

Chicago, Keynes and Fiscal Policy

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INTRODUCTION

During the early 1930's both Keynes and the Chicago economists advanced a policy of public works as a way to overcome depressions.¹ They argued in favor of a counter cyclical fiscal policy to dampen variations over the phases of the economic cycle. Chicago economists drew on a historical tradition that linked monetary and real variables and their point of view applied to a broad range of scenarios.²

Keynes's case for public works was developed initially to overcome the limitations imposed by laissez faire economic policies and was later

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¹ See, Davis (1968), Friedman (1984) and Tavlas (1997).

² See Laidler (1999) for recent analysis of Chicago and Keynes on the trade cycle which includes some of their views on fiscal policy.

seen to be applicable to a *special case*, that of a gold standard exchange rate regime. Ultimately, it became a way of showing how autonomous expenditures can increase income, rather than prices, under less than full employment conditions.

The theory and assumptions underlying both strands of thought were remarkably similar. Both adhered to some version of the quantity theory of money. In addition these economists thought that wages and, in general, costs of production were rigid and that the banking system and monetary policy tools were unsuitable for the task of stabilizing the economy. Chicago economists, in particular, viewed the instability of velocity and/or the fragility and underdevelopment of the banking system as an important limitation on the effectiveness of monetary policy. Due to the impracticability of reducing costs and the current stage of institutional development they advocated an expansionary economic policy through fiscal means that could restore the level of profitability. The primacy of fiscal over monetary policy emanated thus from a combination of market imperfections coupled with important restrictions on the potency of monetary policy channeled *via* the banking system. Finally, Keynes and at least two of the Chicago economist here considered (Paul Douglas and Aaron Director) justified the impact of public spending on the level of output by having recourse to Kahn's multiplier.

Both Chicago economists and Keynes eventually abandoned the idea of reflationary policies as a fundamental stabilization tool, but for reasons that were diametrically opposite. The former took the theoretical foundations of the quantity theory to their full development and became concerned with the inflationary dangers associated with a fiscal expansion. Moreover, in the absence of well-defined fiscal rules, expansionary policies could well be used pro rather than counter cyclically fueling thus an inflationary process.

Over time, as the belief that the economy operated close to full employment levels of output gained prominence among Chicago economists and their followers, fiscal policy lost its relevance. In fact, it became relegated to "a technique for the exercise of monetary policy".³

³ See, Warburton [(1945-1956), (1966)], p. 237.

For his part Keynes extended the logic of the separation of expenditure categories of *The General Theory of Employment, Interest and Money* [(1936),(1964)] (GT, hereafter) to include the government and fiscal policy in his analysis. In the same way that he separated these categories into an income dependent category (consumption) and an income independent expenditure category (investment), he distinguished between a current (government consumption) and a capital budget (investment).

Within this framework the current budget was to be in equilibrium, or show a surplus, to finance the expenditures of the capital budget which played the stabilizing role over the economic cycle. For Keynes, capital budgeting was a fiscal strategy aimed at maintaining economic equilibrium rather than curing disequilibrium (*i.e.*, deficit budgeting). On this ground he opposed a policy of public works and the use of taxation to change the patterns of consumption in the short run while favoring the use of automatic fiscal stabilizers and, especially, capital expenditures to compensate cyclical fluctuations.

Keynes's fiscal policy views were elaborated under a key assumption of the GT, that of capital scarcity. As long as the stock of capital was inadequate any increase in investment would yield a positive return and be beneficial to the welfare of society. Once the point of capital saturation was reached investment would be wasteful and thus unnecessary. At this juncture fiscal policy would change its focus from the regulation of investment to that of consumption.

This paper is divided into four parts. The first part analyzes the early Chicago view on the business cycle and monetary and fiscal policy. The second provides a summary of the evolution of Keynes's thought on public works, deficit spending and counter cyclical fiscal policy in general. The last two sections examine Keynes's thought on these fiscal issues prior to and following the publication of the GT. The paper does not contemplate Keynes's views on fiscal policy in the GT.

CHICAGO ECONOMISTS, THE BUSINESS CYCLE AND FISCAL POLICY

Chicago economists Aaron Director and Paul Douglas (1892-1976), Frank Knight (1885-1972), Henry Simons (1899-1946) and Jacob Viner (1892-

1970)⁴ advocated during the Great Depression public works and government spending to revamp the stagnant United States economy.

