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Did Keynes Make His Case?

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Abstract. Paper considers Keynes' case for fiscal stimulus under depression conditions – a case that remains prominent in both policy and academic literature. It highlights four specific real-history instances where, Keynes argued, monetary measures alone would not have restored prosperity and, hence, where fiscal activism would have been desirable. These were: 1) the depression of the 1890s; 2) the onset of the Great Depression in 1930; 3) the Roosevelt Recovery in 1933; and 4) the 1937-38 contraction in the US. But evidence from all four instances, gathered here, undermines Keynes' claims... Paper then shifts to Keynes' theoretical rationale, where it turns out that the frequently-cited "liquidity trap" argument was only one of several he advanced for monetary policy ineffectiveness. And it was not the one he most-often emphasized, while his own texts raise doubt about its coherence. Keynes view of Depression was intertwined with the stagnationist temper of economic theory during the middle 1930s, and with his owncultural and aesthetic distaste for "capitalist individualism." The weakness of Keynes' real-history illustrations reflects in part his flawed underlying critique of "classical" theory including of Say's Law- a critique that, because it was so prominent, has often set back understanding. Keynes did not make his case.

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1. Introduction

Much popular and academic commentary in the years after 2008 stoked fear that aggressive monetary policy would work too well, and hence would trigger accelerated price inflation. But by 2016, very few central banks had met even their modest inflation targets, despite well-publicized use of "unconventional" monetary expansion in the US, Britain, Japan, and the Eurozone. Inflationary fears were misplaced.

Meanwhile, many self-identified Keynesians argued, much to the contrary, that effectiveness of monetary policy would be sharply constrained under recessionary conditions. Lawrence Summers, who was President Obama's chief economist during 2009-2010, and who continued afterward to be a frequent advisor, called upon the US and other governments to increase borrowing at very low interest rates (Summers, 2012). Paul Krugman has made similar arguments in his *New York Times* columns. Both economists argued that governments should look on such rates as an opportunity both to boost government demand in the short period and to improve their fiscal balance in the long-term.

Their deeper argument was that monetary measures would do little to stimulate the US economy in the wake of the sharp 2008-2009 downturn. Summers wrote

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repeatedly that there was no point in "quantitative easing," the prominent open-market mechanism the Federal Reserve uses to inject reserves, as interest rates were already rock-bottom – his premise is that monetary easing works only through the mechanism of lowering interest rates (Summers, 2012). Presumably, this is what for years he has told Mr. Obama.

Krugman has argued since 2008 that the US has been in a liquidity trap, which Keynes defined as a condition where "almost everyone" prefers holding cash to lending (Keynes, 1936, p. 207). Krugman believes Keynes view of the dynamics of depression is superior to others, and has in his columns tirelessly expounded the case for increased government spending to offset slack spending in the private sector. Keynes (1936, p. 317) also argued:

> It is the return of confidence, to speak in ordinary language, which is so insusceptible to control… This is the aspect of the slump which bankers and business men have been right in emphasizing, and which economists who have put their faith in a 'purely monetary' remedy have underestimated.

I believe Keynes was, and Summers and Krugman are, mistaken. Let us consider real-history evidence Keynes himself cited against effectiveness of monetary policy; it is much weaker than he and his followers have thought. I will then return to his liquidity preference and other arguments offered in the *General Theory* and elsewhere – the coherence of the arguments themselves should be considered. It turns out that the weakness of Keynes' examples reflects not merely careless use of evidence, but flaws in underlying concept.

2. Keynes' Real-History Illustrations

A portion of Keynes' reputation as an economist, and of his place in history, rests on his diagnoses of crisis situations and his proposed remedies. Well-known examples include his tract on the post-World War One Versailles Conference, *The Economic Consequences of the Peace* (1921), and subsequent writings on hyperinflations and then on British deflation during the 1920s. Another, less well known, was his discussion of French monetary and political crises during 1925 and 1926, which I credited in my own work on the period (Johnson, 1997; Chs. 5 and 8). His two-volume *Treatise on Money* (1930) provided detailed and often shrewd observations on a wide range of questions, with frequent comment on current and past economic events.

