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Working Paper No. 542

Keynes's Approach to Full Employment: Aggregate or Targeted Demand?

by

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ABSTRACT

This paper argues that John Maynard Keynes had a targeted (as contrasted with

aggregate) demand approach to full employment. Modern policies, which aim to "close

the demand gap," are inconsistent with the Keynesian approach on both theoretical and

methodological grounds. Aggregate demand tends to increase inflation and erode income

distribution near full employment, which is why true full employment is not possible via

traditional pro-growth, pro-investment aggregate demand stimuli. This was well

understood by Keynes, who preferred targeted job creation during expansions. But even

in recessions, he did not campaign for wide-ranging aggregate demand stimuli; this is

because different policies have different employment creation effects, which for Keynes

was the primary measure of their effectiveness. There is considerable evidence to argue

that Keynes had an "on the spot" approach to full employment, where the problem of

unemployment is solved via direct job creation, irrespective of the phase of the business

cycle.

Keywords: John Maynard Keynes; Public Works; Fiscal Policy; Full Employment;

Aggregate Demand; Targeted Demand; Demand Gap Analysis

JEL Classifications: E01, E12, E62, B31

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"The whole of the labor of the unemployed is available to increase the national wealth. It is crazy to believe that we shall ruin ourselves financially by trying to find means for using it and that safety lies in continuing to maintain idleness."

—John Maynard Keynes (1981a: 881)

"The main task is producing first the intellectual conviction and then intellectually to devise the means. Insufficiency of cleverness, not of goodness, is the main trouble."

—John Maynard Keynes (1980: 384)

I. INTRODUCTION

In a letter to T.S. Elliot, Keynes commented that the trouble with designing policies for full employment is that economists lacked both the intellectual conviction of their feasibility and the cleverness to design them. Goodness and well-meaning intentions were never the problem. It seems today, similarly, we are more in need of intellectual conviction and cleverness to design such policies than ever before in the postwar era. The mainstream has abandoned the notion of full employment believing that some noninflationary level of unemployment is the most we can hope for. Fiscal policy is relegated to the dustbins of history with a possible minor role in severe contemporary recessions. Governments are considered to be generally wasteful and inefficient, thus, whatever solution markets deliver with respect to employment must be the optimum result. The resurrection of Abba Lerner's Functional Finance approach by Post Keynesians (Forstater 1999; Bell 1999; Arestis and Sawyer 2004) attempts to reverse this tide of pessimism and convey the importance of fiscal policy and its link to full employment once again. This is certainly a well-meaning endeavor.

The mainstream approach to unemployment is also driven by good intentions. The solution is to provide incentives for accelerated investment and growth (giving tax breaks and cutting interest rates) and to pump enough aggregate demand via tax cuts, unemployment insurance, or some other form of spending. The problem of unemployment is addressed by pushing the economy onto some new growth path, while preventing those who are left behind from drowning via income transfers. These are the contemporary aggregate demand policies. And while they are not policies that lack good

intentions, Keynes would argue today that they are neither clever, nor driven by the steadfast intellectual conviction that full employment is a real possibility.

So it is constructive to revisit Keynes's view of employment policy once again to see what role aggregate demand policies played in his analytical approach. Much has been written on what Keynes meant or did not mean and what he would have made of contemporary policies carried in his name. Although there is much disagreement on his theoretical contributions, there is a general agreement across the theoretical spectrum that boosting aggregate demand is the Keynesian solution for full employment. This paper argues against this view and suggests that while aggregate demand has an important place in Keynes's analysis of the business cycle, "filling the gap" is not his method for fiscal policy. Rather, he had a *targeted* demand approach to full employment of a specific kind. He favored public employment schemes, generally in the form of public works, which were to be implemented both in recessions and in economies near full employment. To subscribe to such a plan, however, requires conviction of its advantages and cleverness in its execution. Keynes had both.

Because Keynes's theory is mistakenly referred to as "depression economics," public works are generally viewed as "depression solutions." General fiscal policy that fills the demand gap between actual and potential output dominates theory and policy. "Closing the gap," it will be argued here, is a backward way of thinking about full employment policy and is not the essence of the Keynesian contribution.

What was truly innovative in Keynes's work was the principle of effective demand, which is quite distinct from what has become known as the theory of aggregate demand (Kregel 2008). Once we make this distinction, it becomes clear why Keynes did not speak of "fiscal policy" in general, but he spoke of public works (see also Marcuzzo [2006] and Chick [1983: 318]). Furthermore, for Keynes, the key measure of the desirability of public policies was their net employment-generation effect. Targeting demand via public works would be done irrespective of the stage of the business cycle; whether this targeting meant *more* public works or *better distributed* public works depended on the level of economic activity. This distinction is important in evaluating fiscal policy. Today's aggregate demand approach to full employment is not Keynes's

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¹ Recall that full employment for the mainstream is not the same thing as full employment for Keynes.

solution. In addition, it is important to note that the Keynesian method is one of *unemployment* targeting, which is also distinct from what is known as *industry* targeting.

The first question to ask is what role did output gap analysis have in Keynes's method. The standard textbook Keynesian model shows how fiscal stimuli close the gap between full employment output and current output. This could be done via increasing government spending, cutting taxes, or balancing the budget—policies that work through different multiplier effects. While rejecting the Keynesian analysis, the New Economic Consensus model and much of mainstream theory still use the gap method to argue in support of monetary or fiscal policy by stipulating various demand- or supply-side effects of each.² While the policy recommendations across the theoretical spectrum diverge significantly, plugging the gap is a core economic concept that underpins them. This methodology is also embraced by many Post Keynesians.

