

Varieties of Keynesianism

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Abstract

Recent claims, particularly in Paul Krugman's column and blog, on the superiority of the Hicks-Modigliani version of Keynesian economics calls for a re-thinking of the issues raised in the early controversies over what Joan Robinson called "bastard Keynesianism". "Good, old-fashioned, Keynesian economics" (GOKE) substitutes the general and unmotivated assumption of downward money wage rigidity for the detailed examination of the varied social coordination problems that characterize modern capitalist economies. This underrates Keynes' role as a precursor of modern information economics, and risks losing significant policy insights. The political economy background of the New Classical counter-revolution in economic theory, stemming from the unravelling of the "capital-labor accord" of the Second World War, provides some important lessons for the development of a macroeconomic analysis that is relevant to the real problems of modern capitalist economies. Keywords: Keynes, macroeconomics, sticky wages, information economics, multiple equilibria

1 "Jackass" Macroeconomics

An unwelcome side effect of the rapid development of industrial capitalism and the integration of a global economy through trade and financial networks in the last half of the nineteenth century was the increasing severity of financial-economic crises. The depressions in business and employment that accompanied these crises threatened

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popular political support for the property-based, anti-labor, laissez-faire laws and policies on which this first wave of industrial capitalism rested.

The experience of Great Britain in the first half of the nineteenth century with the Napoleonic Wars and nascent urban-industrialism had prompted some hard thinking about the role of the Bank of England in coping with what we now call “shocks” to market-organized economies. In particular, the peculiar and asymmetrical role of the Bank of England in the money markets became apparent. In this period the Bank of England operated with a very small gold reserve, and one chief preoccupation of policy makers was to defend that gold reserve to maintain convertibility of the pound. At the same time the Bank also learned to moderate crises through the extension of credit, thus planting the seeds of what developed into monetary policy.

It is difficult to see much theoretical foundation for these nineteenth-century policy developments. The main contributors to the analytical side of the debates were financiers like David Ricardo (Ricardo (1951)) and Henry Thornton (Thornton (1802)), who looked at monetary questions primarily from the point of view of short-term capital markets. (Ricardo, of course, persisted in a pathbreaking effort to understand the economic dynamics underlying the rapid development of financial markets. But Ricardo’s monetary theory is not very closely connected or consistent with his theories of value and distribution.)

The marginalist “revolution” pointed the way toward the consolidation of a philosophical defense of market-based social and economic organization through the analysis of the properties of what we now would call “full-information”, competitive, market-clearing economies. The great theme of this line of thinking, aside from its rationalization of property incomes like profits and rents as signals for efficient allocation, was the capacity of unregulated markets to achieve optimal social outcomes. The persistence and increasing severity of financial and economic crises that interrupted the operation of markets and depressed employment, output, and income constituted a jarring anomaly for these marginalist claims. Marginalism treated money as a social device to reduce transaction costs, a theory that provided almost no leverage to understand financial dynamics.

At the outbreak of the First World War, the politics and policies of the advanced industrial capitalist nations of Europe centered on the maintenance of property rights, defense of the gold standard, strict enforcement of debt contracts, and a determination to ride out finan-

cial and economic crises without bending or breaking these rules. The exigencies of the War forced the European nations to abandon all of these principles, and revealed an enormous potential for governments to intervene effectively in economic and financial life. The War also acted as a theoretical hothouse in forcing the formulation of new economic theories to address the questions of just how governments might use these great powers.

For example, as Ahamed (2009) recounts, Benjamin Strong, the guiding intelligence behind monetary policy in the first phase of the U.S. Federal Reserve System, realized that the centralization of reserves effectively gave the Fed the power to control the business cycle, which Strong thought of largely in terms of inflation. The gold standard system in theory, and to some degree in practice, requires policy makers to permit the movement of gold reserves among economies in response to shocks, and to allow the resulting changes in demand conditions to force upward and downward adjustments in domestic price levels. It had become apparent before the Great War that even relatively gradual and moderate adjustments in prices and wages necessary to equilibrate the international financial system could impose large and long-lasting costs in terms of fluctuations of employment, output, and income. In the disarray of the international economic and financial system after the War, depending on orthodox gold-standard adjustment would have imposed much larger and much more disruptive domestic price changes, particularly, as Strong realized, an historically unprecedented inflation in the United States, to which gold had flowed in enormous quantities during the War. Strong, despite giving lip-service to the principle of the restoration of the gold standard as the foundation of the world financial system, invented and implemented “inflation-targeting” monetary policy in the U.S. Strong’s system used open-market operations to manipulate U.S. bank reserves to stabilize the value of the dollar. While his policy protected the U.S. to some degree from inflationary and deflationary swings after the War, it also predictably frustrated the adjustments called for by the gold standard and effectively doomed any possibility of a return to the gold standard system.