In contrast, the *General Theory*, the heart of Keynes contribution to economic ideas, is light on historical or even contemporary illustration. So the reader seeks to fill the gaps by turning to other writings. Consider four prominent cases as they reflect on Keynes' view of roles of monetary and fiscal policy.

2.1. British Deflation in the 1890s

An unexpected embrace of fiscal activism comes in the *Treatise* discussion of the deflation of the early 1890s, where Keynes argued that the Bank of England's gold reserves were abundant and credit was easy. But prices in Britain and the world nevertheless went into decline, which undermined profit and investment and reduced employment. He wrote:

> I consider, therefore, that the history of this period [1890-1896] is a perfect example of a prolonged Commodity Deflation – developing and persisting in spite of a great increase in the total volume of Bank-Money. There has been no other case where one can trace so clearly the effects of a prolonged withdrawal of entrepreneurs from undertaking the production of new fixed capital on a scale commensurate with current savings.

Keynes then concluded (anticipating his arguments a few years later, including in the *General Theory*,) that monetary expansion does not always work, and that there might therefore be a role for public investment projects to boost demand (Keynes, 1930, Vol. 2, pp. 169-170).

Keynes' discussion of the 1890s misses the point. Britain in the late nineteenth century was part of an open world economy, with easy movement of goods, people, and especially capital. Keynes neglected to mention that system-wide demand for gold rose much more than the supply from the 1870s through the mid-1890s as nearly two dozen countries adopted or re-adopted the gold standard, and hence needed to accumulate reserves. Two of the world's largest economies, the United States and France, also made growing use of gold coins. Indeed, demand drove the commodity-exchange value of gold to the highest level it was to reach in four centuries of record-keeping (Jastram, 1977) -- the flip-side of deflation of other commodity prices. The commodity price decline reduced profits and chilled investment demand; but commodity prices were determined in international markets, not in Britain.

While demand for gold was surging, the world's monetary gold supply in the mid-1890s was at the lowest point it was ever to reach relative to its 1800-1920 trend line (Johnson, 1997; p. 52[1]). As the mines in the South African Rand cranked up production in the 1890s, relative gold supply and commodity prices increased nearly in tandem after 1896 – thus ending the Commodity Deflation, and initiating a gentle inflation. A growing money stock affected not just the supply of credit (as reflected in a declining interest rate), but also the demand for goods and services. A result was nearly two decades of economic growth in all of the industrial powers, a pattern that was sadly interrupted by the First World War.

Monetary events were at the heart of both the origins of and recovery from the depression of the early 1890s. Keynes himself gave this backhand acknowledgement with his comment a few paragraphs later that "the fall of prices [in the early 1890s] could only have been avoided by a much greater expansion of the volume of bank-money." It is revealing that Keynes would discuss price deflation during that period without mentioning the geographic expansion of the gold standard – easily the most important monetary event of the era.

2.2. The onset of the Great Depression

Moving to then contemporary events, Keynes' discussion of the "slump of 1930," an early stage of the Great Depression, also in the *Treatise*, builds on similar themes. While the US stayed on a gold standard throughout, most European countries left it early in WWI, then restored it during the 1920s. Economists Gustav Cassel, Ralph Hawtrey and Charles Rist had argued a few years earlier that the undervaluation of gold following restoration of gold standards at prewar gold prices in Britain, France, Germany, and Italy would force world-wide monetary contraction. Keynes, in contrast, told the Royal Commission on Indian Currency in 1926 that central banks would adjust their currency reserve cover ratios if their gold stocks became inadequate - which allowed him to dismiss the danger (Keynes, 1989a; p. 482).[2] Keynes turned out to be wrong, as he underestimated what we might call the mystique of gold money, which would generate resistance to efforts to reduce gold ratios or to use foreign exchange as a gold equivalent.