It is easy to see how Keynes's own writings have encouraged such an interpretation. Keynes, after all, emphasized that his was a theory of aggregates and that he set out to explain the determination of output and employment as a whole. Largely overlooked is the fact that he also had a clear theory of pricing, which provided the micro foundations of his macro theory.³ He first stressed that an exogenous (or quasiindependent) marginal propensity to consume of less than one left a gap between consumption and income, meaning that firms' outlays on wages did not return back to them in the form of revenue from consumption. The withdrawal of purchasing power from saving undermined full employment and could be plugged by investment spending only under certain very special circumstances in a manner similar to that in classical theory (Keynes 1964 [1936]: 9). In general, however, Keynes argued that investment did not normally manage to do so, leaving the economy to operate below full employment. As he pointed out, "the evidence indicates that full, or even approximately full, employment is a rare and short-lived occurrence" (Keynes 1964 [1936]: 250). So he set out to understand the forces behind investment, which made it chronically ineffective in attaining or maintaining full employment. After spelling out these forces, he concluded

² Recall, for example, that the Taylor rule targets both the output and inflationary gaps (Taylor 1993). Other modern output gap methods come from some variation of Okun's law (more below).

³ Keynes stressed output and employment determination as a whole in the *General Theory* because he did not do so in his analysis in the *Treatise*.

that it was the job of public policy to "establish a closer approximation of full employment as nearly as is practicable" (Keynes 1964 [1936]: 378–79).

This conclusion has largely been interpreted to mean that if the demand gap is not filled by investment spending it can be filled by government spending, but the type of fiscal policy that could do the job is left to interpretation. The key is to increase money expenditures sufficiently to produce full employment. Keynes, however, did not endorse just any fiscal policy and he specifically objected to those that aimed to stabilize consumption as policies for full employment. This would rule out contemporary unemployment insurance, which he did not believe would solve the unemployment problem; it would also exclude modern tax rebates, various consumption subsidies, and other transfer payments. For example, in correspondence with James Meade (who argued in favor of cutting taxes "before unemployment develops" as Britain exited a full employment war-time economy), Keynes objected that he was not too happy about the line of argument Meade set forth... "I doubt it is wise to put too much stress on devices for causing the volume of consumption to fluctuate in preference to devices for varying the volume of investment' (Keynes 1980: 318–319). And again, "I doubt if much is to be hoped from proposals to offset unforeseen short-period fluctuations in investment by stimulating short-period changes in consumption" (Keynes 1980: 323). Keynes's objections would also rule out Post Keynesian proposals of a social dividend (as in Robinson [1949]),⁴ and basic income guarantees (as in King [2001] and Sawyer [2005]).

Keynes wanted to stabilize investment, but he also did not believe that stabilizing *private* investment could do the job. Boosting aggregate demand to encourage private investment had serious limitations, which were well understood by his contemporaries (see, for example, Kaldor [1938] and Kalecki [1945]), limitations which could easily be overcome by public investment.

To understand his approach to policy we need to examine: 1) how *effective demand* differs from *aggregate demand*; 2) why fixing the point of effective demand at full employment is not possible; 3) how a policy of public works circumvents this

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⁴ "If there is unemployment on the one hand and unsatisfied needs on the other, why should not the two be brought together, by the simple device of providing the needy with purchasing power to consume to products of the unemployed" (Robinson 1949: 73). Note that for Joan Robinson, "public works can serve as a counterweight to the fluctuations in investment undertaken by profit seeking entrepreneurs" (Robinson 1949: 30), but for Keynes they were also a policy for employing the unemployed at the margin.

problem, irrespective of the stages in the business cycle; and 4) what role the method of "plugging the gap" plays in Keynes's analysis. All of this has to be studied in the context of Keynes's steadfast intellectual conviction that the "real problem, fundamental yet essentially simple...[is] to provide employment for everyone" (Keynes 1980: 267). Full employment is an objective in recessions and in expansions, as well as in the long run. In response to Sir Eady, who reflected that Keynes's note on the *Maintenance of Full Employment* in the long run via public works was, for most British Ministers, a "voyage to the stratosphere," Keynes replied that they should better "become accustomed to the stratosphere—if that is really what it is!as there is scarcely an undergraduate of the modern generation for whom these truths [the means of securing long-term full employment] are hidden" (Keynes 1980: 325). It seems that Keynes's contemporaries lacked not just conviction and cleverness, but also a very basic grasp of his proposal.

II. EFFECTIVE DEMAND IS NOT AGGREGATE DEMAND

It is important to remind the reader that Keynes's theory of effective demand is not the same as the theory of aggregate demand. The theory of effective demand is a theory about the *factors* that determine investment in a monetary production economy, while the theory of aggregate demand is a theory of boosting the various components of *current expenditure* (private or public) to secure some numerical measure of potential output. It must also be pointed out that what Keynes called the aggregate demand curve (the D curve) is not a curve of the *current* money expenditures as a function of *current* prices (i.e., the GDP curve in contemporary economic models). Rather, it is a curve of the *expected* future expenditures (or proceeds), which will validate the entrepreneurs' decision to produce and employ N number of people today. Increasing current expenditures may or may not improve those expectations, which means that pumping aggregate demand today is not guaranteed to improve the conditions that underpin the point of effective demand. Keynes, of course, compellingly argued that in slumps it generally would, but from 1937 on he just as compellingly argued that near full capacity increasing aggregate demand would not produce full employment. At the time, he

warned, "we are in more need today of a rightly distributed demand than of a greater aggregate demand" (Skidelsky 2001: 21; see also Kregel [2008]).