Academic economics in this period both in England and the U.S., was based on a “classical dichotomy” in which marginalist economics emphasizing the allocational efficiency of market-clearing equilibrium determined the relative prices of goods and services, including the real wage, and a “quantity theory” of money and prices, based on

the assumption of a stable, slowly evolving velocity of money (or, what boils down to the same thing, a stable demand for bank reserves as a function of incomes and interest rates) determined the money price and wage level. Because of its foundation in market-clearing equilibrium, the theory based on this classical dichotomy had no real explanation for fluctuations in incomes and employment, and only a highly reductionist account of price and wage movements based on exogenous fluctuations in the supply of bank reserves. Even those unfortunates who found themselves charged with thinking about these questions at the Fed recognized the failure of this academic framework to provide practical guidance for real-world monetary policy. (Paul Samuelson later reviewed this period in a paper in which he nominated himself as the “jackass” who could, as a one-time adherent of the classical dichotomy, explain what it really said (Samuelson (1968)).)

2 John Maynard Keynes

John Maynard Keynes’ huge influence on economic thinking in the middle decades of the twentieth century has left a somewhat distorted impression of his actual intellectual life and even fields of expertise (as biographies such as Skidelsky (1983) reveal). Keynes operated as what the British celebrated as a “clever” man, which, in the British milieu of the first years of the twentieth century, meant that he was a generalist problem-solver rather than a trained professional in any particular field. On the basis of his impeccable and politically potent Cambridge connections he drifted into the civil service, where he was charged with thinking over the reform of the Indian currency. (The trick here was to find a system that would obscure the transfer of large surpluses from India to England, which would have been transparent had India, for example, simply adopted the pound sterling as its currency.) This job eventually led to his becoming the chief administrator of British financial policy during the Great War. One predictable effect of this experience was that Keynes developed an enormous (and well-founded) contempt for the rigid obscurantist, dogmatic views of the traditional financial experts entrenched in the Bank of England. He also saw first-hand the enormous potential financial power of governments, and the fragility of supposedly well-established financial institutions and markets. This day-to-day reality of War finance bore equally little resemblance to the rather sketchy Marshallian monetary

theories Keynes had been taught at Cambridge.

After the War it seems inevitable that Keynes would become interested in financial speculation, with his combination of believing that he was “the smartest guy in the room” and his almost unique and enormously valuable experience of managing war finance, exactly the profile of insider-information and outsized self-confidence that so many financial speculators exhibit. Keynes’ record as a speculator was uneven and ultimately unsuccessful. The political presumptions that Keynes had watched develop during the War eroded, and the resulting policies wrecked the bets he based on them. Keynes remained solvent only with the support of powerful and wealthy sponsors. His first-hand engagement with financial markets, however, seems to have redoubled his constitutional suspicion of the competence of market participants and what we would now call the “rationality” of the markets as a system.

To the degree that Keynes pursued a formal academic research career, it was in the field of probability and statistics. He wrote on these subjects before the “frequentist” movement in statistics (closely connected with eugenics) established the hegemony of statistical thinking it has only recently begun to lose in the face of its tendency to reach spectacularly wrongheaded conclusions. Keynes (Keynes (1921)) sensibly enough took a philosophically “subjectivist” approach to probability theory, which he developed into a somewhat eclectic and not always consistent theory of statistical inference.

As we know even more poignantly in the early twenty-first century, the theory of statistical inference is both an indispensable and a treacherous component of financial speculation and management. Keynes acknowledged the theoretical possibility that formal statistical inference might help to discipline the subjective basis of financial market asset valuations. But, both on the basis of his close observation of financial markets, and from his independent critical understanding of probability theory, he did not think this help could be of much real practical importance. The difficulty is that there are few dependable regularities in economic and financial data on which to base robust statistical inference. This is particularly true for what we now call “macroeconomic” factors, including policy and political developments, which tend to essentially novel and unprecedented configurations as history unfolds. (It is important to remember that Keynes’ reflections on these questions occurred 50 years before the development of high-capacity computing made both the collection and analysis of

financial and economic data possible on a scale unthinkable in the nineteen-twenties. As a result regularities in financial data have come to light that allow the effective use of statistical inference to guide certain types of financial transactions, such as arbitrage. Unfortunately macroeconomic data does not seem to escape Keynes' skeptical critique, since it is far less abundant, and subject to the historical vagaries Keynes diagnosed.)