Keynes listed factors driving interest rates higher during the 1920s: corporate borrowing for new industries; governments borrowing to pay reparations and war debts; central banks borrowing to add reserves as they restored gold convertibility; and speculators borrowing to buy shares of stock. He identified but was less able to

[1] League of Nations chart, reproduced in (Johnson, 1997).
[2] (Keynes, 1924) made a similar argument; p. 134-135.

explain the collapse internationally in anticipated returns in investment - what he would later call the marginal efficiency of capital - that occurred in the mid-1920s. As in considering the early 1890s, he did not connect the fall-off in real yields on new investment with systemic monetary constraint.

> For these [above listed] events, *though they had no bearing whatever on the real yield of new investment*, were a powerful influence on the market-rate of interest (Keynes, 1930, Vol. 2, p. 379). (Italics added.)

Parallel to what happened in the 1890s, the middle and late 1920s saw a commodity deflation as restoration of gold standarts led to a rise in demand for gold. Keynes wrote that the only ways to boost demand for goods and services was by lowering interest rates, especially long-term rates – or, alternatively, by government fiscal activism. His explanation did not acknowledge the underlying monetary problem: that improved returns on investment would require more liquidity, either through a higher gold price to restore gold-to-currency reserve ratios, or perhaps by abandoning the gold standard altogether.

2.3. The Roosevelt Recovery in 1933

Keynes' comments in January 1934 on the monetary-fiscal mix in the US were baffling. In one of Roosevelt's initial acts as President in March 1933, the dollar was allowed to depreciate against gold – thus providing the higher gold price mentioned a moment ago. This was a momentous event in monetary history – the underlying cause of the interwar deflation had been removed, and the international gold standard was never to be restored with the same conviction. Keynesnevertheless wrote:

> One half of [Roosevelt's] programme has consisted in abandoning the gold standard, which was probably wise, and in taking various measures… to depreciate the gold value of the dollar… [But i]t is not easy to bring about business expansion *merely* by monetary manipulation. The other half of his programme, however, is infinitely more important and offers in my opinion much greater hopes. I mean the effort to cure unemployment by large-scale expenditure on public works and similar purposes. (Keynes, 1989c; p. 308)

This summary scarcely acknowledges the results of expansionary monetary policy undertaken in the US within the previous year. Dollar depreciation succeeded at least to the extent any advocate could have hoped. Industrial production soared by 57 percent during March-June 1933, the first four months of the Roosevelt Administration – this was the one-off increase, not an annualized rate -- making up half of what had been lost since 1929. (Federal Reserve data) It was, and remains, the fastest rate of expansion in industrial production recorded over a four month period in the history of the US. Yet Keynes apparently considered this event to be "infinitely" less important than the boost that might come from fiscal borrowing for public works programs.

Had the experiment continued for a few months more, pre-crash production levels might have been recovered. Unfortunately, the NIRA (National Industrial Recovery Act), announced in July 1933, brought micro-policy changes that had the effect of stopping the recovery in its tracks. The NRA (National Recovery Administration), set up under NIRA, then negotiated specific sets of codes with leaders of the nation's major industries; the most important provisions were anti-deflationary floors below which no company would lower prices or wages, and agreements on maintaining employment and production. Within a short time, the NRA reached agreements with most major industries. In a phrase, the NIRA wanted to increase prices by restricting output rather than by increasing demand. Sumner (2015) provides several rounds of evidence for the contractionary impact of NIRA and subsequent New Deal policy.

Lest the above appear suspect as a garden-variety right-wing critique of New Deal economics, consider that Keynes himself pointed to the "fallacy" of the NRA approach. He noted in January 1934 that "rising prices caused by deliberately increasing prime costs or by restricting output have a vastly inferior value to rising prices which are the natural result of an increase in the nation purchasing power." He added that it was "hard to detect any material aid to recovery in the National Industrial Recovery Act" (Keynes, 1989b; p. 299). Within six months after the NRA was announced, industrial production had lost half of the gains dropped twenty-five percent from the higher level (Sumner, 2012), thus erasing more than half of the gains recorded during Roosevelt's more successful initial months in office.

Here we are. We saw an historically unmatched recovery for four months during 1933, driven almost entirely by a decision to break the straightjacket imposed on monetary policy by the international gold standard. Keynes had been an able critic of the gold standard in the *Tract on Monetary Reform* (1924) and again in several chapters of the *Treatise*. The 1933 recovery was then stalled by micro-policies of which he was explicitly critical. Yet Keynes seemed to dismiss this entire episode in his call a few months later for fiscal stimulus!