Unemployment for Keynes, in all cases (regardless of the phase in the business cycle), was a result of deficient *effective* demand, not deficient *aggregate* demand. But because there is only one point of effective demand consistent with full employment, to pin it down is no easy task. As already explained, this point is given by the cross-section of the current supply price of output and the future demand price of output. In the short run, there is no swift way of reducing the supply price of output (i.e., the cost of production) other than by lowering wages, which would be counterproductive. This is because bidding down wages makes sure that the extra output will not be sold, even if it can be produced at a lower cost (Kregel 1987). In other words, lowering wages is likely to *reduce* total employment. For these reasons, and in rejection of Say's law, he argued that one must work on the demand side. To do this, policy can attempt to influence the independent factors that determine the level of employment—the marginal propensity to consume (MPC), the marginal efficiency of money (MEM), or the marginal efficiency of capital (MEC).

When total demand is deficient, policies can attempt to boost either private or public investment. Private investment can be encouraged by reducing the interest rate (i.e., the MEM), which, given the state of expectations, will reduce the cost of finance. Alternatively, one may attempt to change the MPC via income redistribution schemes towards those individuals with high propensities to consume and away from those who have high propensities to save. Finally, another way of moving the point of effective demand is to boost expected profitability from investment (i.e., the MEC), which could be done by increasing total current money expenditures in the economy, i.e., via aggregate demand. It is in recessions that the case is made for vigorous aggregate demand stimuli. Total current spending will help validate *past* expenditures undertaken by entrepreneurs and can help stabilize investment and the business cycle.

There are many factors that can affect the point of effective demand and boosting aggregate demand is but one option of influencing these factors. However, "plugging the gap," as it is discussed today, is not the leading method of Keynesian analysis; this is

because, as the entire corpus of his work shows, while it is possible to move the point of effective demand, it is impossible to fix it at full employment.

III. THE PROBLEM WITH FIXING EFFECTIVE DEMAND AT FULL EMPLOYMENT

The difficulties with fixing the point of effective demand at full employment are well known. Working with the marginal efficiency of money to influence private investment in the face of depressed expectation, Keynes argued, may prove to be like "pushing on a string." This would make monetary policy futile, especially when interest rates are already very low. Secondly, boosting the marginal efficiency of capital (or profit expectations) also has its limitations because it is not under the direct control of policy. Low rates of interest and an increase in total money expenditures can improve the profits outlook and entice entrepreneurs to redirect their money from financial assets to real production. Government spending can be thought of as filling "the cash boxes of private entrepreneurs" (Kregel 2008), but how large an injection of liquidity is need to induce those investors to start employing is difficult to gauge. This is because while aggregate demand will increase the amount of liquid assets in the system, it may not be able to expediently shift individual preference away from holding them.

Such would be the problems under a liquidity-trap scenario where money, as Keynes argued, becomes "a bottomless sink of purchasing power...[and] there is no value for it at which demand [for it] is diverted ... into a demand for other things" (Keynes 1964 [1936]: 231). The trouble with filling investor's cash boxes as a policy for full employment rests with the state of expectations, which may or may not improve fast enough with the provision of liquid financial assets.

In any event, it is during severe slumps that we the find strongest support for broad aggregate demand management policies, because we can be reasonably sure that an increase in money expenditure would sooner or later increase employment. As Harrod (1972 [1951]: 477) put it: "In times of depression and unemployment it was desirable to encourage spending and lavishness." But even in recessions, any type of aggregate demand policy will not have equal employment creation effects; when swift reduction of

unemployment is needed, targeted demand via public works would do the job. And Keynes always advocated large-scale public capital improvements in severe slumps.⁵

Suppose, however, that we are in an expansion. Private spending and investment are strong and the economy is approaching full employment. In these circumstances, additional money expenditures will boost the MEC, but will not have the same employment-creation effects as in recessions. This is due to the structure of the economy. Near full employment, the MEC may be quite high, but aggregate demand will likely increase it further in those industries that have already been saturated and are producing at full capacity. This is because for Keynes, "effective demand spends itself, partly in affecting output and partly in affecting price," which will depend on the respective two elasticities. He explains:

Some products take time to produce, so that it is practically impossible to increase the supply for them quickly. Thus, if additional demand is directed to them without notice, they will show low elasticity of employment. (Keynes 1964 [1936]: 285)

Affecting the MEC near full employment via an increase in aggregate demand need not have the same employment-creation effects. In fact, it will likely produce inflationary pressures in those industries with low elasticity of employment.

Because the structure of the economy distributes the increase in aggregate effective demand unevenly, a boost in total current expenditures will not be able to absorb the remaining (structurally) unemployed and will also push up prices in certain industries. The first problem with boosting aggregate demand in expansions is that it causes prices to rise *before* it produces full employment. The second problem is that near full employment it also creates more unequal income distribution between capital and labor, favoring the latter. Keynes argued that:

⁵ As it will be noted later, large-scale public works are needed not only for the swift reduction in unemployment, but also for a generalized socialization of investment, which Keynes considered to be a prerequisite for economic stability.