Three premises formed the basis for their policy recommendations. First, depressions arose from a lack of synchronization between prices and costs, or more precisely between the supply and demand prices. Second, cost and/or prices exhibited a rigid downward structure. Third monetary policy was ineffective. Either the institutional configuration of the financial system was inadequate, the monetary policy instruments useless, or velocity (the demand for money) was unstable, and thus changes in the money supply would not necessarily have, *per se*, a predictable effect on prices. The logical conclusion was that fiscal policy was the main tool to bring about an economic recovery.

The Chicago approach to the business cycle is aptly summarized by Simons [(1934), (1962), p. 55]:

When for any reason business earnings become abnormally favorable, bank credit expands, driving sensitive product prices farther out of line with sticky, insensitive costs; earnings become more favorable; credit expands farther and more rapidly; and so on and on, until costs finally do catch up, or until some speculative flurry happens to reverse the initial maladjustment. When earnings prospects are unpromising, credit contracts and earnings become still smaller and more unpromising. In an economy where costs (especially wages, freight rates, and monopoly prices in basic industries) are extremely inflexible downward, the deflation might continue indefinitely...

According to this view, the triggering factor of changes in the business cycles were entrepreneurs' profits or losses accompanied by a credit

⁴ Knight, Viner and Simons are considered the founders of the *Chicago School* of economics. However, as Viner wrote, in a letter to Don Patinkin in 1981, he became aware of the tenants of the Chicago school and its label after he left the university in 1946 and adopted that label in 1951: "It was after I left Chicago in 1946 that I began to hear rumors about a 'Chicago School' which was engaged in organized battle for laissez faire and 'quantity theory of money' and against 'imperfect competition' theorizing and 'Keynesianism'. I remained skeptical about this until I attended a conference sponsored by University of Chicago professors in 1951" [Reder, (1982), p. 7, Footnote 19].

expansion (contraction) and a disparity between prices of final goods and costs. The initial determinants of profits are not identified with precision at the start of an economic expansion, but the reference to *speculative flurry* placed expectations in the role of a key variable in the downturn phase of the economic cycle. The upward or downward movement of the cycle was amplified by the banking system. Finally, the misalignment between prices and a downward rigid cost structure perpetuated the conditions for an economic boom and paved the way for a depression.

All of these elements with different emphasis and degrees of importance were present in the Chicago explanation of the Great Depression. Their distrust of the banking system, their perception of an underdeveloped financial structure and the explicit recognition by some of the instability of the circulation velocity of money, led them to advocate fiscal policy as a means to overcome economic depressions. More generally, these authors favored counter cyclical fiscal policy as a way to attenuate economic fluctuations. The recourse to fiscal policy emanated from the limitations, which they bestowed upon the workings of the monetary system and monetary policy.

Frank Knight and Henry Simons identified expectations and the behavior of the circulation velocity of money as triggering factors of the Great Depression while Paul Douglas and Aaron Director focused on wage and price stickiness combined with a lack of consumer purchasing power as both triggering and propagating mechanisms.

Frank Knight [(1941), (1963)] analyzed the business cycle in terms of the behavior of the speculative demand for money combined with lags in the output of final products. Velocity or the demand for real cash balances was determined by the speculative demand for money rather than by transaction purposes. In turn, speculative demand for money responded to the holding of idle money in the expectation of a rise in its future value. It was ultimately expectations that determined the demand for real goods and which could ignite an upward or downwards cumulative movement. As put by Knight (p. 211):

Thus the tendency for increase or decrease in speculative holding of money...to feed upon itself cumulatively is subject to no such effective check as results

from the accumulation of a consumable commodity with a fairly definite demand curve which is fairly well known, like the stock held speculatively. Indeed in the case of money, just what sets a boundary to a movement of general prices in either direction, and especially the downward movement, becomes something of a mystery.