2.4. The 1937-38 Contraction in the US

A few years later, Keynes disregarded evidence of the role of monetary policy in triggering a sharp relapse into near-depression conditions in the US during 1937-1938. The dollar depreciation of 1933 and the formal increase of the gold price to \$35/ ounce in 1934 meant automatic revaluation of central bank gold stocks and gave impetus to increased gold exploration and production – concentrated, as it happened, in the Soviet Union. (Keynes noted the irony that increased Soviet efficiency in mining of gold was bailing out world capitalism!) He also noted that new gold reserves were bringing increased effective demand to the world economy that might result in "abnormal profits" (Keynes, 1989d). Keynes sometimes acknowledged the role of monetary factors in the economic recovery of the mid-1930s.

In a major policy mistake, the US Treasury responded to rising wholesale prices in 1936 by deliberately sterilizing new gold inflows. In this process, dollars issued against new gold were drained by sales of other central bank assets. A money supply measure, M2, that increased by 12 percent annually during 1934 -1936, suddenly turned flat and even slightly negative from about January 1937 to July 1938 (Irwin, 2012). Real GDP fell by 11 percent during this period, and industrial production fell by 30 percent. Rather than sterilize incoming gold, had the Fed intervened in financial markets to target a modest rate of increase in any of a number of variables – a money supply indicator, a price index, industrial production, either real or nominal GDP growth – much or most of the 1937-1938 contraction could have been avoided. By April 1938, sterilization was discontinued, and economic recovery resumed by that summer.

In February 1938, Keynes offered advice in a private letter to President Roosevelt that mentioned little of this. He did acknowledge that addressing "credit and insolvency problems" was an essential step toward recovery, as doing so would create a necessary "supply of credit" – while, one infers, demand for that credit would have to come from elsewhere. This comment reflected Keynes' more frequent 1930s view that expected returns on investment – and demand for goods and services generally – were not much affected by monetary factors. He went on to recommend that the US could "maintain prosperity at a reasonable level" only through "large-scale recourse to… public works and other Investments aided by Government funds or guarantees" (Keynes, 1989f).

Despite Keynes' recommendations, the lesson of *all four* of the illustrations here is that increasing money balances – through central bank open market purchases, or through new gold or foreign exchange reserves – *does* affect expected returns on investment in plant and equipment, in equities, and in real estate.

3. Arguments for Fiscal Activism

We could stop here, having assembled evidence of Keynes' doubtful conclusions about the role of monetary factors in specific pivotal events. Indeed, evidence from these cases points strongly in the opposite direction, toward recognizing the crucial role of such factors. Summers', Krugman's, and other Keynesians' argument that monetary policy is ineffective in environments of weak demand is undermined. But the prominence of Keynes' fiscalist legacy requires that we go further. Evidence aside, what was Keynes' argument? In fact, he had a sequence of arguments.

In 1929, Keynes offered a comparative argument in favor of fiscal stimulus, and against monetary stimulus, specific to economic circumstances in Britain at the time (Keynes, 1931; p. 124). Keynes anticipated a portion of an argument Robert Mundell was to make decades later regarding the "policy mix," that is, the appropriate mix of monetary and fiscal policy to meet both domestic output and external exchange rate targets (Mundell, 1971). Britain in 1929 was on the international gold standard, hence was constrained externally by the need to maintain gold reserves. The Bank of England could not simply create credit, because, Keynes reasoned, "such credit might find its way to foreign borrowers, with the result of a drain of gold out of the Bank." (More generally, a country loses control over monetary policy under fixed exchange rate conditions (Mundell, 1963). Hence, Keynes proposed fiscal stimulus to increase domestic demand and employment, alongside monetary constraint to maintain Britain's reserve and exchange rate targets.