[I]f the increase in demand is directed to products with a relatively low elasticity of employment, a larger proportion of it will go to swell the incomes of entrepreneurs and a smaller proportion to swell the incomes of wage earners and other price cost factors. (Keynes 1964 [1936]: 287)

For these reasons, to guarantee full employment in expansions, it is not more demand, but appropriately distributed demand, is needed.

For the ways in which we suppose the increase in aggregate demand to be distributed between different commodities may considerably influence the volume of employment. If for example the increased demand is largely directed towards products which have a high elasticity of employment, the aggregate increase in employment will be greater than if it is largely directed towards products which have low elasticity of employment.

In the same way employment may fall off without there having been any change in aggregate demand, if the direction of demand is changed in favor of products having a relatively low elasticity of employment. (Keynes 1964 [1936]: 286)

In sum, general aggregate demand helps in depressions, but to yield maximum employment creation, it is more effective to target it to the unemployed directly via public works. Close to full employment, an increase in aggregate demand brings inflationary and distributional problems because of the structure of production. As Keynes recognized, the closer we are to full employment, the more troublesome it becomes to secure a further given increase in employment via an increase in aggregate real income (Keynes 1964 [1936]: 118).

We cannot conclude from this that the goal of full employment is abandoned once we approach it, as it is done by mainstream economists who define full employment as the noninflationary level of unemployment (or the remaining frictional and structural unemployment). For Keynes, even in expansions, the goal of full employment is still important. The problem to wrestle with is structural unemployment, which should "be treated as something to be handled forcibly and not something to be defeatist about" (Keynes 1980: 357). To deal with structural unemployment, government can redirect its public works to those "special areas" with the highest remaining unemployment. Keynes

and the government had agreed that they could take "the contract to the men, rather than the men to the contract" (Brown 1936).

These are the core reasons why fixing the point of effective demand at full employment is hard to do. These difficulties were well understood and developed by Keynes's associates and followers. Kaldor (1938), for example, looks at the complementarity and specificity of the inputs of production to explain why privately determined full employment is unstable. Kalecki (1945: 83, original emphasis), in a similar vein, argues that to maintain full employment via private means, "the rate of interest must *continuously* fall; the income tax must be *continuously* reduced or the subsidies to investment must *continuously* rise." When comparing these strategies to the one via public investment, he finds that cumulative stimuli are not required for the latter and that the only logical solution to the problem of unemployment is for government to socialize private investment and control its growth rate lockstep with population growth and the increase in productivity of the labor force.

IV. HOW PUBLIC WORKS CIRCUMVENT THE PROBLEM OF FIXING EFFECTIVE DEMAND

Keynes's targeted demand approach can be best understood from his writings in the interwar period. Because he is often criticized for only studying the conditions of economies in depression, it is important to dispel this view and demonstrate the benefits of public works near full employment. His writings in the interwar period, his short pamphlet *How to Pay for the War* (1940), and much of his work on postwar policy are instructive, not only because they explicate his view on how to maintain full employment once we get there, but also because they set out his method of analysis, which, as I shall argue later, is not the same thing as contemporary "output gap" analysis.

Let's begin first with how to maintain full employment. Very early on Keynes recognized that public works were also crucial when the private sector is working at full capacity.

My argument is that if public works are stopped, particularly at a time when private enterprise is stopping from temporary overcapacity and is therefore not in a position to expand, then private saving can do any amount of harm. You remember what I said—every pound saved puts a man out of work. (Keynes 1982: 150)

What Keynes wanted to press on his contemporaries was that the logic of the objective and subjective factors that determined private consumption meant that the private sector would not expend its entire earned income. And so "it isn't really the business," Keynes argued, "of private individuals to spend more than they naturally would, any more than it is their business to provide for the unemployed by private charity" (Keynes 1982: 151). Furthermore, because of the volatile nature of investor expectations, full employment, if attained, cannot be sustained. Public works and, more specifically, the sizeable socialization of investment were the answer:

If two-thirds or three-quarters of total investment is carried out or can be influenced by public or semipublic bodies, a long-term program of a stable character should be capable of reducing the potential range of fluctuation... (Keynes 1980: 322)

The provision of full employment should be "done by the organized community as a whole—that is by public authorities" (Keynes 1982: 151).

As noted above, discontinuation of public works in conditions of private-sector overcapacity is undesirable, as the latter cannot expand to absorb those laid off from the public sector. This was well understood by Keynes's contemporaries in the context of maintaining full employment after the Second World War. Meade, for example, echoed this sentiment:

"there is little understanding...that the immediate postwar unemployment that may result from demobilization is one that cannot suitably be cured by general expansive policies. It requires, of course, rather policies of retraining, labor transference and general adjustment to peacetime uses." (Meade in Keynes [1980: 314])

In other words, what is needed is not to discontinue public works, but to transform them from military to peacetime industry while retraining workers simultaneously for the needs of civilian production.

