

# Quantitative Easing as a Means of Reducing Unemployment: A New Version of Trickle-Down Economics

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**Abstract:** Quantitative easing represents a variation of trickle-down economics: the presumption is that asset purchases by The Federal Reserve (FED) benefit everyone. The policy involves increasing the prices of treasury bonds and mortgage backed assets to stimulate output and employment. Quantitative easing acts on balance sheets; it works through the price system by affecting the structure of prices, and hence wealth. The unemployed, lacking assets, are not directly affected by changes in asset prices. The unemployed are dependent on policies directed at generating income. While FED intervention prevented a collapse in asset prices, its effect on the real economy remains tenuous. The policy, however, has been a disaster from the point of view of social and economic justice. Data suggests that the policy has exacerbated the inequality in both the distribution of wealth and income, while doing little to reduce unemployment. The policy contrast sharply with fiscal policy employed during World War Two, which promoted greater equality in the distribution of income.

**Keywords:** Quantitative easing, monetary theory of production, inequality

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Quantitative easing represents a variation of trickle-down economics: the presumption is that asset purchases by The Federal Reserve (FED) benefit everyone. The policy involves increasing the prices of treasury bonds and mortgage backed assets to stimulate output and employment. While the effect on output and employment appears tenuous, the policy fails in promoting a more just society. The policy represents the triumph of pecuniary values over service, financial interests over industrial interests, asset holders over income earners.

Historically, trickledown economics refers to policies directed at increasing profits as a means of increasing output and employment. Adam Smith offered two versions both of which depend on extending the division of labor. “It is the great multiplication of the productions of all the different arts, in consequence of the division of labour, which occasions, in a well-governed society, that universal opulence which extends itself to the lowest ranks of the people” (Smith 1937, 11). The first version involves extending the market, which expands the division of labor, increases productivity and employment. The second version subsequently adopted and restated by supply-side economists advocates reducing taxes to increase saving and investment. Both versions claim to increase output and the income with which to buy that output. The first two versions affect income flows; quantitative easing affects asset prices. The obscurity between quantitative easing and the real economy, however, raises a number of questions.

First, what is the transmission mechanism between asset purchases and economic activity? Invariably, the effectiveness of the policy hinges on the degree of substitutability among assets, the higher the substitutability the more effective the policy. Second, how do we reconcile the trickle-down approach of quantitative easing with the historical manner in which businesses make money? Smith’s butcher, brewer, and the baker earned money by selling goods,

not assets. They earned their money the old fashion way, a process outlined in the monetary theory of production. Third, how does quantitative easing compare with fiscal policy in terms of promoting employment and equality? Fiscal policy used during World War II provides an example. And fourth, how do we reconcile quantitative easing with John Rawls difference principle and Marc Tool's social value principle? How do we reconcile helping the advantaged as a means of helping the disadvantaged? This points to the paradox inherent in market economies, namely, that to increase employment requires appealing to pecuniary interests. The problem, however, is that the pecuniary interests of financial institutions appear largely separate from the interests of the community.

### **Quantitative Easing and the assumed Transmission Mechanism**

In adopting quantitative easing, the FED has taken a page from Milton Friedman, James Tobin, and others. In response to a reporter's query regarding the Bank of Japan's options beyond a zero-interest rate policy to avert deflation, Friedman responded that "they can buy long-term government securities, and they can keep buying them and providing high-powered money until the high-powered money starts getting the economy in an expansion. What Japan needs is a more expansive domestic monetary policy" (Friedman 2000, p. 421).