This well-grounded argument also offers possible insight into the economy of the early 1890s, where demand among central banks for limited gold reserves generated monetary contraction. Keynes, as we saw, did not make that argument – but we can construct it expost. The best solution might have been some international agreement to increase demand by modifying the international gold standard, perhaps by raising the currency price of gold, or even by a return to bimetallism – boosting the stock of monetary reserves by adding silver (Friedman, 1992). Absent such creative adjustments in monetary policy, a purely national approach could have looked to a fiscalist demand boost. But the rush of gold from South African mines soon gave life to the prewar gold standard, making structural change unnecessary – and, indeed, associating the prewar gold standard with an age of lost prosperity in much popular memory.

3.1. Removing External Constraints

Keynes soon abandoned this policy-mix argument. Unlike the case in Britain, the US in 1929 and 1930 was well-stocked with gold reserves. An expansionary US policy at that time could have eased monetary conditions world-wide, not just in the US. In March 1933, the dollar was floated against gold, hence removing any external policy constraint – as appreciation of the value of gold increased the value of the US' vast reserves. In Keynes' embrace of public works spending from January 1934 (above), he had shifted ground from his 1929 advice. His newer interest was to argue that fiscal activism was preferable to monetary expansion even if the latter was *not* constrained.

In Chapter 15 of the *General Theory*, "Incentives to Liquidity," Keynes offered the argument that monetary policy was specifically unsuited to boost economic demand when interest rates approached zero percent. In conditions where interest rates could not be lowered further, Keynes reasoned, a condition of "absolute liquidity preference" held. He observed, "In this event, the monetary authority would have lost effective control over the rate of interest" (Keynes, 1936; p. 207). This "liquidity trap" argument is cited endlessly by latter-day Keynesians in support of a fiscalist agenda.

The argument is misleading. The one example Keynes provides for the possible existence of such absolute liquidity preference involved open market operations in the US during 1932, which, it has been asserted, did nothing to boost domestic demand. But was this because monetary expansion ran into a liquidity trap? In fact, the boost to US domestic money was offset by a loss of gold reserves, in part through private hoarding. Keynes' argument also overlooked the possible effect of gold outflow from the US in boosting demand elsewhere. In any event, the real story in 1932 was of a gold standard constraint on the supply of money, it was *not* a story of unquenchable demand for liquidity (Sumner, 2015; p. 147).

Keynes' liquidity trap argument establishes much less than he needed. Keynes did not mention zero-bound interest rates as a constraint in *any* of the four situations discussed earlier – yet he called for fiscal stimulus in *all* of them. His case against monetary activism went well beyond situations of absolute liquidity preference; but as we will see in a moment, monetary policy can work even then.

Much of Keynes' vision for government intervention, including fiscal activism, follows from his discussion of the fickleness of financial markets (Keynes, 1936; Ch. 12). Observing the instability of private sector investment volume, he advocated a larger role by the government in stabilizing investment demand, often through direct outlays.

Keynes' argument shifted from the instability of the investment function to concern that investment was and would remain chronically weak – and hence to the conclusion that high unemployment was not self-correcting, but could persist for years. As noted earlier, Keynes in the *Treatise* pointed to a collapse in the marginal efficiency of capital as the trigger for both the depression of the 1890s and for the "slump of 1930." In Chapter 17 of the *General Theory*, on the "Essential Properties of Interest and Money," Keynes (1936; p. 236) noted situations where:

> …[the] rate of interest declines more slowly, as output increases, than the marginal efficiencies of capital-assets measured in terms [of the same asset].

as formulated in one of several instances in Chapter 22, "Notes on the Trade Cycle":

> A more typical, and often the predominant, explanation of the crisis is, not primarily a rise in the rate of interest, but a sudden collapse in the marginal efficiency of capital (Keynes, 1936: p. 315).

this pattern of falling marginal efficiencies of capital was at the core of Keynes increasing skepticism about monetary remedies.[3]

3.2. New Money and Effective Demand

Keynes usually argued that monetary policy worked mainly through raising or lowering interest rates – this was certainly a premise of the liquidity trap argument. Further on in the *General Theory*, he wrote that "the primary impact of a change in the quantity of money on the quantity of effective demand is through its effect on