While industry restructuring may take a while to do, Keynes did not believe that the maintenance of full employment was a formidable task. The required remedies would be of a much smaller scale than Meade had suggested, as it was easier to "prevent the ball rolling [i.e., to prevent the development of unemployment] than would be required to stop it rolling once it started [i.e., to solve unemployment once it developed]" (Keynes 1980: 316). In this sense, public works were favored as a long-term solution. Keynes often chided his contemporaries for not fully grasping the role of public works both as a short-and long-term solution. In response to Meade, he wrote:

I think you lay too much stress on cure and too little on prevention. It is quite true that a fluctuating volume of public works at short notice is a clumsy form of cure and not likely to be completely successful. On the other hand, if the bulk of investment is under public or semi-public control and we go in for a stable long-term programme, serious fluctuations are enormously less likely to occur. (Keynes 1980: 326)

Thus, Keynes argued, Meade did less than justice to large-scale public employment schemes by pointing out deficiencies in the short term without acknowledging their important preventive benefits in the long run. Public works circumvent the problems of relying on private spending and investment for full employment, but they also impart stability on the system in the long run and must be therefore maintained, even when we reach full employment.

But, for Keynes, another conundrum demanded resolution. How does one maintain full employment and, at the same time, prevent any possible inflationary pressures from developing?⁶ He deals with this specific problem in a series of articles in *The Times* in 1937 and 1939, which later culminated in the short pamphlet *How to Pay for The War*. A full employment wartime economy is likely to develop what Keynes called an "inflationary gap" and it is here that the gap method comes into view. It is

⁶ Recall that for Keynes the true meaning of inflation was when prices started increasing *after* full employment was reached.

important to note that this method was developed in the context of true inflation. While he did not believe that *more* money expenditures would be sufficient to close a recessionary gap, he did believe that less money expenditures are needed to close an inflationary gap. His solution to inflation, however, was not one that sacrificed employment, as is currently advocated by mainstream theory on the basis of the Philips Curve relationship. This scenario is important to study because it shows the asymmetric nature of demand-management policy.

Keynes argued that any increase in spending toward the war effort would occur at the expense of prewar consumption. The increased demands of the war necessitated increasing expenditures on military production, while the fully employed "working classes would command substantially more [consumer] goods than before" (Keynes 1980: 42). Clearly, an inflationary environment would develop. How does one solve the problem of inflation? Do we shed public works in order to reduce the income generated? No. Keynes did suggest that localities should postpone *new* projects as long as they can reasonably be held back (Peden 1980: 1), but he did not advocate shutting down public works or laying off workers. It may be necessary to retard *certain* types of investment, those that are usually undertaken in the center rather than in the periphery of economic activity, which is why he advocated public works for the "special" or "distressed areas." This regional approach to maintaining full employment has not received sufficient recognition (Peden 1980: 18). A comprehensive look at Keynes's employment policy is more consistent with a targeted demand approach to full employment than with one relying on aggregate demand.

So how does one close the inflationary gap? For Keynes, not layoffs, but reduction in spending is the solution. Inflation can be addressed in three ways. The first is to let prices rise, i.e., let inflation manifest itself, which could entice firm production (expansion in supply) in those sectors observing the price increases. In full employment conditions, however, such a "solution" to inflation is undesirable because it will be self-reinforcing. Wage demands will press on to compensate for the rise in prices, producing a wage-price spiral and exasperating inflation. The second solution is to reduce income growth through increasing taxation. This, however, would mean taxing the working classes (including the previously unemployed who were now enjoying strong income

growth), therefore depriving them of the fruits of their labor, which, for Keynes, was an unacceptable solution. The best solution in his view was to produce a scheme of deferred payments, where incomes were taxed in a very progressive manner, but those taxes were to be deposited in savings deposits, which would be accessible for spending after the war when industry converts to civilian production. In this plan, a large proportion of the low-income working classes would be exempt from these "forced savings" due to the progressive nature of the tax, and those savings would be available for the repayment of debt (i.e., mortgages), but not for new consumption. This form of taxation is preferred as it allows the income earners to have access to their deferred payment (which is stored in the form of wealth) after the war. This plan drew much criticism from government and labor, but the essence of the approach to closing the inflationary gap did not rely on laying off workers; the solution was an increase in "desired" net saving (or, as he called it, thrift).

Before we examine Keynes's method for solving the inflationary gap, a few final words are necessary about the importance of public works. For Keynes, the first objective of policy was to hire people by whatever means possible. Once full employment had been reached, policy must plan, redesign, and substitute expenditures to make these public works useful and effective and to integrate them into a broader agenda for long-term, stable public investment. We can call Keynes's approach to full employment a "on the spot" approach. As Keynes himself argued, a "man-year of employment on the spot" can be done immediately without any obstacles (Keynes 1982: 171). As is also clear from the McMillan Committee deliberations, it is immaterial whether the rate of return on public works is 5 percent, 3 percent, or 1 percent; the first important result is a reduction in unemployment and the second result is that some yield is better than no yield at all (Keynes 1981b: 174–175).

Although Keynes did not advocate pyramid building or burying jars with money and employing the unemployed to dig them out, he did provide such examples of public works largely to emphasize the importance of this "on the spot" approach to unemployment. The benefits of public works are, first and foremost, to be ascertained by their employment-generation effects. Once this is done, Keynes argued "there can be only one object in the economy, namely to substitute some other, better, and wiser piece of

expenditure for it" (Keynes 1982: 146), i.e., to redesign those public works. Keynes of course emphasized that there was no dearth of useful things to do and that whatever we do was still better than not doing anything at all. But we need cleverness to design public employment schemes for true full employment.