In theory, quantitative easing affects the structure of asset prices. In purchasing assets, the FED increases asset prices leaving banks with excess reserves and other asset sellers with excess liquidity. In rebalancing their portfolios, banks increase lending; other asset sellers rebalance their portfolios bidding up the price of undervalued assets, a process that continues resulting in higher asset prices. Friedman describes the effect on the real economy as follows:

As the prices of financial assets are bid up, they become expensive relative to nonfinancial assets, so there is an incentive for individuals and enterprises to seek to bring their actual portfolios into accord with desired portfolios by acquiring nonfinancial assets. This, in turn, tends to make existing nonfinancial assets expensive relative to newly constructed nonfinancial assets. At the same time, the general rise in the price level of nonfinancial assets tends to raise wealth relative to income, and to make the direct acquisition of current services cheaper relative to the purchase of sources of services. These effects raise demand curves for current productive services, both for producing new capital goods and for purchasing current services. The monetary stimulus is, in this way, spread from the financial markets to the markets for goods and service. (Friedman 1969, p. 231)

Nevertheless, Friedman's explanation regarding how asset purchases increase employment remains obscure. His comment that it becomes cheaper to hire labor than "purchase of sources of services" implies that firms contract for labor services rather than purchase the businesses that supply those services. Employment rises because businesses substitute labor for capital.

Asset purchases supposedly affect the real economy by stimulating income flows in three ways. First, the increase in asset prices increase wealth. At some point, asset holders realize their capital gains, spending a portion on goods and services. Second, increasing asset prices create an expectation of higher asset prices, increasing borrowing and the likelihood of asset bubbles. Third, by reducing interest rates, quantitative easing offers debtors with good credit an opportunity to refinance, thereby reducing their cash outflows and increasing expenditures. All

three effects increase the flow of income accruing to businesses, thereby stimulating investment and employment. As Ben Bernanke notes:

The idea behind quantitative easing is to provide banks with substantial excess liquidity in the hope that they will choose to use some part of that liquidity to make loans or buy other assets. Such purchases should in principle both raise asset prices and increase the growth of broad measures of money, which may in turn induce households and businesses to buy nonmoney assets or to spend more on goods and services." (Bernanke 2009).

Bernanke calls the policy credit easing, implying that the policy works primarily through the asset side of the balance sheet. In other words, the policy works by increasing asset prices and reducing interest rates, instead of increasing bank reserves.

Second, the FED seeks to influence expectations by signaling to financial markets its intent to continue to purchase assets. "Such signaling can also increase household and business confidence by helping to diminish concerns about "tail" risks such as deflation. During stressful periods, asset purchases may also improve the functioning of financial markets, thereby easing credit conditions in some sectors." (Bernanke August 31, 2012)

### **Quantitative Easing and the Monetary Theory of Production**

The current macro situation indicates a disjuncture between asset prices and income flows. As noted, quantitative easing affects asset prices; it works through the price mechanism. Lacking assets, households in lower income brackets benefit only insofar as quantitative easing induces asset holders to consume more or hire more labor.

The slow decline in the unemployment rate underscores the lack of substitution between labor and other assets. Labor is not purchased at a price corresponding to the present value of discounted future income streams. The income accruing to labor is based on flows of expenditures, flows that are only indirectly influenced by FED policy.

As noted, businesses make money through the monetary theory of production. As Adam Smith observed, to earn profit capital must circulate, “it must go in one form and return in another” (See Smith 1937). Marx noted that circulation involves using markets to convert goods and services into money. In anticipating Keynes, Veblen emphasized the importance of sales. “By the sale of the output the business man in industry “realizes” his gains. To “realize” means to convert saleable goods into money values” (Veblen 1975, 50). In Dudley Dillard’s estimation, Keynes *General Theory* restates the monetary theory of production (Dillard 1980). Revenues depend on sales; sales depend on demand. In other words, for businesses to produce goods for markets there must be a market for goods.

Quantitative easing inverts the historical relationship between asset values and the income flows. Under the monetary theory of production, asset prices represent the present value of prospective income or quasi rents, anticipated revenues less variable costs. Prospective income implies that asset prices are subject to animal spirits, which are largely influenced by current income flows. As Hyman Minsky notes, the pervasiveness of income flows falling below cash flows that service debt precipitates depressions (See Minsky 1975). Unable to borrow, debtors are forced to liquidate assets. In this context, the central bank’s decision to purchase assets short-circuits the tendency to debt deflation by providing debtors with liquidity enabling them to fulfill their obligations.

