest work in “professional and related occupations” or “office and administrative support occupations” in the manufacturing, mining, and construction industries. As Table 1 indicates, the increase in the wages and salaries of these groups was considerably greater than the increase for all workers—between 4.6 and 7.2 percentage points greater if we use the CPI-W index to adjust for inflation, and between 5.0 and 7.8 percentage points greater if we use the PCE index. Since the overwhelming majority of “nonproduction” and “supervisory” employees are in one of these occupations, their wages and salaries must have increased by much more than those of production and nonsupervisory workers. But if one accepts this conclusion one has to accept that the data on production and nonsupervisory workers are invalid, or, at minimum, that we have to take them with a pillar of salt.

The underconsumptionist camp is therefore faced with the following dilemma. If it wants to use the production and nonsupervisory worker data, in order to say that regular workers’ total compensation has increased only slightly since 1972, then it must also accept that inequality of pay has *not* increased over the last 24 years. If it wants to say that such inequality has increased, it must reject the production and nonsupervisory worker data and accept the consequence that it lacks valid evidence that the total compensation of regular workers has increased only slightly since the early 1970s. It can’t have it both ways.

I distrust the production and nonsupervisory worker series and accept the data in Table 1 which indicate that inequality of pay has increased. But these data also indicate that it would be highly misleading to present the rise in inequality of pay as a matter of well-off managers and professionals further enriching themselves at the expense of an undifferentiated mass of regular workers. The first full year for which there are data on pay in particular occupations and industries is 1986. Since then, total compensation of office and administrative support (i.e., clerical and secretarial) workers—who are disproportionately women and who are not typically well-paid—has risen *faster* than total compensation of managers and professionals. And total compensation of workers in the relatively low-paid service-providing industries has risen by almost as much. Since 1988, the first full year for which there are data for workers in utilities industries, their total compensation has also increased *faster* than total compensation of managers and professionals.

So, although the data suggest that inequality of pay has increased, Foster and Magdoff’s talk of “an accelerated class war against workers” is an overgeneralization—an overgeneralization that does more to fuel resentment than to account for the phenomena. And it is an agent-centered overgeneralization that diverts attention from the economic laws of capitalism that are the main underlying cause of the rise in inequality of pay.<sup>3</sup>

### **Production for the Sake of Production**

Finally, I turn to the lynchpin of the underconsumptionist theory of economic crisis, which is that economic crises are ultimately rooted in things like a fall in wages or a fall in workers’ share of national income. We’ve seen that they haven’t fallen, but let’s set that aside for now and focus on the notion that *if* workers do worse, *then* the economy will also do worse.

This notion seems rather strange, since we’re talking about a *capitalist* economy here. When workers’ pay is reduced, what they lose is of course a gain to the companies that employ them, extra profit, and profit is the fuel that powers the capitalist system. What creates problems for the system isn’t a rise in the rate of profit, but a fall.

---

<sup>3</sup> Since capitalism is a system of value production, the price that a company can get for its product is governed by the *socially necessary* cost of the product. A company can’t just pass *unnecessary* costs on to the purchaser. So capitalists have to eliminate unnecessary costs, especially when the going gets tough. Where it got toughest in the 1970s and 1980s, and where unnecessary costs were the greatest, was in the goods-producing industries. Their workers were disproportionately male and unionized, and they were relatively well paid. So production moved to non-unionized areas here and abroad, unions were busted, giveback contracts became common, and so forth. This process largely accounts for the disparity between compensation growth in office and administrative support occupations and in goods-producing industries, and the increased supply of service and sales workers that resulted from the relative loss of goods-producing jobs largely accounts for the slow growth of compensation in these occupations.

However, the underconsumptionist camp points to the fact that workers, being less well off than managers, owners, etc., spend a bigger fraction of their incomes on consumer goods and services. So, if workers' pay and/or share of income are falling, *personal* consumption demand will tend to fall. This would indeed reduce profits, and it could set the stage for an economic crisis or recession, *unless the decline in personal consumption demand is offset by a rise in another component of demand.*

Let's consider *productive* consumption demand, which we usually call "investment" demand nowadays. Investment demand consists of spending by businesses to build things like factories, malls, and offices, as well as purchases of machinery, other equipment, and software. So if investment demand rises, and the rise is large enough to offset the fall in personal consumption demand, a decline in wages or workers' share of income does not lead to a decline in *total* demand, and it therefore does not lead to an economic crisis or recession.