[3] Leijonhufvud (1981) offers a variation on this theme with the comment that in Ch. 37 of the *Treatise* "the assumption that entrepreneurs are right was dispensed with" – that is, entrepreneurs became, in Keynes' judgment, excessively bearish. Leijonhufvud argues that Keynes' subsequent arguments relied on fiscal intervention to overcome bearishness.

the rate of interest" (Keynes, 1936; p. 298). In the earlier *Treatise* Chapter 37 on "Control of Investment," where he calls for open market operations *a outrance*, the object is to bring "the market rate of interest… down to the limiting point (Keynes, 1930; vol 2, p. 371)." Later, in 1937 articles on "finance," where Keynes (1989E) stressed the crucial role of monetary policy in economic recovery, he again emphasized the channel of lowering interest rates.

Keynes' interest rate argument is not credible. Monetary economics routinely identifies channels other than interest rates through which additional money creation can affect demand. For example, Frederic Mishkin, a former member of the Federal Reserve Board of Governors, has identified channels of exchange rates, financial asset prices, real estate prices, wealth effects on consumption, and increase in bank lending capacity (among others) through which demand can be increased (Mishkin, 1996). Pertinent here, Keynes himself sometimes rejected the interest rate argument to make the case that monetary expansion could boost demand directly.

For example, in Chapter 17 of the *Treatise,* on "Monetary Factors," Keynes noted that monetary stimulus might bring together a previously "unsatisfied fringe of would-be entrepreneur borrowers who were ready to borrow… even at the old terms [i.e., without lowering interest rates], and … an unemployed fringe of the factors of production [i.e., workers] to offer employment to additional quantity of the factors of production." In an additional impact, he wrote that "certain entrepreneurs may now be willing to increase their output even if this means making higher offers than before to the factors of production because (as the ultimate result of the influx of new money) they forsee profits" (Keynes, 1930; vol. 1, pp. 263-264). As Keynes here illustrates, the underlying goal of monetary expansion is to satisfy an unmet demand for money. The consequence may be to lower interest rates, but it may also work by directly increasing demand for goods and services, and for credit to purchase them.

The *General Theory* has comparable passages. In Chapter 11, on the "Marginal Efficiency of Capital," Keynes linked changes in investment prospects to prior changes in prices. He wrote, "the expectation of a fall in the value of money [i.e., price inflation] stimulates investment, and hence employment generally, because it raises the schedule of the marginal efficiency of capital, i.e., the investment demand schedule" (Keynes, 1936; pp. 141-142). Consider that it is just this link between higher prices – as a result of the dollar depreciation -- and the large increase in industrial production that Keynes minimized in his earlier-cited comments on the US recovery in 1933. In Chapter 21, on the "Theory of Prices," Keynes noted that "new money" could lead directly to increases in effective demand, which would be "divided between the rise of prices, the rise of wages, and the volume of output and employment" (Keynes, 1936; p. 298).

"New money," so understood, can provide the missing link toward understanding the real-history illustrations scattered through Keynes' writings. Lack of "new money" was at the heart of the commodity deflation of the 1890s, the slump of 1930, and the near-depression of 1937-1938. Despite Keynes' claims regarding real-history evidence, the way he understood monetary policy to work did *not* require him generally to reject monetary measures in order to boost aggregate demand; and it did not make monetary policy ineffective even with zero-bound interest rates. But, Keynes wanted the primise that monetary policy was powerless as a lead-in to his view of a system in crisis. His views on monetary policy and his sometimes anti-capitalist social philosophy came together in his forecast for a declining marginal efficiency of capital.

In Chapter 16 of the *General Theory*, on "Sundry Observations Concerning the Nature of Capital," Keynes anticipated a future "where capital goods would be so abundant" that the average marginal efficiency of capital – that is, the return on investment -- would fall to zero (Keynes, 1936: pp. 213f, 218). It was a logical extension of his view of financial markets, driven by fickle expectations, and of what in the early 1930s was growing "bear market" sentiment. He added in his final chapter, "Concluding Notes on the Social Philosophy Toward Which a General Theory Might Lead," that such an abundance of capital would bring about the "euthanasia of the rentier, of the functionless investor," which he described as an "aim" of public policy, one perhaps to be realized "within one or two generations" (Keynes, 1936; p. 376). In some passages in the *General Theory*, a monetary shipwreck was no longer viewed as a fate to be averted, but rather as a step toward social transformation.