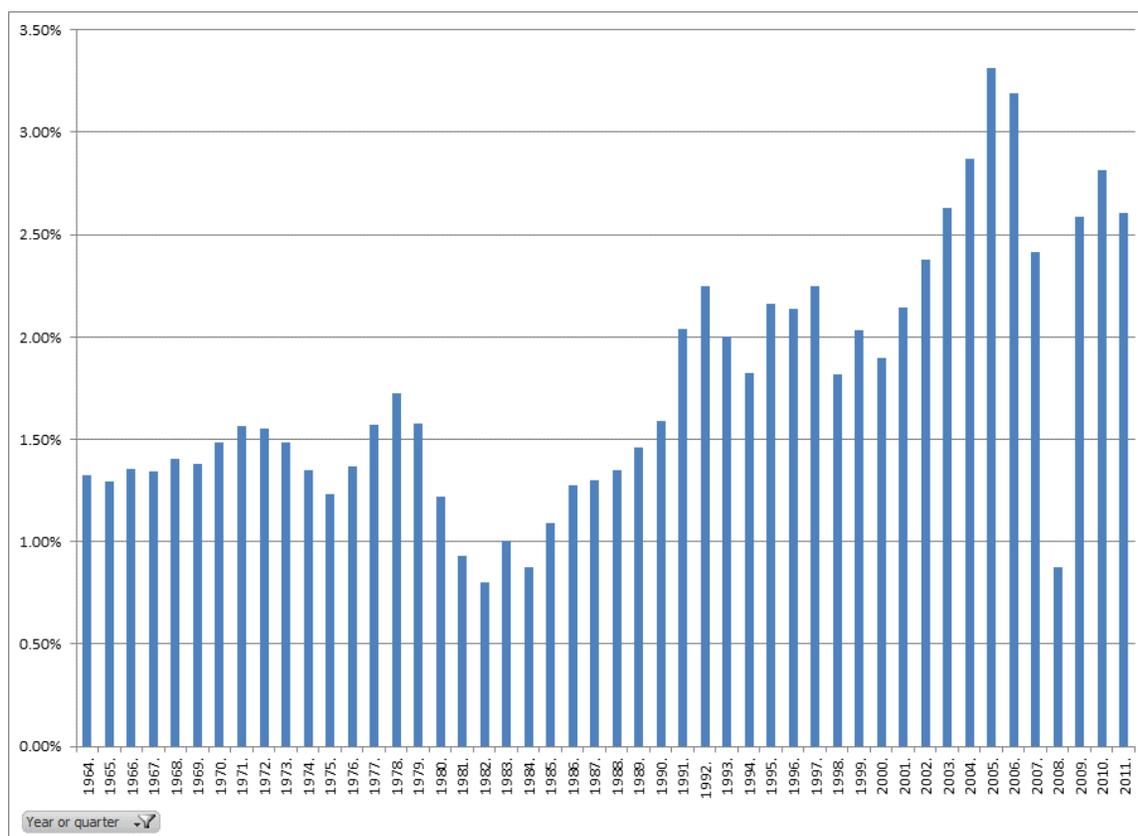
From the viewpoint of both Keynes and John R. Commons, a monetary economy involves a series of mutual obligations, the legal expression of which is the contract. Their observation that one person's financial asset is another's liability is central to modern monetary theory (See Wray 2012). From this viewpoint, monetary policy points to an asymmetry between averting a collapse in asset prices and stimulating economic activity. While providing liquidity enables firms to meet their obligations, providing liquidity does not in itself create obligations except to the central bank.

Creating obligations requires increasing expenditures. The opportunity to earn profits induces businesses to initiate a series of obligations aimed at increasing output, and converting that output into money. For Smith's brewer, those obligations involve purchasing labor, barley, hops, and yeast; financing and purchasing a brewery; hiring a brew master to oversee production; bottling the beverage; marketing; finding retailers, and so on. At each step, promises to provide inputs are exchanged for promises for money. The ongoing fulfillment of those promises hinges on the sale of the final product.