But underconsumptionists claim that investment demand *cannot* grow faster than personal consumption demand in the long run. Why not? Well, they say, if businesses invest in new factories and machines and so on, and use them to produce more stuff, they then have to sell the stuff—ultimately to people. But why is that? Why can't they sell to each other? For instance, why can't mining companies sell iron to companies that use the iron to make steel? And why can't the steel companies sell the steel to companies that use it to build mining equipment. And why can't the companies that build mining equipment sell it to the mining companies? And so on and so forth. (Of course, I'm not talking about a system without *any* production of consumer goods, just one in which production of consumer goods and the demand for them rise less rapidly than production of and the demand for investment goods.)

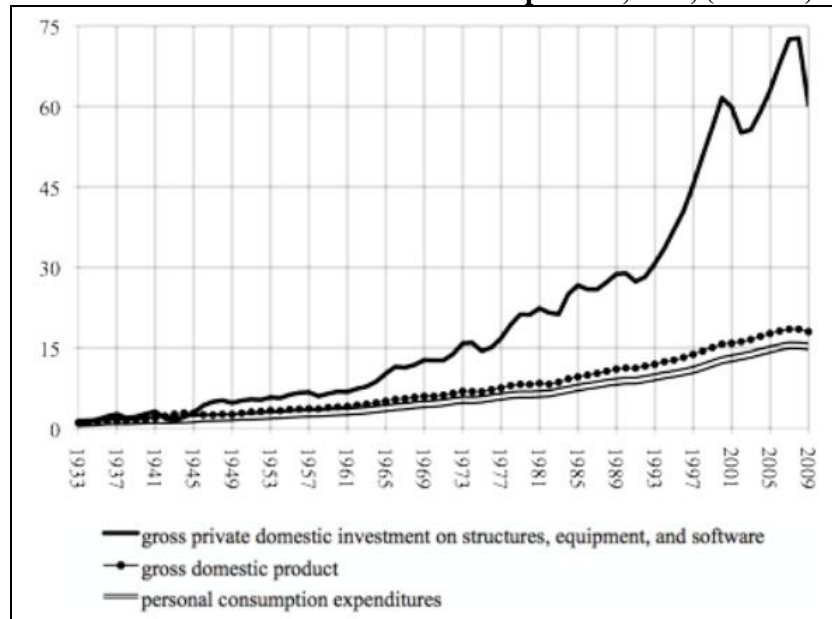
The underconsumptionist camp has never managed to provide a real answer. The best they've done is to assert that, in the long run, "the process of production is and must remain, regardless of its historical form, a process of producing goods for human consumption." [Paul M. Sweezy, *The Theory of Capitalist Development*, New York, Monthly Review Press, 1970 [1942], p. 172]. This statement isn't meant to deny that investment goods are produced, or that some investment goods are used to produce more investment goods. The point is rather that the process *ultimately* results in more shoes and iPods, and only as much additional investment goods as are needed to produce more shoes and iPods—not more iron, steel, and mining equipment that doesn't result in additional shoes and iPods. *However, the underconsumptionist camp hasn't provided any evidence or argument to support its assertion that production is always production for human consumption.* It's just a dogma.

And it's a dogma that's factually incorrect. At least it's factually incorrect in the U.S. case. Figure 3 shows the growth of real (inflation-adjusted) personal consumption demand and real investment demand by private businesses on structures, equipment, and software, as well as the growth of real GDP. Everything fell in 2009 because of the recession. But in the three-quarters of a century before that, real investment demand grew 73-fold, while GDP grew only 18-fold and personal consumption demand grew only 15-fold. So investment demand grew *four* times as rapidly as GDP and almost *five* times as rapidly as personal consumption demand. (For further discussion, see the Appendix, which follows the endnotes.)

What was that about investment demand not being able to grow faster than personal consumption demand in the long run? What was that about all production ultimately being production for human consumption? How long do we have to wait? Until, in Rosa Luxemburg's famous phrase, "the extinction of the sun"?