In his practical, public-spirited way, Keynes continued to think hard about what might be done practically to improve British economic performance after the War. He could see that the attempt to return to the gold standard was doomed both by U.S. monetary policy and the impossible financial overhang created by the pathologies of the Versailles conference and treaty. He could also see that the academic synthesis, based on a stable velocity of money, was drifting far out of touch with the reality of financial markets, and began to formulate a systematic account of what we now call macroeconomic dynamics in his *Treatise on Money* (Keynes (1930)). The *Treatise* is particularly focused on the determinants of asset prices, interest rates, and the demand for bank reserves, and has some acute and still highly relevant insights into the possible pathologies of interaction of these variables. From a methodological point of view, which will be relevant to the later discussion in this paper, two features stand out. First, Keynes still saw the dynamics he was studying in terms of price fluctuations imposed on a background of equilibrium clearing of markets for production and consumption. Keynes clearly understood that the achievement of, say, a deflation of prices and wages to accommodate some change in financial markets, could impose major and long-lasting transient hardship through unemployment and depressed business activity. But in the *Treatise* these broader economic effects appear analytically only as "frictions" or side-effects of financial market changes. Second, the analytical tools Keynes deployed in the *Treatise* are much the same Marshallian constructs (supply and demand curves) of his undergraduate days.

Keynes in his continuing role as an economic adviser to the Liberal Party (the main inheritor of the Great War traditions) ventured somewhat ahead of Keynes as the writer of academic treatises (Keynes (1924, 1932)). He pushed for a much more extensive system of management of key financial variables, for example, calling for a system of frequent adjustment of the gold price of the pound rather than a rigid commitment to a fixed target exchange rate, particularly pre-war par-

ity. He bemoaned the fact that the restoration of the gold standard forced the Bank of England, as in the pre-War period, to prioritize the defense of the pound at the expense of managing domestic aggregate demand, and advocated large deficit-financed public works programs to address the problem of chronic unemployment. In this period, however, it seems that Keynes saw the academic synthesis of the quantity theory with market-clearing equilibrium as in need of elaboration and correction rather than fundamental change. If the Chancellor would be more reasonable about the price of gold, and the Bank more attentive to aggregate demand, Britain could muddle through even the chaos of world finance in the 1920s reasonably well.

3 The Economics of Keynes or Keynesian Economics?

The years immediately following the publication of the *Treatise* were, indeed, revolutionary both to Keynes' thinking and to academic economics, and set the stage for the discussion of this paper. It is not easy, even for those of us who have had the privilege of meeting and talking at greater or shorter length with the participants in the "Cambridge Circus" in which this revolution largely took place, to understand exactly what happened intellectually there. The book that emerged, Keynes' *General Theory* (Keynes (1936)) (*GT*), however, does tell a revolutionary story. Exactly what the revolution was, however, and how to exploit it, remain highly controversial and unsettled questions in economics.

For the purposes of the present discussion two relatively uncontroversial features of the *General Theory* are central. First, the *General Theory* argues that the levels of output, employment, and income will vary in response to shocks to aggregate demand such as a change in the supply bank reserves, even without any corresponding change in resources, tastes, or technology. Second, the *GT* regards the resulting configuration of the economy as an "equilibrium", even when there is substantial involuntary unemployment.

The variability of output, income, and employment in response to demand shocks eliminated one of the major empirical anomalies in theories based on the classical dichotomy, the prediction that real output and employment would not be affected by demand shocks. The theoretical framework of the *GT*, together with the growing availability of

meaningful macroeconomic aggregate data, opened up an apparently highly fruitful line of empirical work demonstrating systematic correlations among macroeconomic variables. The *GT* validated what many people viewed as commonsense conclusions from observing the impact of monetary and fiscal policy in influencing the level and growth rate of output. Over the decades since the appearance of *GT* a very great part of practical macroeconomic policy analysis has used the methods of income and output determination from projections of aggregate demand proposed there.

Economic theorists, on the other hand, had difficulty in coming to terms with Keynes' characterization of states of economies with substantial involuntary unemployment as "equilibria". Keynes defines involuntary unemployment quite precisely in the *GT* as a position on the aggregate demand curve for labor but with a real wage above the aggregate supply curve of labor, which looks, in the ordinary terminology of economic theory, like a disequilibrium in which supply is not equal to demand at the market real wage. Keynes invoked other definitions of equilibrium to justify his terminology, primarily the notion that in equilibrium expectations are in a certain sense correct, for example, that at the equilibrium level of output and employment firms' expectations of sales are fulfilled.