The prevailing structure of the banking system was an important factor in amplifying changes in hoarding and dishoarding (*i.e.*, in the velocity of money). According to Simons, low capitalization levels characterized the banking system. In addition, the practice of making short term loans representing unsecured claims led to the creation of money substitutes, increasing thus the variability of the circulation velocity of money.⁵

The existing financial structure generated the conditions for wholesale liquidation as banks were led to curtail loans when faced with unfavorable business conditions. Banks were forced to hoard and liquidate existing loans while individuals converted deposits into currency. In short, according to Simons (1933), the *speculative temper of the community* caused changes in velocity, which were magnified by the existing short term banking lending structure of the economy.⁶ Indeed [(1936), (1962), p. 166],

...the economy becomes exposed to catastrophic disturbances as soon as short term borrowing develops on a large scale. No real stability of production and employment is possible when short-term lenders are continuously in a position to demand conversion of their investments, amounting in the aggregate to a large multiple of the total available circulating media, into such media. Such an economy is workable only on the basis of a utopian flexibility of prices and wage-rates. Short-term obligations provide abundant money

⁵ The difference between Knight and Simons centered on the way expectations affected velocity, which in turn reflected the historical context in which they were writing. For the former expectations led to hoarding or dishoarding due to expected price variations. For the latter, velocity responded to collapses in confidence.

⁶ See, Simons, *Appendix to Banking and Currency Reform* (1933), quoted in Friedman [(1967), (1969)], p. 85.

substitutes during booms, thus releasing money from cash reserves; and they precipitate hopeless efforts at liquidation during depressions. The shorter the period of money contracts, the more unstable the economy will be...⁷

Paul Douglas (1935) was also aware that the banking system was prone to generate instability. Indeed, three features of the banking system tended to aggravate rather than to dampen fluctuations in economic activity: the deposit multiplier, the volatility of credit upon the demand for capital goods and the fractional reserve banking.

The deposit multiplier tended to aggravate cyclical phases, depending on its phase, by causing a cumulative contraction or expansion of credit. Finally, a fractional reserve system could set the basis for a banking panic:

The bankers have in the past taken heart by assuring themselves that this could never happen, since people would continue to have confidence in the banks and would never put the credit system to the test. But what was thought to be merely an impossible nightmare finally came true... They... in increasing numbers, asked for the money which was supposedly theirs... the banks began to fail and as this still further increased the fears of the public, the demands for cash became so great that virtually all of the banks had to suspend payments (pp. 173-174).

While Knight and Simons traced the origins of depressions to expectations and velocity, Douglas focused on the disparity between prices and costs and the lack of consumer purchasing power.

The former was the result of a rigid downward price structure, which reflected the prevalent influences of monopoly practices upon the workings of capitalism. According to Chicago economists the analysis of monopoly had been forgotten by most economists but needed to be re-introduced in order to understand how to deal with the Great Depression. In this spirit Douglas wrote (*op. cit.*, p. 234):

⁷ In a similar way, he stated [(1934), (1962), p. 54]: "It is no exaggeration to say that the major proximate factor in the present crisis is the commercial banking system."

...the orthodox economists, when they portrayed the mechanical adjustments of a beautifully adjusted society, were thinking of a freely competitive system. So far as business depressions are concerned they went astray in not recognizing the very serious extent to which monopoly price policies were preventing the smooth functioning which they posited, and were producing internal strains and frictions which could only end in disaster and collapse.

In a similar vein, Viner would still argue three decades later: “monopoly is so prevalent in the markets of the western world today that discussions of the merits of the free competitive market...seem to me academic in the only pejorative sense of that adjective.”⁸

Monopoly practices took the form of cartels or pools and agreements between companies to increase prices. The stickiness created by private monopoly practices was exacerbated by government regulation and eventually by labor’s demands for increasing wages to protect its relative income position [Douglas (1935), p. 54; Simons, (1934), (1962)].⁹

Douglas fingered management practices as the evil element. As he wrote: “while it is evident that at least in the United States high wage rates did not initiate the present depression, but that, on the contrary, the pegging of prices by management practices was largely responsible for both the initiation and the continuance of the depression.” (p. 64.)

Regarding the lack of consumer purchasing power, he reasoned as follows. The increase in profits resulting from the difference between final prices and costs was invested in mass production industries increasing

⁸ Quoted in Spiegel (1987).