In contrast, financial institutions earn profits by converting money into assets, which are then sold for more money; by earning fees for facilitating converting money into assets and then assets into money; or by earning interest on loans, the present value of which exceeds the value of money loaned. The accumulation of excess reserves resulting from the FED's asset purchases indicates the problem in converting asset purchases into income flows. Banks cannot force businesses and households to take out loans; banks cannot force economic agents to assume obligations. By November of 2013, excess reserves approached \$2.4 trillion (Board of Governors of the The Federal Reserve System).

By purchasing assets, the FED has gone beyond rescuing the rentier (See Watkins 2010). It has empowered the rentier, resurrecting profits as a percentage of GDP accruing to financial institutions to almost the same level as before the crisis (See Figure 1). For the Federal Reserve Banks, profits as a percentage of GDP have not been higher in fifty years. The policy represents the ultimate in freeing business from “all restrictions of a non-pecuniary character” (Veblen 1975, , p. 69). The question remains: is the policy effective in stimulating output and employment?

Figure 1: Financial Profits as a Percentage of GDP



Source: *Economic Report of the President 2013*, Tables 1 and 91

## What the Data Reveals

The Survey of Consumer Finances indicates the effect of the financial crisis and the initial asset purchases by the FED on net worth. Taken in 2010, the survey of consumer finances provides the most recent survey of wealth inequality. Using net worth as an index for wealth, the survey suggests that the primary beneficiaries of FED intervention are those in the upper income brackets.

**Table 1: Percent of Net Worth Held for Different Quintiles and Deciles Based on Household Income**

<b>Year</b>	<b>&lt;20</b>	<b>20–39.9</b>	<b>40–59.9</b>	<b>60–79.9</b>	<b>80–89.9</b>	<b>90–100</b>
1989	0.13%	1.79%	3.10%	4.95%	9.83%	80.20%
1992	0.31%	2.15%	3.06%	5.86%	8.96%	79.65%
1995	0.45%	2.52%	3.49%	5.72%	9.64%	78.17%
1998	0.34%	1.90%	3.06%	6.45%	10.82%	77.43%
2001	0.29%	1.41%	2.39%	5.43%	9.90%	80.57%
2004	0.25%	1.14%	2.44%	5.43%	10.65%	80.09%
2007	0.22%	1.02%	2.37%	5.54%	9.59%	81.27%
2010	0.17%	0.72%	1.85%	3.60%	8.03%	85.64%

Source: Survey of Consumer Finances,

[http://www.federalreserve.gov/econresdata/scf/scf\\_2010.htm](http://www.federalreserve.gov/econresdata/scf/scf_2010.htm)

Table 1 indicates the ratio of net worth to total net worth for the bottom four quintiles of households and the top deciles of households based on income. The data indicates that all quintiles and deciles of all households suffered a decline in net worth. The data also indicates that the wealth held by the bottom 80 percent of households has consistently been less than ten percent of total wealth. The last three years, however, shows a dramatic change, with those in the upper income brackets having garnered a greater share of wealth jumping from 81% to 86%. The data is supported by Saez and Picktel, who found that virtually all the increases in income have accrued to those in the upper one percent of income (See Saez 2012).

The wealth effect refers to the increase in expenditures resulting from an increase in wealth. The effect depends on the FED's influence over the price of assets besides Mortgage Backed securities and Treasury securities, an influence that remains unclear. As noted, Friedman claimed that the FED's asset purchases would make other assets such as stocks and real estate appear undervalued, leading to their appreciation. But the recent rise in stock values could result from the *belief* that quantitative easing affects stock values rather than reality. Moreover, the decrease in interest rates could make using leverage to purchase assets more affordable.