There is, however, another way to reconcile Keynes' use of the term "equilibrium" in the *GT* with accepted economic terminology. If there are externalities in an economy, several of the properties of what Keynes claimed to be equilibria in the *GT* do hold. Equilibria with externalities, to begin with, are generically "second-best", that is not Pareto-efficient, as Keynes clearly regarded underemployment equilibria to be. There are generically multiple equilibria in economies with externalities, as well. These properties of competitive equilibrium with externalities came to be much better understood in the years after the publication of the *GT*, though in papers that rarely invoked the macroeconomic literature stemming from the *GT*. The general concept of externalities was, however, well-known to Marshall and Cambridge economists in general. Externalities underlie Marshall's analysis of upward and downward sloping long-run supply curves in terms of "technical" rather than "pecuniary" diseconomies. Keynes' contemporary at Cambridge, Arthur Pigou, had developed the idea of correcting externalities through government intervention in the form of taxes (Pigou (1920)).

Furthermore, the consequences of pervasive externalities permeate

the arguments of the *GT*. For example, the consumption function (and the multiplier) rest on the assumption that a significant proportion of the households and firms in an economy are liquidity-constrained. When this is the case, the spending of any household or firm (or the government) constitutes an externality through its effect in relaxing the liquidity constraint of other firms and households. (Milton Friedman's "permanent income hypothesis" explanation of consumption (Friedman (1957)) actually underlines this point, perhaps inadvertently and backhandedly, by explicitly analyzing consumption under the assumption of no liquidity constraints to critique Keynes' consumption function. The permanent-income hypothesis is probably the most enlightening of Friedman's macroeconomic ideas, though like many of the others, for example, the notion that the demand for money is a stable function of a few variables, it turns out to be wrong empirically.) The spending externality obviously can be of enormous practical significance in the real world.

There are other aspects of the *GT* that suggest that Keynes often reasoned in terms of external effects that inherently cannot be mediated by markets. One example is the famous "beauty contest" description of asset market valuations. Keynes argues, quite reasonably, that the organization of asset markets puts speculators in the position of trying to guess not the "fundamentals" on which asset returns might depend, but the opinion of other speculators, and thus were analogous to the beauty contests in British tabloids where the winner was the entrant whose selection best matched the selections of all the other entrants. While this passage is often quoted to invoke the "irrationality" of asset markets, it is equally relevant to the issue of externalities, since in the scenario Keynes sketches the decision of one speculator to buy or sell an asset has an external effect on the valuation of the asset by other speculators.

Yet another example of this type of reasoning in the *GT* is Keynes' discussion of the reasons why money wages tend to be sluggish in adjusting to involuntary unemployment. (I will return to other aspects of this central issue of the theory of the labor market below.) Keynes argues, probably on the basis of observation of British union behavior, that workers are sensitive not just to their absolute real wage, as neoclassical labor supply theory assumes, but to their relative wage. This type of dependence constitutes an externality, because, when it is important, the decision of any worker or group of workers to accept a lower (or higher) money wage changes the labor supply decisions of

other workers who evaluate their own wage offers in relative terms.

These examples point to far-reaching conclusions in the interpretation of the *GT* which the macroeconomic literature has tended to overlook or neglect. One crucial point is that the place to find a “microeconomic foundation” for the *GT* is in the theory of equilibrium with externalities. Hardly any of the voluminous post-*GT* macroeconomic literature has followed this idea up systematically, though important work of Cooper and John and Peter Diamond and various co-authors has explored some avenues along this line (Diamond (1982); Cooper and John (1988)). A second crucial point concerns the interpretation of the term “expectations” in the *GT*. Equilibria with externalities are critically dependent on participants’ expectations about the behavior of other participants. A good example of this (though one that came to prominence in the economics literature decades after Keynes’ *GT*) is the Assurance Game with multiple equilibria, where the participants’ choice of strategy depends on their prediction of the probability of the other participants’ choosing their strategies (one of many discussions is Bowles (2004)). Much of the macroeconomic literature that stemmed from the *GT*, however, interpreted the term “expectations” to refer to concrete predictions of particular future outcomes, for example, levels of interest rates and aggregate demand.

There is a close relation between the informational analysis of economic transactions and externalities. One of the consequences of incomplete information (a pervasive problem in credit, labor, and asset markets) is that important aspects of transactions cannot be specified in contracts enforceable by appeal to a third-party. These non-contractual aspects of transactions inherently constitute an externality, since no market-mediated price can coordinate the participants’ behavior in these respects (Bowles (2004)). From this point of view Keynes’ *GT* can be regarded as an early and pioneering contribution to the theory of asymmetric information and the consequences of informational imperfections in multiplicity of equilibria and dependence of equilibria on expectations.