⁹ Chicago economists attested to the importance of competition and the suppression of monopoly practices as essential components of a stable market based economy. However they also recognized that their implementation required a given level of institutional development and political structure which was not present at the time of their writing. Simons [(1936), (1948)] argued against a monetary rule in light of the lack of development of the United States financial system and absence of accountability of politicians (See Footnote 9, below). Jointly with the need for expediency in jumpstarting the United States economy during the Depression, this explains at least in part their preference for macroeconomic over microeconomic instruments and solutions.

in this way their productive capacity. The resulting increase in output was not bought at current prices due to lack of purchasing power by wages earners and the like. Moreover, the stickiness in prices assumed by Douglas resulted in accumulation of inventories of unsold goods. This overproduction translated in a sharp reduction in prices, which did away with profit margins, and hence business profits. As he put it:

It will thus be seen how a growth in output, unaccompanied by corresponding increases in wages and with heavy reinvestments of the greatly increased profits, may cause such an increase of production, that in order for it to be absorbed by the smaller incomes, prices will have to be reduced appreciably...profit margins may be swept away and a general crisis precipitated. (p. 74.)

The remedy sought to overcome the depression lay in preventing speculation or in changing the circulation velocity of money to maintain the prices of final goods stable. More precisely, when the prospects for the successful control of the circulation velocity of money were dim, a stable relationship had to be maintained between product prices and wages by “deliberate action...correcting or offsetting incipient tendencies to expansion or contraction.” (Knight, p. 225.) That deliberate action would come from the government. This view was also shared by Simons in spite of the fact that contrarily to Douglas he attributed the continuation of the Depression to a rigid cost structure, which included sticky wages. As he put it [(1934), (1962), p. 55]: “In an economy where costs (especially wages, freight rates and monopoly prices in basic industries) are sticky downwards, the deflation might continue indefinitely (until everyone was unemployed) if governments did not intervene to save the banks or mitigate human suffering.”

Due both to a fragile financial structure and price and wage rigidity, Simons recommended a price index rule whereby currency issue was adjusted in a discretionary manner to stabilize the price level.¹⁰ The mode

¹⁰ On this basis he rejected a monetary rule. Regarding rules, Simons [(1936), (1962)] wrote: “The liberal creed demands the organization of our economic life

of implementation of this rule was through fiscal policy, injecting purchasing power through expenditure and withdrawing it through taxation. Monetary policy was too weak both in its institutional structure and in providing a stable and measurable “quantity of money” variable. In this respect, Simons [(1936), (1962), p. 175] wrote:

...in an adequate scheme for price-level stabilization, the Treasury would be an administrative agency; and all the fiscal powers of Congress would be placed behind the monetary rule.... At present, monetary powers are dispersed indefinitely, among governmental agencies and private institutions, not to mention Congress itself. Since the powers of the legislature are ultimate and decisive, a program looking toward co-ordination and concentration of responsibility must focus on fiscal as its mode of implementation.

Douglas (1935) took the same route. He was not convinced of the efficiency of monetary instruments to rein in the effects of the depression on output and employment. For one thing, open-market operations built up commercial bank reserves and they would use these to cancel out debt rather than to end up with bad loans. Also lowering the discount rate was simply an “idle gesture” for it would do little to boost business confidence since the problem lay in business’ dimmed profit prospects, *i.e.*, in demand conditions. Douglas and Aaron (1931) had voiced earlier a similar concern. They also pointed out the limitations in the use of monetary policy instruments during a depression: “...the difficulty comes from the demand side as to whether business, exposed to such difficulties, would wish to borrow more.” The problem was the response of aggregate demand. As

largely through individual participation in a game *with definite rules*. It calls upon the state to provide a stable framework of rules within which enterprise and competition may effectively control and direct the production and distribution of goods” (p. 160) and “But we cannot get along without some such rules —without some moral sanctions and mandates which politicians must obey in matters of finance. And there is probably nothing more promising than the idea of a stable price-level as a symbol articulating deep-rooted sentiments and as a source of discipline in fiscal practice.” (pp. 176-177.)

put by Douglas and Aaron (1931, p. 225): “The interest of society as a whole does not lie with the fortunes of individual firms, but in the demand for commodities in the aggregate.”¹¹

Douglas proposed to separate the function of the creation of credit from the retailing of credit by putting the creation of purchasing power into the hands of the government (p. 184). The amount of purchasing power to be created would be in direct relation to the amount of unemployment (p. 189). Under conditions of high unemployment the federal banking authority would create credit and loan it to the government “for the financing of public works and thus provide the purchasing power needed to put idle labor back to work.” Using Kahn’s concept of the multiplier, he estimated that each dollar spent on public works would generate an equivalent of 2.80 dollars in the rest of the economy.¹²

Ultimately Douglas advocated a budget policy, which would be balanced over a ten-year period, but which would allow “...to have receipts exceed expenditures during periods of relative prosperity and expenditures exceed receipts during periods of depression.” (p. 278). Viner also recommended in 1931 that governments should spend more in recessions and decrease taxation during depressions.