The distinguishing feature of capitalism, that which makes it different from all prior modes of production, is that it is a system of "production for the sake of production," not a system of "production for the sake of human consumption." In other words, production of means of production, investment goods, grows faster than production of consumer goods. What makes this possible is that, as the above data indicate, demand for investment goods also grows faster than demand for consumer goods.

**Figure 3**  
**Real Gross Domestic Product and Components, U.S., (1933=1).**



Source: [Bureau of Economic Analysis](#), NIPA, Table 1.1.3, lines 1, 2, and 9

This was the core of Marx’s argument against what is now called “trickle-down” economics—the notion that what’s good for General Motors ends up being good for working people as well—which is also based on the dogma that all increases in demand are “ultimately” increases in the demand for consumer goods (see *Capital*, vol. 1, chap. 24, section 2). And the primary reason why Raya Dunayevskaya held that Stalinist Russia was a (state-)capitalist society is that its economic development was based firmly on capitalism’s distinguishing feature, production for the sake of production. Just as in the “West,” investment demand in Russia grew faster than personal consumption demand. The latter actually fell for a long time, and the lives of tens of millions of peasants and workers were ruined and shortened. (See Dunayevskaya’s *Marxism and Freedom*, chap. 13 for a discussion of Russia, and her *Rosa Luxemburg, Women’s Liberation, and Marx’s Philosophy of Revolution*, chap. 3 for a discussion of “production for the sake of production.”)

## Appendix

The investment data in Figure 3 exclude government investment spending, spending to construct new homes, and investment spending on imports and exports. Between 1933 and 2008, real government investment spending grew faster than government consumption spending. I excluded spending on the construction of new homes because the status of such spending is ambiguous. The U.S. government classifies it as investment spending, but, more often than not, people purchase homes principally in order to consume the “housing services” they provide. It is difficult to draw any conclusion about the remaining component of GDP, the difference between exports and imports, because the U.S. government’s data for them begin only with 1967 and because the statistical tables fail to break down spending on some imports and exports, like cars, into investment spending and consumption spending.

The investment figures presented in Figure 3 are figures for “gross” investment, i.e., investment before subtraction of depreciation. It is not possible to estimate the growth of “net” (post-depreciation) investment by private businesses on structures, equipment, and software since 1933 because it was negative in that year. It was also negative throughout the whole 1931-1944 period, except in 1937, 1940, and 1941. Between 1945 and 2008, real net private investment on structures, equipment, and software grew 7.0 times as fast as real personal consumption spending, and 9.9 times as fast as real GDP. But because net investment is extremely volatile, the amount by which it increased between a certain year and 2008 is greatly affected by the choice of the starting year. If I had chosen 1930, 1937, 1940, 1941, or 1946 as starting year, the results would have



been quite different. Real net private investment would have grown between 1.5 and 93.4 times as fast as real personal consumption spending and between 1.6 and 89.5 times as fast as real GDP. So the long-run comparisons based on the net investment figures are not particularly informative.

In nominal terms, i.e., when no adjustment is made for inflation, gross private investment on structures, equipment, and software grew 3.0 times as fast as personal consumption spending, and 2.6 times as fast as GDP, between 1933 and 2008. Net private investment on structures, equipment, and software grew 2.4 times as fast as personal consumption spending, and 3.1 times as fast as GDP, between 1945 and 2008.

But why have I been concerned to begin my analysis with 1933, or as close to it as possible? In this year, the trough of the Great Depression, investment spending was exceedingly low. Am I not cherry picking the data and thereby exaggerating the increase in investment demand over time? No. This starting point is the right one to select in order to test what underconsumptionists claim. They regard the Depression as a return to equilibrium, the point at which growth of means of production, which had temporarily outstripped growth of personal consumption, was forcibly brought back in line. Because 1933 or thereabouts is an equilibrium, they would predict that the relationship between investment demand and consumption demand that existed in or around 1933 is the relationship that is sustainable in the long run. In other words, they would predict that any subsequent increases in investment relative to personal consumption would be only be temporary and self-negating, not a permanent feature of the post-Depression economy. In fact, underconsumptionists such as Alvin Hansen *did* predict a return to Depression conditions after World War II, and Paul A. Baran and Paul M. Sweezy argued in 1966 (*Monopoly Capital*, Harmondsworth, England: Penguin, p. 177) that “if the military budget were reduced to 1939 proportions, unemployment would also revert to 1939 proportions.”