Keynes' notion was similar to the Marxian concept of a declining rate of profit -- following accumulation of physical capital. The stagnationist thesis, Keynesian or Marxian, resonated with the Left, especially during the depression-racked Thirties. Keynes' proposed remedy was to scale back the reach of market relations, and to replace them with an expanded role for the State. Leaving the longer term horizon and returning to the causes of Depression, Keynes wrote at the end of the *General Theory*: "It is certain that the world will not much longer tolerate the unemployment which, apart from brief intervals of excitement, is associated – and in my opinion, inevitably associated – with present day capitalistic individualism" (Keynes, 1936; p. 381).

Keynes by then saw the source of economic distress as capitalism run amuck – rather than, for example,in a persistent liquidity trap (as an earlier argument in the *General Theory* would have suggested.) Had Keynes proposed a large boost in liquidity through open market operations, his inferred premise would have been merely that money demand was, for the moment, not being satisfied – not enough content for a self-described revolution in economic thinking. Faced with the rising appeal of Communism and Fascism in the desperate 1930s, Keynes thought he needed more. In his social and political visions, Keynes often reflected his times; it would be hard to conclude that he transcended them.

There is little evidence since the 1930s for a collapsing rate of profit following decades of capital accumulation. Keynes underestimated potential demand for new investment, not to mention ongoing obsolescence of previous investment, in a world with billions of people, most of them seeking to enhance their material comfort and social status. A.C. Pigou, Keynes' oft-times nemesis, dismissed the stagnationist thesis almost immediately, noting "An era that has witnessed the development of electrical apparatus, motor cars, aircraft, gramophone and wireless, to say nothing of tanks and other engines of war, is not one in which we can reasonably forecast a total disappearance of openings for new investment" (Skidelsky, 2005; p. 539).

Keynes' view that the world depression of the 1930s was caused by capitalistic individualism has done more damage. The downturns during the decade of depression were driven by gold standard rigidity, reserve shortages, inopportune central bank sterilization, and to a lesser extent by anti-market micro-economic policies associated with the New Deal, the Popular Font and equivalents elsewhere. Major economic boosts came from currency depreciations against gold and other monetary initiatives. The Depression was *not* caused by markets disfunction irrational pessimism on stock exchanges, excessive capital accumulation, or lack of government stimulus. Whatever the all-in contribution of the *General Theory*, it had the unfortunate consequence of diverting attention from the monetary dynamics that had brought depression. Alas, Keynes' legacy as received some three generations on has contributed to the confusion that fiscal stimulus is the best way to boost demand, while monetary policy is often taken to be either ineffective or as just tinkering. Keynes did not make his case.

4. Keynes and Say's Law: Does Supply Create its own Demand?

Leaving aside his visionary interludes, Keynes essential claim in the *General Theory* was that unemployment could persist for years, *even if wages and other factor costs were flexible*. The point was that even if factor costs fell, the marginal efficiency of capital might not recover because it was driven by market expectations -- which were volatile, and trending downward. Falling costs might even be taken, not as restorative, but as evidence of weak demand and sagging investment prospects. Investment might then stay below the level needed to maintain full employment. Keynes was *not* asserting that *general* equilibrium was maintained in the face of unemployment, as some critics were later to assert. He used the term "equilibrium" more modestly to mean that unemployment could persist, and that it was not self-correcting.

Keynes, at least in his darker moments, saw accumulation of physical capital as inexorably leading to lower capital efficiency and declining profits. With this premise, an attempt to reboot investment by increasing money and prices – even if it succeeded in the short run -- would just mean more rapid accumulation of capital, and hence more rapid decline in profits, in a self-reinforcing stagnationist circle. This argument could be put to empirical test, and it has been falsified by subsequent decades of growth. To be fair, it pushes Keynes' suppositions to the edge of what his text might support, and Keynes never wrote it down, not in so many words.