These views were echoed in Douglas & Director (1931) as they argued for an activist counter cyclical fiscal policy: “When private business is very active and the available supply of labor fully employed, government should contract its own expenditures; when on the other hand, private business is depressed, government should expand its own expenditures.” (p. 196). Regarding public works, they wrote: “Our analysis so far, indefinite as it is, permits us to conclude that over a period of time it is possible, through the use of public expenditures, to reduce somewhat the extreme fluctuations of unemployment. In the long run...we may actually expect a reduction in the average level of unemployment.” (p. 219). In

¹¹ Mills of Columbia University made a similar statement regarding economic theory: “classical and mathematical theory were inadequate to provide a rational program and a technique for the study of the economy as a whole” [quoted in Phillips (1995), p. 28].

¹² Douglas (1935), p. 125.

their analysis they were aware of the *crowding out effect* but denied its relevance:

Credit cannot be looked upon as a fixed pool which is emptied by one if not another. Hence to argue that the demand for credit for public works in time of expansion acts as a check on private over-expansion, is to disregard the fact that the public works industry is itself an important branch of the general construction industry.... There is no reason for assuming that contraction of public demand will be offset by increase of private demand and that a policy of adjusted public works will itself contribute to exaggerate private fluctuations. (p. 221.)

As a group Chicago economists advocated on more than one occasion an increase in aggregate demand to revamp a stagnant economy. In January, 1932, twenty-four economists participating at a conference at the University of Chicago urged President Hoover to pursue more aggressively open market operations and to continue the government's public works program. Later on in April, 1932, at the request of Congressman Samuel B. Pettengil (Republican of Indiana), Chicago economists drafted and signed a statement urging a public works program financed by having resort to the printing press. As they put it,

Recovery can be brought about, either by a reduction in costs to a level consistent with existing commodity prices, or by injecting enough new purchasing power so that much larger production will be profitable at existing costs. The first method is conveniently automatic but dreadfully slow.... The second method...only requires a courageous fiscal policy on the part of the Central Government. [Quoted in Tavlas, (1997), p. 164.]¹³

Reliance on reflationary policies had an important drawback. They could fuel inflation, especially if they were used during the upward phase of the

¹³ Simons restated this view [(1934), (1962), p. 74]: "Sound policy will look, first toward pulling the more sticky prices down and, second, toward pulling the flexible prices up, in order to create the favorable prospects with respect to business earnings. Little can be accomplished quickly in the first direction; consequently, main reliance must be placed on 'reflationary' government spending."

cycle. Simons [(1934), (1962)] was early on aware of the link between fiscal policy and inflation, as he labeled reflationary fiscal policy as dangerous. Close to two decades after the GT was published, Viner criticized Keynes on the grounds that his definition of true inflation was a means to use government spending to boost the economy in times of high output and employment.

It was perhaps the concern that reflationary policies would be used pro cyclically in combination with the assumption that full employment was a historical norm rather than a historical rarity, that led Chicago economists to eventually abandon the notion of a counter cyclical fiscal policy as a fundamental prescription. This, in turn, shifted the analysis of compensatory finance from its focus on budgetary aspects to monetary ones. This view was fully articulated by Clark Warburton (1896-1979). According to him, fiscal policy combined monetary policy and government expenditures. However, only the former was relevant. Government expenditure was simply a substitute for individual expenditure and had no extra net effect on the level of activity.¹⁴ Fiscal issues were thus exclusively seen through their monetary aspects and, *de facto*, encapsulated within the analysis of monetary policy.

**A SUMMARY OF THE EVOLUTION OF KEYNES' VIEWS ON FISCAL
POLICY: FROM THE NEED OF A JOLT TO CAPITAL EXPENDITURE
STABILIZATION (1924-1945)**

In consonance with the early Chicago view, and prior to the elaboration of the GT, Keynes advocated public works in times of recession as a means to economic recovery.