Keynes did not explicitly invoke externalities or use the language of equilibrium with externalities in the *GT*. One reason for this was that a standardized terminology for discussing asymmetric information and the resulting externalities did not emerge until well after the writing of the *GT*. Another reason may lie in the imperfect communication between the Marshallian tradition of neoclassical economics centered in Cambridge and other, for example, Walrasian, versions that domi-

nated Continental economics in the inter-war period. In any case, few readers of the *GT* put this aspect of its arguments at the center of their attention.

4 “Bastard” Keynesianism

In the reaction of economic theorists to the *GT* we can detect both a high degree of sheer intellectual curiosity prompted by the evident empirical relevance of Keynes’ ideas, and a heightened scholarly wariness of shallowly founded innovation. Unfortunately wariness tended to win out over curiosity, at least in the “mainstream” of economics. The tension between these responses to the *GT* led some of the most technically advanced economic thinkers of the early 1940s to propose interpretations of the *GT* that reconciled its startling claims with conventional supply and demand economics. The most influential of these lines of thinking were John Hicks’ “IS-LM” analysis (Hicks (1937)) and Franco Modigliani’s reformulation of Keynesian macroeconomics (Modigliani (1944)).

Both IS-LM and Modigliani’s model represent Keynes’ analysis as a special case of traditional and conventional economic thinking. (That Keynes anticipated this kind of response is evident from his defiant characterization of his theory as the *general* theory of employment, interest, and money.) The special assumption introduced in these “interpretations” was that money wages were “sticky”, or unresponsive to the existence of involuntary unemployment. Thus both Hicks and Modigliani proposed to view Keynes as a version of the classical dichotomy model in which money wages are analytically taken to be exogenously fixed, rather than endogenously adjusting to clear markets.

This theory (which Joan Robinson dubbed “bastard Keynesianism” (Robinson (1973)) and came also to be called “Keynesian economics” in contrast to the “economics of Keynes” in Axel Leijonhufvud’s terminology (Leijonhufvud (1967))) is in many ways an enormous advance on theories based on the classical dichotomy. If money wages are taken as exogenous, the classical model loses one of its degrees of freedom, and some other variable has to be freed to adjust to satisfy equilibrium conditions. One way (though not the only way) to exploit this change in “closure” is to maintain the determination of the money price level by the quantity of money mechanism of the classical

dichotomy. This assumption in turn forces either the supply of money or the level of output to adjust to satisfy the market clearing conditions. Hicks' IS-LM diagram is a (characteristically both apparently transparent and very subtle) representation of this complex argument; Modigliani's modification of a generic classical dichotomy model to accommodate exogenously fixed money wages makes the same point with more complete mathematical elaboration. This system certainly looks in some important ways like the *GT*. Output is responsive to aggregate demand shocks; there is a role for active fiscal and monetary policy to stabilize output and employment; the downwardly sticky money wage becomes irrelevant if aggregate demand pushes the economy to full employment, where upward pressure on money wages will take over.

From a doctrinal point of view, however, the sticky-money wage version of Keynesian economics leaves the classical dichotomy model intact as the "general case". Keynesian (not necessarily Keynes') macroeconomics theoretically swings into action only when an economy encounters a negative aggregate demand shock that puts downward pressure on money prices and wages. Students can compartmentalize their understanding of economic theory in a fairly transparent way. The policy conclusions of the Hicks and Modigliani analysis are, well, Keynesian: when it is expedient, it is better to pump up aggregate demand through expansionary monetary or fiscal policy than to grind down the level of money wages through an extended period of high unemployment and reduced output and income. But the Hicks-Modigliani approach leaves the theoretical foundations of neo-classical economics, particularly the theoretical social optimality of *laissez-faire*, unscathed.

The main question is what wrong conclusions the Hicks-Modigliani Keynesian analysis will lead to, if real-world economies are actually characterized by pervasive uncorrected externalities, rather than just by downwardly sticky money wages. In order to explore this question it will be necessary to review other analytical possibilities as points of comparison.

The bastard Keynesian model raises some immediate questions. If markets are so good at allocating resources so much of the time, what is it about the labor market that makes it vulnerable to this particular kind of market failure (downward rigidity of the money wage)? A critic of left-wing political persuasion might also point out that the theory has implicit class bias. The theory seems to imply that *laissez-faire* policies would be appropriate except for the anomalous

behavior of the money wage, thereby blaming workers' refusal to accept lower money wages for whatever unemployment they experience and output society loses as a result. Why not assume that the rigidity preventing market-clearing equilibrium occurs in asset markets, or output markets? (Keynes himself spends as much or more space in the *GT* exploring possible pathological malfunctioning of output and asset markets as on labor markets.)