He argued that "it is easy to employ 80 to 90 percent of the national resources…but to employ 95 to 100 percent is a different task altogether" (Keynes 1982: 409). Care and management in planning are needed. As Peden (1980: 13) points out, Keynes thus believed that 95 to 100 percent of national resources, including labor, can be employed;⁷ for this task, it is not more demand that is needed, but rightly (and cleverly) distributed demand. "Anything that we can actually *do* we can afford. Once done it is *there*. Nothing can take it away from us" (Keynes 1980: 270). With policies that sustain the unemployed via unemployment insurance, we are not creating anything, so we "have nothing to show for it except more men on the dole" (Keynes 1982: 149).

So while the primary objective of policy is to offer employment at the margin, Keynes never believed that public employment schemes could not be executed in a well-devised manner. Could we not use more universities, more local schools, and recreation areas, more theaters, museums, and galleries, more cafes or dance halls, Keynes asked. But surely there are many other pressing needs that Britain can address: public works can increase housing, improve the transportation infrastructure, and "replan the environment of our daily life [...] Not only shall we come to possess these excellent things, but [...] we can hope to keep employment good for many years to come" (Keynes 1980: 270). This is the essence of a good policy; it is not only driven by the intellectual conviction that full employment is essential and achievable, but it is also designed with imagination and cleverness in creating projects that are beneficial to the community as a whole.

The needs of the community and the distribution of weak and overheating economic sectors would determine where policy should direct demand and what the nature of public works would be. In the 1930s, there were very few statistical sources that provided the needed information for designing public policy and Keynes was very vocal about the need for better statistics. It is in his discussions about statistics and the measurement of the inflation gap that we can fully appreciate the difference between

⁷ This, as Keynes pointed out, is done by rightly distributed demand.

Keynes's own method and the modern calls to fill the gap between current and potential output.

V. CLOSING THE OUTPUT GAP: A KEYNESIAN METHOD?

As noted earlier, closing the output gap is an approach that is embraced by the mainstream, as well as many Post Keynesians. Keynes did speak of a demand gap, however, but in the aggregate he emphasized the shortfall in the demand for *labor*, not the demand for *output*. This is not an insignificant distinction. His methodology, which underpins government budgeting for closing the labor demand gap, is laid out in the statistical appendix of a memorandum on national income and expenditure after the war. This paper produces estimates of the level of current spending as a function of labor and its pay allowances. Keynes's measure of income and output was first suggested in the General Theory in his discussion on the choice of units. Whenever he spoke of an increase in expenditures that would produce a certain percentage increase in output, this increase was measured in wage units. In the deliberations about budgetary planning after the war, Keynes, in collaboration with Rick Stone, attempted to give guidance on budgetary expenditures needed to sustain full employment. All calculations were based on some assumptions of the number of employed and unemployed men and women. The goal was to outline a method of measuring current production as a function of employment, labor productivity, and factor prices. In other words, any output gap that needed to be plugged was measured in terms of number of unemployed that need to be hired (Keynes 1980: 280–307).

For Keynes, the gap that needed closing was the labor demand gap, not an output gap as measured in current prices. In fact, he explicitly objected to the latter measure (more below). Let's first look at the textbook method for solving unemployment by closing the output gap.

This approach comes to us from various incarnations of Okun's law, which posit a statistical relationship between the rate of growth of output and unemployment (Okun 1962). The law states that a 1 percent increase in unemployment would bring about approximately a 3 percent decline in GDP growth. This relationship has been flipped and

used as a policy guide, suggesting that to reduce unemployment, the rate of growth in current output must be greater than the rate of growth in potential output. In other words, if policy manages to stimulate growth at a rate faster than the rate of growth of potential GDP, unemployment can be reduced and (possibly) even eliminated. This approach has given rise to broad-based, pro-growth policies. Note however that the original observation of Arthur Okun (the economist after whom the law is named) was that, when growth deviated by 1 percent from its long-term trend, unemployment fell by 0.3 percent. He cautioned that the relationship between growth and unemployment was very weak. Reversing his analysis, however, has given powerful ammunition to growth-at-all-cost policies. Because investment is the active component of growth, private-investment stimuli of various kinds (supply- or demand-side) have been the preferred policy option to close the output gap.

Accelerating growth would produce full employment, so long as the economy does not run into some inflationary barrier in the meantime. But, as Keynes had pointed out, price pressures in certain sectors tend to kick in before output reaches its full employment level. Modern policy often sacrifices the goal of full employment in the name of maintaining price stability, since the latter is considered to be more devastating to economic stability. Paradoxically, it is precisely this approach of closing the gap that advocates pro-investment, growth-at-all-cost aggregate demand policies that is generating the inflationary pressures. Consequently, the whole enterprise of achieving full employment is doomed to fail from the outset because of the inappropriate tools employed.

Keynes, too, was interested in closing the gap, but he measured it in labor units, which is one reason why he emphasized the primary employment effects of public works. Public investment is a direct approach to reducing unemployment. Add to that the secondary employment effects produced by the multiplier effect and we can estimate how much public-works spending is needed to close the labor demand gap. Whenever Keynes spoke of how much national income and expenditure are needed to maintain full employment, his "calculations are in terms of equivalent men ... and women, if they are unemployed..." (Keynes 1980: 298). He did not talk about deficient demand of output, but of deficient demand of labor (e.g., discussions on postwar spending for full

employment in Keynes [1980: 277–307]). This lends methodological support to the present argument that the Keynes's approach to full employment was one of targeted demand, whereby policy targets unemployment directly, not some generalized level of output or economic activity.