His advocacy of public works, from the time of "Does Unemployment Need a Drastic Remedy?" (1924) and "Can Lloyd George Do it?" (1929) to the Wicksellian framework of the *Treatise on Money* (1930) which he used in the MacMillan Committee, sought to provide a palliative measure for the practical consequences of laissez faire. This theory made too many stringent assumptions (*i.e.*, full employment), or was

¹⁴ Warburton, *op. cit.*, p. 236.

unable to produce the desired results under market imperfections, such as wage rigidity. As put by Keynes [(1924, (1981), p. 229]:

....we are brought to my heresy...I bring in the State; I abandon laissez-faire, —not enthusiastically, not from contempt of that good old doctrine, but because, whether we like it or not, the conditions for its success have disappeared...it entrusted the public weal to private enterprise unchecked and unaided. Private enterprise is no longer unchecked, —it is checked and threatened in many different ways.

As he developed the Monetary Theory of Production in 1932 moving closer to the conceptual framework that was fully developed in the GT, Keynes rested his case for public works basically on the workings of the multiplier. The idea was to show that, under less than full employment conditions, an increase in autonomous expenditures can expand income (“The Means to Prosperity” (1933) in *CW*, vol. IX, (1972), pp. 335-366).¹⁵

However, with the publication of the GT, Keynes in fact broke away from the concept of fiscal policy as a corrective device, as a method to correct economic disequilibrium. Fiscal policy became, rather, a way to maintain equilibrium and economic stability.

Following the logic of the GT, which separated aggregate demand into income dependent and independent categories, consumption and investment respectively, Keynes sought to divide the budget into corresponding categories, a current and a capital budget. The capital budget included borrowing by the government agencies, surpluses and deficits of extra budgetary funds and capital expenditures. The current budget was to be equilibrated or in surplus to finance the capital budget, which in turn would actively maintain an optimal level of capital expenditures (*CW*, 1980, vol. XXVII, p. 378). Thus the capital budget played the main stabilizing role over the economic cycle.

¹⁵ Obviously as Keynes mentioned on several of his writings the increase in income would accompanied also by price increases. Kahn however placed the focus on the increase in income rather than prices.

Underlying this view was a key hypothesis of the GT analysis, namely the capital non-saturation hypothesis.¹⁶ For Keynes, capital was scarce and this meant that the return to increasing investment could always be positive and that investment per-se would increase economic welfare. If the investment program were to be turned over to public or semi-public bodies this could reduce further its *potential range of fluctuations*. Planning was key to maintaining full employment: “With a big program carried out at a properly regulated pace we can hope to keep employment good for many years to come. We shall, in very fact, have built our New Jerusalem out of the labor which in our former vain folly we were keeping unused and unhappy in enforced idleness” (*Ibid.*, p. 270).

Once the capital saturation point was reached (the point at which investment demand could not be brought to equality with full employment savings without engaging in wasteful projects) fiscal policy could turn to encourage consumption instead of investment. However he saw that stage far in the future: “We most of us, not only expect that we shall reach a point where the encouragement of consumption is the thing to put first, but we hope for it. All this, however, is in the future.” (*Ibid.*, p. 360.)

KEYNES AND FISCAL POLICY BEFORE THE GENERAL THEORY (1924-1933)

From late 1924 on, Keynes consistently recommended the undertaking of public works as a way to overcome recessions.¹⁷ Underlying this proposition were two key ideas that he developed sequentially. First, money wages were rigid and second, unemployment could be traced to disequilibrium between investment and savings. Keynes thought that

¹⁶ See Keynes [(1936), (1964)], pp. 220-221; p. 325 and pp. 375-376. Chick (1992) p. 22, refers to it as the most basic assumption of the GT.

¹⁷ Earlier on, Keynes did not think that government spending was an efficient way to increase the level of output. In an early draft of chapter 3 of the *Treatise* he stated: “The expenditure, on the production of fixed capital, of public money which has been raised by borrowing, can do nothing in itself to improve matters; and it may do actual harm if it diverts working capital away from the production of goods in a liquid form.” (CW, vol. XIII, p. 23.)

the rigidity of money wages was part of the institutional transformation that European economies had undergone following WWI. This hypothesis came to the forefront of Keynes's thinking after the return of Britain to the gold standard in April, 1925.¹⁸ Later on, he used this hypothesis to downplay the role that monetary policy could play to turn the tide in a depression.¹⁹ His analysis of savings and investment was developed as he worked on the *Treatise on Money* and was clearly enunciated after the *Great Slump* had begun.