From a rigorously laissez-faire perspective, a theory that motivates government intervention, even if only to regulate aggregate demand and not the allocation of employed resources, on the premise that one of the most important markets in the economy, the labor market, malfunctions, is just as heretical as a general questioning of the efficacy of market allocation of resources altogether. If that theory (bastard Keynesianism) also appears to depend logically on a flawed premise (unexplained downward money-wage rigidity) so much the better, because it is vulnerable to a critique (the "Lucas critique" demanding "micro-foundations") that itself reinforces orthodox economic analysis.

Despite appearing in new Rational Expectations Hypothesis-styled clothes, the tradition of "New Keynesian Economics" is at heart a version of Modigliani-Hicks, based on analyzing a version of a complete markets Walrasian model with the arbitrary assumption of slow money-wage adjustment (see, for one leading and influential example, Bernanke and Gertler (1989)). (This assumption is not really made any less arbitrary by being translated into the transactions-cost terminology of "menu costs".) Thus the same difficulties that are inherent in "good old-fashioned Keynesian economics" (GOKE) of the Modigliani-Hicks model are likely to recur in New Keynesian settings.

5 The theoretical weakness of bastard Keynesianism

Just what is going to go wrong if we analyze an economy that is characterized by numerous important uncorrected externalities with a model that ignores the externalities and substitutes one big pervasive market failure (downward money wage rigidity) as its analytical foundation?

First of all, the resulting theory is going to make some wrong predictions. One wrong prediction, in fact, is that money wages are

downwardly rigid in the face of substantial unemployment. In fact, money wages did decline in the Great Depression, and in other sustained periods of high unemployment after the Second World War, including the current Great Recession. One could argue that they did not decline *enough*, or *fast enough* to provide sufficient liquidity to re-float the system. This argument is dubious even in the case of the Great Depression and seems absurd in the case of the Great Recession, marked as it has been by super-aggressive easy monetary policy that flooded asset markets with liquidity.

As Keynes himself pointed out in responding to the Hicks-Modigliani position, downward money wage flexibility is unlikely to resolve a major unemployment crisis. When workers accept lower money wages, the proximate effect is to lower firm costs of production, which allows, particularly in conditions of general over-production of commodities, for money price reductions of produced commodities. The proximate effect of deflation is likely to be a further collapse of aggregate demand because deflation increases debt burdens, with a larger negative impact on spending than any positive effect on spending from the increase in creditor net worth. Keynes conceded the theoretical possibility that deflation might, given a constant nominal supply of bank reserves, result in an increase in liquidity of the system, parallel to easy monetary policy (an argument that used to be called the “Keynes effect” in GOKE textbooks). Keynes ridiculed the idea that it would be expedient to depend on large fluctuations in money price and wage levels to maintain employment in the face of frequent demand shocks. (In fact, the real costs associated with large money price level changes required by the gold standard system in post-World War I conditions was what had led to the crisis in economic theory to begin with.)

Furthermore, Keynes pointed out that even a massive increase in liquidity, whether the result of sharp money price and wage inflation or aggressively easy central bank monetary policy, might not be able to reflate aggregate demand if the incentive to invest (Keynes’ “marginal efficiency of investment”) were so depressed as to require a negative money interest rate to restore high employment levels. This liquidity trap argument is generally accepted by both GOKE and post-Keynesian economic schools. (Pigou (1943) went one step further and argued that in theoretical principle a massive enough deflation would increase the net worth of the public by increasing the real value of net government debt, the “Pigou effect”, and thus stimulate consumption spending. Pigou’s argument is the precursor of what came later to be

called “quantitative easing”, the attempt to reflate demand by raising asset prices.)

But there are other problems lurking in depending on the all-purpose assumption of money wage rigidity to stand in for other, more deeply rooted, social coordination problems in capitalist economies. Economies with uncorrected externalities, such as liquidity-constrained spending, oligopolistic financial market pricing, or over-valued currencies, can settle into low-level equilibrium “traps” that increased liquidity affects only indirectly or not at all. In these cases depending on an all-purpose money wage rigidity explanation of market failure wastes time by diverting attention away from policy measures more directly targeted on the relevant social coordination problems. Of course these policy measures are bound to be “government interventions” that will appear to the parties involved (such as financial institutions and producing firms) as contrary to their perceived self-interest. The resulting political resistance will be formidable.