One can extrapolate from this analysis the following argument: instead of aiming for some level of growth, which may or may not bring full employment, the objective should be to target a clear and attainable goal of full employment directly. 8 Okun's law, or any form of gap analysis that compares current output to some level of potential output, is a backward way of thinking about full employment. When the goal is growth via stimulating investment (as in contemporary aggregate demand management), policy tends to produce inflationary forces that, in turn, induce additional policy measures to fight inflation—which defeats the original purpose and automatically precludes the economy from reaching full employment (this is why potential output in mainstream theory is not consistent with zero involuntary unemployment, but is pegged at the noninflationary level of unemployment). Policies that target a particular rate of growth may be associated with many different levels of employment. An alternative policy option is one that targets full employment and is associated with different levels of growth. This is not an argument for sacrificing growth in the name of full employment; it is an argument that growth and full employment are two different objectives, which may require different policies where one need not conflict with the other. One could also argue that what constitutes adequate growth will be difficult to ascertain before full employment has been attained. When full employment is achieved via a direct job creation, market forces aided by a careful institutional design of the public sector programs will determine the distribution of private and public employment, technique of production, productivity, and, therefore, growth.

Keynes flatly rejected calculations of potential output. While acknowledging his support for the important work of Mr. Colin Clark (the father of British national

⁸ And there is debate on what this attainable full employment target for Keynes would have been. Peden (1984) argues that Keynes was not wedded to a particular level, as he did not believe that spending beyond certain rate of unemployment—be that 12, 5, or 1 percent—must necessarily be inflationary. Skidelsky (2001), by contrast, implies that Keynes must have had some noninflationary level in mind since, in his writings from 1937 and forward, he talks about ways to avoid the inflationary impact of increased aggregate expenditures.

statistics), Keynes vigorously critiqued his calculations of gross national income, which were often taken to give the potential rate of current consumption and investment measured at market prices. This method was unacceptable to Keynes because such estimates were impossible to produce over a period of time, since they would depend on the "technical considerations and the precise character of the plant in use." Such measures of potential output have useful meaning only over an "instantaneous or very brief period" (Keynes 1980: 71). Keynes saw no practical purpose for such estimates, since the economy was an evolving organism where the character of consumption and investment changed. Potential output is even more misleading (Keynes calls it an "impostor") as a concept for the long run. Such measures do not take into account that shifts in consumption and investment may involve loss of capital or labor when they only attempt to look at the market value of consumption or investment goods. In fact, changing the structure of production and diverting resources from one use to another is the key reason why potential output cannot be measured over the long run or over a year for that matter. Most importantly, the loss of labor from such a diversion needs to be treated separately, which is why Keynes's national output definition is in terms of manhours which might be worked (Keynes 1980: 73).

Modern output gap analysis is wholly inconsistent with Keynes's method for producing full employment. Any attempt at integration of these approaches must either redefine potential output in terms of wage units or unemployment must be addressed directly and independently of the definition of potential output. "Our income is only another name for what we produce when we are employed" (Keynes 1982: 156). Any meaningful Keynesian approach to filling the gap would be limited to plugging the labor demand gap. Keynes's method is also useful because potential output is not limited to hiring all those who are presently unemployed. For Keynes, expansion of output would depend on "greater intensity of work by the existing labor force and on the increase of the labor force from the ranks of the unemployed and from those not previously in the labor market" (Keynes 1981b: 52). In other words, he has a more dynamic view of potential output that will fluctuate not just with the unemployed, but also with those that may be currently outside the labor market.

Filling the gap according to traditional aggregate demand management methods usually relies on stimulating investment and growth. It therefore attempts to manage the most unstable aspects of the economy and those that all but ensure a below–full employment equilibrium. As experience has shown, filling the gap this way is an impossible thing to do due to the volatility of profit expectations, the associated inflationary and distributional problems near full employment, and the structure of production. Thereby pro-growth, pro-investment policies that attempt to push growth faster than the growth in potential output as a function of current prices is a wrongheaded approach for full employment. But so is attempting to pump enough government deficit spending. The only sense in which we can speak about plugging the gap is to speak of plugging the gap for labor, and for Keynes this was done directly via public works. To reinstate the link between fiscal policy and full employment it is necessary to understand and embrace Keynes's methodology of measuring output, something that has been emphasized little by Post Keynesians. For this task, too, conviction and cleverness are required.

VI. CONCLUSION

Keynes's effective demand approach to employment determination is not the same as the modern aggregate demand approach. Revisiting Keynes's contribution makes clear why pinning the point of effective demand at full employment is impossible to do via aggregate demand stimuli. This is due to the structure of the economy, which ensures that near full employment, more money expenditures generate inflation and erode income distribution. To get to full employment, Keynes argued for a better targeting of demand, not necessarily for more aggregate demand. Although a rapid shortfall of aggregate demand can produce a serious downturn, even in severe slumps a targeted approach to unemployment is preferred. This is because the desirability of public policy is measured by its respective employment-creation effects, where different aggregate demand policies have a different impact on unemployment. This is why Keynes advocated a direct approach to unemployment via public works. He did not promote broad-based fiscal

⁹ See Wray and Tcherneva (2005) as a recent exception.

policies, but focused on public employment schemes. His approach to full employment is thus best described as an "on the spot" approach.