The Survey of Consumer Expenditures provides data indicating the ratio of expenditures to after tax income from 2008 to 2011. Table 2 indicates that ratio for the bottom sixty percent of income earners has actually declined, while the ratio for the top forty percent increased. Both the decline in wealth and the decline in income for the top quintile between 2008 and 2011 would suggest a decline in expenditures. The increase may result from an increase in relative wealth. Or it might be explained by Saez observation that from 2009 to 2012 the top 1% of income earners sustained a 31% increase in income.

**Table 2: Ratio of Expenditures to Income**

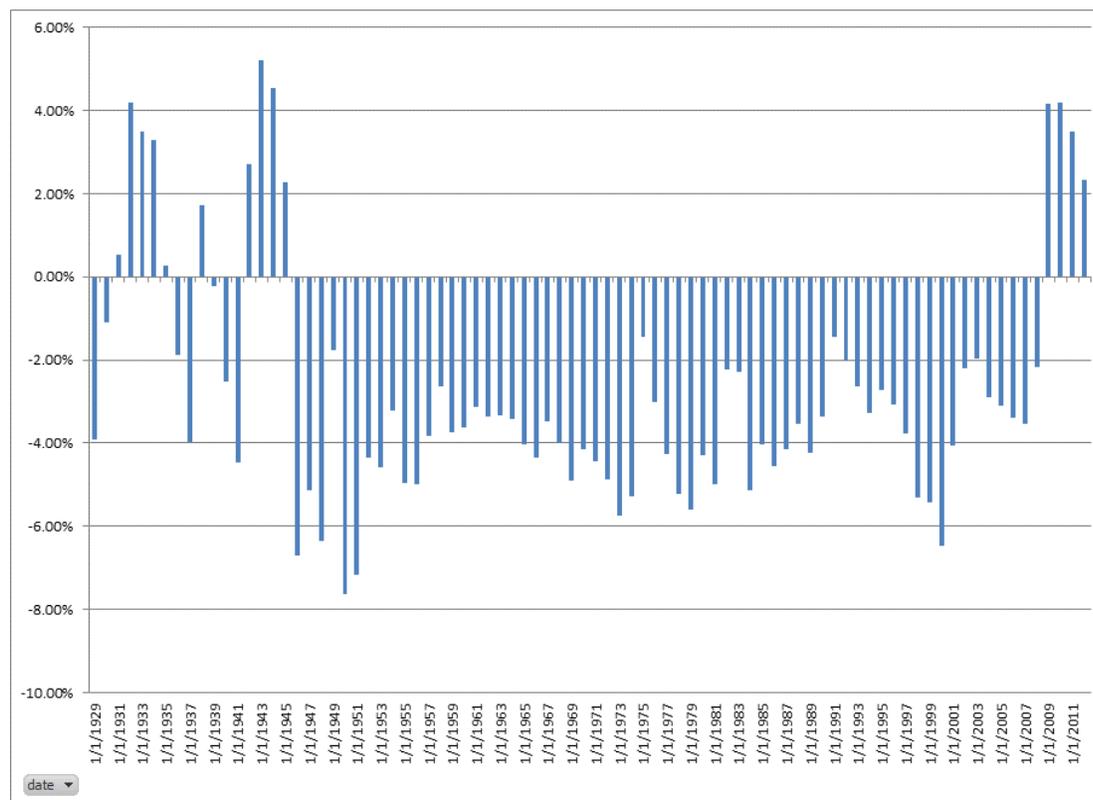
<b>Quintiles Based on After Tax Income</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Highest 20 percent	0.61667	0.6185	0.6285	0.6437
Second 20 percent	0.79619	0.7752	0.7984	0.8073
Third 20 percent	0.93065	0.912	0.9104	0.9089
Fourth 20 percent	1.17855	1.1231	1.1506	1.1404
Lowest 20 percent	2.18394	2.0882	2.1707	2.1026

Source: Consumer Expenditure Survey, <http://www.bls.gov/cex/csxstnd.htm#2011>

In the national income and products accounts, each sector of the economy—non-profit institutions and households, business, government, and the foreign sector—receive income and make expenditures. By definition, the sum of income less expenditures for each sector equal zero. Hence, in a two world sector comprised of households and businesses, for business to incur a profit households must deficit spend.