Keynes narrower conclusion, that unemployment could persist despite flexible input costs, draws on his well-known discussion of Say's Law near the beginning of the *General Theory*. Keynes quotes John Stuart Mill's description of the "classical" doctrine according to which "supply creates its own demand" as a counterpoint to his own grand design. Keynes quoted Mill to demonstrate that "classical" economists thought it possible to "double the purchasing power" merely by "doub[ling] the supply of commodities in every market" (Keynes, 1936: p. 18). Perplexingly, Keynesthen chopped off the rest of Mill's paragraph, in which was included –

> …money is a commodity; and if all commodities are supposed to be doubled in quantity, we must suppose money to be doubled too, and then prices would no more fall than values would. (Mill, 1909; p. 558)

Algebraically, an excess supply in one market must be matched by an excess demand in another. A shortfall of demand for goods implies a matching excess (unsatisfied) demand for money. A supply of goods creates its own demand for goods *only if* demand for money is satisfied. Mill and other Classics recognized this – and far from finding a flaw in Mill's argument, Keynes mis-stated it. Regarding Keynes' omission, Mundell wrote:

> …Keynes perpetrated an historical error in the economics profession lasting several years, a distortion of the classical position that to this day remains in the elementary textbooks. By thus attacking the logic of the central feature of the classical theory through carelessness or mischievous omission of its essential parts, Keynes was able to win disciples over to the belief that there was a fatal logical defect, an absurd premise, in the classical system (Mundell, 1968; p. 110).

As suggested earliner, Keynes wanted his critique of monetary policy. His historical evidence, alas, does not support either argument.

As we acknowledge Mill's premise that increased money can satisfy the demand for liquidity, and thereby directly boost demand for goods and services, Keynes arguments focused narrowly on the effect of increased money on interest rates are undermined furher. Keynes overall disregard of the supply of gold in the 1890s and 1920s, and his de-emphasis of the price of gold then and again in 1933, followed closely upon his neglect (in his critique of Say's Law) of the link between monetary adequacy and demand for goods and services.

With somewhat more effect, Keynes did provide a critique of the conventional Quantity Theory of money – which he had himself endorsed in his earlier *Tract*. In the *Treatise*, he argued the case over several chapters that some cost and other factor price increases were tied directly to increases in the quantity of money, while price increases that feed into profits might be less correlated with changes in the money supply. Indeed, where demand for money balances increases, a higher quantity of money might even coincide with lower aggregate profits and hence with lower prices (Keynes, 1936; pp. 208-209). Slaying the Quantity Theory, was important to many of Keynes' early followers, in whose understanding it opened the way to an active role for the State and to deploying an array of fiscal "multipliers."

It is otherwise less important. Monetary economics has by now moved past the Quantity Theory, or growth of the money supply, as a policy marker. Many, if not most central banks now seek to stabilize expectations by targeting a steady rate of price inflation. Lars Svensson (2008) has recorded that Milton Friedman, the most prominent monetary economist of his era, told him late in his life that he (Friedman) agreed monetarists should target changes in prices rather than growth in the money supply. Scoot Sumner and other (2012) and orher "market monetarists" urge central banks instead to target a rate of growth in Nominal GDP.[4] I would qualify their recommendation with the suggestion, given the dollar's role as the world economy's key liquid asset, that US monetary authorities should also target foreign exchange rates during financial crises, especially the dollar-euro rate. But nothing about moving beyond the Quantity Theory makes monetary policy less important, or makes interest rates the only channel, or even the dominant channel, through which it can be effective.

The irony is that Keynes, the acclaimed revolutionary of Depression economics, had so little to say about the uses of monetary policy when interest rates fell to historic lows and anticipated investment returns went even lower. Correctly understood, the real-history evidence in the opening section suggests that economic slumps and unemployment persisted because effective monetary expansion did not occur. This was true where the marginal efficiency of capital was falling sharply, and even where interest rates were already very low. The de-stabilizing factor was inept monetary policy, beginning with inability to adap tor revise the international gold standard.

[4] Sumner's blog www.themoneyillusion.com

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