Although deficient demand is what produces unemployment, closing the demand gap is not Keynes's solution. Another important difference between modern gap approaches and Keynes's method is that to do the former, some measure of potential output is necessary, but such a measure can only be "an impostor," as it cannot usefully tell us what the potential level of spending in the economy is. This is because the economy is a living organism where the character of investment and consumption changes continuously. Potential output is a malleable definition that fluctuates with the technique of production, the composition of demand, the intensity of work, labor force participation, as well as other factors, therefore, potential output offers no useful guide about the capacity of the economy beyond some instantaneous and brief period of time. Thus, attempts to plug the output gap are wholly misguided as employment policy, unless they are based on directly plugging the labor demand gap. It is in this sense that Keynes's approach to full employment is a targeted demand approach, one that targets the unemployed via direct job creation. Of course, to design public employment schemes that can attain and maintain full employment, a considerable amount of conviction and cleverness are required.

REFERENCES

- Arestis, P. and Sawyer, M. 2004. *Re-examining Monetary and Fiscal Policies in the Twenty-First Century*. Cheltenham, UK: Edward Elgar.
- Bell, S. 1999. "Functional Finance: What, Why, and How?" Working Paper No. 287. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.
- Brown. E. 1936. "Defense Programmes-Labor Issues Involved." Cabinet Paper #57. *Cabinet Office Paper Series 24*, Vol. 260.
- Chick, V. 1983. Macroeconomics after Keynes. Cambridge, MA: MIT Press.
- Forstater, M. 1999. "Functional Finance and Full Employment: Lessons from Lerner for Today." *Journal of Economic Issues* 33(2): 475–482.
- Harrod, R.F. 1972 [1951]. The Life of John Maynard Keynes. Middlesex, UK: Penguin.
- Kaldor. N. 1938. "Stability and Full Employment." *Economic Journal* 48(192): 642–657.
- Kalecki, M. 1945. "Full Employment by Stimulating Private Investment." *Oxford Economic Papers* 7(Mar): 83–92.
- Keynes, J.M. 1964[1936]. *The General Theory of Employment, Interest, and Money*. New York: Harcourt-Brace & World, Inc.
- ———. 1972. *How to Pay for the War*. Volume IX of *Collected Works*, D. Moggridge (ed.). London: Macmillan.
- ———. 1978. *Activities 1939–45. Internal War Finance*. Volume XXII of *Collected Works*, D. Moggridge (ed.). London: Macmillan.
- ——. 1980. Activities 1940–46. Shaping the Post-War World: Employment and Commodities. Volume XXVII of Collected Works, D. Moggridge (ed.). London: Macmillan.
- ——. 1981a. *Activities 1922–29. The Return to Gold and Industrial Policy: Part II.* Volume XIX of *Collected Works*, D. Moggridge (ed.). London: Macmillan.
- ———. 1981b. Activities 1929–31. Rethinking Employment and Unemployment Policies. Volume XX of Collected Works, D. Moggridge (ed.). London: Macmillan.
- ——. 1982. *Activities 1931–39. World Crises and Policies I n Britain and America.* Volume XXI of *Collected Works*, D. Moggridge (ed.) London: Macmillan.

- King, J. 2001. "Labor and Unemployment." in R.P.F. Holt and S. Pressman (eds.) *A New Guide to Post Keynesian Economics*. London: Routledge.
- Kregel. J.A. 1987. "The Effective Demand Approach to Employment and Inflation." *Journal of Post Keynesian Economics* 10(1): 133–145.
- ——. 2008. "The Continuing Policy Relevance of Keynes's General Theory." in M. Forstater and L. R. Wray (eds.) *Keynes for the 21st Century: The Continuing Relevance of The General Theory*. London: Palgrave Macmillan (forthcoming).
- Marcuzzo. M.C. 2006. "Keynes and the Welfare State." mimeo.
- Okun, A. 1962. "Potential Output: Its Measurement and Significance." in *Proceedings of the Business and Economic Statistics Section, American Statistical Society.*Washington, DC: American Statistical Association.
- Peden, G.C. 1980. "Keynes, the Treasury and Unemployment in the Latter Nineteen-Thirties." *Oxford Economic Papers* 32(1): 1–18.
- ———. 1984. "The 'Treasury View' on Public Works and Employment in the Interwar Period." *The Economic History Review*, New Series 37(2): 167–181.
- Robinson, R. 1949. *Introduction to the Theory of Employment*. London: Mcmillan.
- Saywer, M. 2005. "Employer of Last Resort: A Response to My Critics." *Journal of Economics Issues* 39(1): 256–264.
- Skidelsky, R. 2001. *John Maynard Keynes, Volume Three: Fighting for Britain 1937–1946.* London: Mcmillan
- Taylor, J.B. 1993. "Discretion versus Policy Rules in Practice." *Carnegie-Rochester Conference Series in Public Policy* 38: 195–214.
- Tcherneva, P. and Wray, L.R. 2005. "Common Goals—Different Solutions: Can Basic Income and Job Guarantees Deliver Their Own Promises?" *Rutgers Journal of Law and Urban Policy* 2(1): 125–166.