Gross saving is defined as personal saving plus business saving plus government saving. Disaggregating private saving into household saving and business saving reveals the following equation:  $S_{\text{business}} - I = G - T + NX - S_{\text{household}}$ . Business saving less investment equals government saving plus net exports less household saving. While the data is *ex post*, the data suggests a surprising change. For the first time since WWII, businesses have become net savers, partly owing to an increase in corporate profits, partly because of a decline in investment (See Figure 2). In brief, business investment is insufficient to provide for full employment.

Figure 2: Business Saving Less Gross Private Domestic Investment



Source: Federal Reserve Economic Data (FRED), <http://research.stlouisfed.org/fred2/>

### Fiscal Policy and the Lessons of War

The current situation invites comparison with the effects of fiscal policy during WWII. The high rates of business saving during WWII resulted from large and sustained government deficits, resulting in unusually high profits as a percentage of GDP. The relatively low level of investment during the war resulted from the allocation of resources towards the war. Similarly, the current high rates of business saving also result from high profits. The current low rate of investment, however, suggests low expectations, a hangover of the financial crisis.

The data from WWII suggest that aggressive fiscal policy reduced unemployment, increased the labor force participation rate, and increased economic output. By 1941, the

unemployment rate had fallen to six percent. Unemployment continued to fall from 6% to 2% in 1944. As Hugh Rockoff notes, the labor for the war came from increasing the labor-force participation rate, increasing the number of hours worked, and reallocating labor from low paying jobs to high-paying jobs (Rockoff 1998). Moreover, women moved into the labor force in droves, taking clerical and manufacturing jobs that opened as a result of the war.<sup>4</sup>

Between 1939 and 1944, real GNP increased fifty-five percent. Over the same period, military spending rose from 1.4 percent of GNP to 45 percent. Although consumer spending declined as a percentage of GDP, per capita consumption actually increased. As expected, inequality declined significantly. Piketty and Saez note using IRS data that the income accruing those in the top decile of income earners declined from forty percent in 1940 to thirty percent in 1944 (Piketty and saez 2004). The data suggests that inequality falls when elites need the masses to fight wars.

All of this was made possible by large and sustained deficits. By 1943, the government deficit as a percentage of GDP exceeded thirty percent. Government debt held by the public increased from 44.2% in 1940 to 108.7% by 1946.

In contrast, government debt held by the public increased from 36.3% in 2007 to 73.5% in 2012. From October 2009 to November 2013, the unemployment rate fell from 10% to 7%. Over the same time period, the labor force participation rate fell from 65% to 63%, continuing a continuing a decline beginning in December 2006.

### **Quantitative Easing: A Question of Fairness**

By placing a floor on asset prices, quantitative easing provides financial institutions a measure of security not enjoyed by industry or labor. The source of this inequity lies, in part, in the working

rules that the FED follows. Those rules limit asset purchases to mortgage backed assets and US government securities. Even without restrictions on asset purchases, the beneficiaries of asset purchases would be asset holders.

Given the inequity in treating different sectors of the economy and lack of investment to provide for full employment, quantitative easing appears to conflict with both John Rawls' difference principle and Marc Tool's social value principle. John Rawls difference principle holds that "inequalities in income and wealth are to be arranged for the greatest benefit of the least advantaged" (Rawls 2001, p. 59). Quantitative easing increases inequality benefiting the most advantaged. Tool's social value principle refers to the instrumental use of knowledge to help achieve "*the noninvidious recreation of community*" (Tool 2000, p. 293). In other words, Tool advocates the use of knowledge to advance the life process. Given the decrease in the labor force participation rate, the slow decline in unemployment, and the increase in inequality, one would be hard pressed to conclude that quantitative easing had in fact advanced the life process.

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