GOKE, and its sanitized Samuelsonian cousin the “neoclassical synthesis” (Samuelson (1955)) thus appeared to red-blooded unreconstructed adherents of Keynes’ original ideas such as Joan Robinson to dilute the deep message of Keynes’ insights. Not only were the theoretical diagnoses of GOKE limited and in many cases wrong, but the policy recommendations were fundamentally flawed in refusing to accept the need for widespread government regulation and intervention to make the capitalist economy work to social ends.

6 Post-Keynesian alternatives

A small group of macroeconomists steadfastly resisted the GOKE bandwagon and set up shop under the banner of “post-Keynesian” economics to defend and develop the insights of Keynes’ *GT*.

Some themes of post-Keynesian economics recognizably pick up fundamental ideas of Keynes and his Cambridge circus. In place of the rational expectations hypothesis, post-Keynesians tend to invoke “Knightian (or Keynesian) uncertainty”, the idea that it is impossible for speculators and wealth-holders to form probabilistic judgments about concrete future macroeconomic developments. This position certainly echos Keynes’ skepticism of the power of statistical methods to guide economic decision making. In place of money wage rigidity, post-Keynesianism posits rigid markups on costs (in general reducible

to wage costs in closed economies), implying a rigid real (not nominal) wage, or in Marxist terms, a rigid rate of exploitation. This setup (or “closure” in Stephen Marglin’s (Marglin (1984)) and Lance Taylor’s (Taylor (1983)) language) forces the volume of output and hence employment to fluctuate with investment spending, as Keynes thought was likely in Depression conditions. This vision of the capitalist economy predisposes post-Keynesian economists to argue for deficit-financed fiscal policy as the main tool for regulating aggregate demand in slumps.

There are some other themes of post-Keynesian economics (and its structuralist variants) that diverge noticeably from Keynes’ ideas. There is almost no place in the post-Keynesian paradigm for Keynes’ sophisticated and subtle analysis of financial markets, including the interplay of the central bank and financial institutions over the supply of bank reserves in the short-term money markets. Post-Keynesian theory tends to reduce the short-term money market to a policy-determined short-maturity interest rate through the theory of “endogenous money”. (This picture of short-term money markets works pretty well in “ordinary” times when central banks are following “(John) Taylor rules”, but curiously enough goes sharply out of focus precisely in depressed economies where one would hope Keynes’ insights would be highly relevant.)

Post-Keynesian economics does not take up the themes in Keynes’ *GT* pointing toward pervasive social coordination failures as explanations of inadequate aggregate demand, mispriced financial assets, and high unemployment. Since rigid markups are just as much anathema to orthodox economic thinking as rigid money wages, post-Keynesian economics has had little purchase on the high-theory struggles over “micro-foundations” for macroeconomics.

7 The political economy of GOKE

There is little evidence to support the idea that aggregate demand shocks in the period leading up to World War I, or in the inter-war period, originated from workers’ money wage demands. The major shocks seem likely to have had their origin in financial bubbles and crashes in the pre-WWI period, and in the feckless and self-defeating attempts of central bankers and politicians to sustain the gold standard in the inter-war period. The focus in economic theory on the the-

oretical possibility that money wage and price flexibility could stabilize output and unemployment in the face of aggregate demand shocks seems in retrospect to have been the result of thinking in terms of classical dichotomy models.

In this perspective the political economy of the classical dichotomy model is particularly perverse. It argues that the costs of coordination failures in finance and public finance ought to be borne in the form of wage cuts or unemployment encouraging wage cuts by workers who have had no power over nor reasonable responsibility for, those underlying failures. Keynes found this implication of conventional thinking dangerous in its potential to fan revolutionary resentments in even the staid English working class. Thus Keynes' criticism of the view that money wage and price flexibility could be depended on to correct aggregate demand failures rested not just on his judgment as to the expediency of the conventional view, but also of its political viability.

In one of the ironies of history of the kind that fascinated Marx, it turned out that the adoption of Keynesian economics in most of the industrialized capitalist countries after World War II did indirectly create conditions in which upward pressures on money wages for a short period played a central role in macroeconomic policy. Franklin Roosevelt framed his understanding of the political economy of the Second World War in the U.S. as the substitution of "Dr. Win-the-war" for "Dr. New Deal". The New Deal was an attempt to intervene with government legislation and settle the chronic class conflicts that had bedeviled the U.S. economy through the period of industrialization after the Civil War, a project that met with at best limited success.

Roosevelt had discovered that the War offered an alternative path to resolving the country's political-economic dilemma, a "capital-labor accord". This was a system in which workers through their union representatives agreed to cede to employers control over production methods in exchange for job security and a reliable sharing of the resulting productivity gains. The labor shortage created by mobilization and the boom triggered by massive military spending made the capital-labor accord more attractive to both workers and capitalists, and the largely politically popular aims of the war against fascism provided credible ideological cover for the union leaders who embraced it. Wage and price controls allowed the government a large degree of direct influence on distribution to enforce the accord.

After the War, the capital-labor accord endured as the core political-

economic framework for U.S. economic policy, but with gradually weakening political and institutional support. The Cold War confrontation with the Soviet Union stood in for the war against fascism to provide ideological legitimation. Centrist economists of both major parties who adhered to similar versions of GOKE managed the details of economic policy. Increasingly in this period (sometimes viewed as a “golden age” in retrospect, a description hard to reconcile with the actual experience of its sharp contradictions), as Michal Kalecki prophesied in his 1943 paper on the politics of a business cycle managed by government intervention to control aggregate demand (Kalecki (1971)), relatively high and stable levels of employment led to episodes of upward pressure on money wages. Thus the GOKE assumption that money wages would not adjust to aggregate demand shocks became a kind of self-fulfilling prophesy in the 1960s and the 1970s.

Central banks and politicians struggling to manage the capital-labor accord system in this period were faced with awkward and hard choices. The fundamental dilemma posed itself as whether to accommodate money wage increases by monetary and fiscal policies increasing aggregate demand, which would allow capitalists to pass on the cost increases in higher prices, or to “fight inflation” by restricting aggregate demand, with the consequence of higher unemployment to damp down money wage pressures. This dilemma made its way into GOKE in the somewhat mystified form of the “Phillips Curve”, which represented the policy tradeoff between accommodating and restrictive policy in terms of a “menu” of social choices. This episode of cost-push inflation was a blow to GOKE from which it is still struggling to recover. The attempt to paper it over with the excuse that the dilemma was due to oil-price shocks lingers as a distraction, but is implausible on gross empirical grounds because energy costs were and are much smaller proportionally than wage costs, and market responses did restrict the growth of energy use effectively in response to the oil price increases of the 1970s.

In the short run Paul Volcker brutally resolved the GOKE dilemma by cutting the Gordian knot of the Phillips curve with punitively high interest rates, triggering the worst economic downturn seen up to that point after the Second World War. The resulting chronically overvalued dollar contributed to a long-term “resolution” of the political economic dilemma in several ways. It greatly weakened the price-setting power of U.S. oligopolistic firms, and led to their breakup

and reconstruction in a more price-competitive form. It encouraged the export of U.S. jobs to low-wage regions of the world that were becoming more welcoming to foreign investment as a result of the spread of liberalized capital movements. The highly credible threat of job loss did much more than domestic unemployment to deter cost-push money wage pressures in the U.S. The Phillips curve unravelled both as a policy issue and as an econometric artifact as a result.

Thus the New Classical “counter-revolution” in economic theory has a political-economic aspect more important than the supposedly scientific controversy over “micro-foundations”. The inflationary problems of the 1970s, despite Milton Friedman’s characteristically misleading slogan that “inflation is always and everywhere a monetary phenomenon” (Friedman (1963)), were not primarily due to monetary shocks to aggregate demand, but to cost-push wage pressures. New Classical models represent a return to a formally more sophisticated, but economically bankrupt, version of the classical dichotomy. The defensive New Keynesian attempt to salvage some scholarly credibility for the GOKE approach by expressing it in terms of rational expectations, as I argued above, resurrects both the political palatability and the doctrinal vulnerability of GOKE.

The important lesson, it seems to me, for contemporary macroeconomics is that purely theoretical discussions of liquidity traps and aggregate demand, as salutary as they are in bringing some sanity into a macroeconomic policy debate largely hijacked by extreme reactionaries, benefit from some diagnosis as to the real issues confronting the U.S. and world economies. These conditions seem light-years removed from the wage-push problems of the 1970s. Price changes in the contemporary U.S. economy seem more likely to reflect pressures of “service” sectors like health care and education than wage pressures from the dwindling number of U.S. workers who actually produce something. The apparent liquidity trap besetting monetary policy appears more likely to reflect oligopolistic rigidities in financial markets than weakness in incentives to invest. (Investment in the U.S. for twenty years has been largely disinvestment connected with the transfer of productive work to low-wage regions of the world, anyway.) The goals of macroeconomic policy have to be more focused on making the economy work better to provide economic security and well-being than to make it grow faster.

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