In his earlier articles "Does Unemployment Need a Drastic Remedy?" and a "Drastic Remedy for Unemployment" [CW, vol. XIX (1924), (1981)] Keynes analyzed unemployment in terms of structural causes, wage rigidity and demand considerations. While he thought structural programs, reconversion and reorganization of depressed sectors, and wage flexibility could improve competitiveness it was *de facto* an impractical solution. He thus favored increasing aggregate demand through a program of public work expansion. Kahn's multiplier provided, eventually, the basis for its rationale.²⁰

Increasing demand could transfer workers from less to more productive sectors. Later on, in "How to organize a Wave of Prosperity?" (1928) and in "Can Lloyd George Do it?" (1929), he combined the idea of an expansion of demand with that of an increase in labor intensity. This increase in labor intensity was an alternative to a decrease in nominal wages to reduce production unit costs, thus restoring business profitability. In this sense, his thinking was very similar to that of Douglas, Aaron, Simons and Viner. When commenting on a money wage reduction as a way to cure the ills of unemployment, he argued [(1924), (1981), p. 221]:

¹⁸ See Keynes, CW, vol. XIII, and (1931). Clark (1988) p. 86. In "The Economic Consequences of Mr. Churchill" [(1925), (1931)], Keynes refined his approach to wage rigidity and introduced the concept of relative wage resistance.

¹⁹ See, Keynes "The Part Played by the Banking System" (1928-1929) in CW, vol. XIII, pp. 109-110.

²⁰ Having seen a draft of Kahn's multiplier article, Keynes presented it first in a memorandum to the Committee of Economists of the Economic Advisory Council in September, 1930.

Rather we must seek to submerge the rocks in a rising sea, -not forcing labor out of what is depressed, but attracting it into what is prosperous; not crushing the blind strength of organized labor, but relieving its fears; not abating wages where they are high, but raising them where they are low. And there is no way in the world of achieving these better alternatives but by confidence and courage in those who set enterprises in motion.

In *The Treatise on Money* [(1930), (1965)], Keynes provided the framework to make the case for public works in an open economy under conditions of wage rigidity and a fixed exchange rate regime. He focused on what he thought was the essential problem of monetary theory, the process through which the level of prices changes from one situation of equilibrium to another. More specifically, the Treatise centered on the dynamic price change, in the short run, and its consequences in the level of activity and employment. To this end he used a modified version of the quantity theory of money which he termed the *fundamental equations*. In the fundamental equation the price level of output as a whole, π , was a function of the per unit cost of production $[(1/e)W]$, where W is the rate of earnings per unit of human effort and e the coefficient of efficiency,²¹ and on per unit profits [expressed as the difference between investment and savings measured in terms of output, $(I - S)/O$],

$$\pi = (1/e)W + (I - S)/O \quad [1]$$

According to equation [1], the price level of output as a whole (π) would equal its cost of production when savings equaled investment. Prices and the level of economic activity could vary due to changes in the per unit cost of production or due to losses or profits. As such an insufficiency of demand ($S > I$) would generate losses, prices would decrease and firms would contract production. The contraction of demand would cause unemployment and, under conditions of price flexibility, decreased unitary costs of production. Under rigid money wages, the contraction in demand

²¹ Keynes [(1930), (1965), pp. 135-136] called in the rate of earnings per unit of output or the rate of efficiency earnings.

could lead to further declines in profitability perpetuating the decrease in demand.

Keynes introduced Wicksell's theory of investment and savings and made the profit per unit of output dependent on the disparity between the natural and the market or bank rate of interest. In this way fluctuations in the natural or market rate of interest generated a disparity between savings and investment (profits or losses) that could contract or expand the level of activity. Governmental authorities could vary the bank or market rate to approach the natural rate to maintain price and, hence, output stability.

In a depression, savings exceeded investment (*i.e.*, the market rate was greater than the natural rate) and thus the fundamental policy prescription of the Treatise was straightforward: an expansionary policy by a demand stimulus that, by decreasing the market rate of interest and equating the natural and market rate of interest, would close the gap between investment and savings.

In an open economy under a fixed exchange rate regime such as the gold standard the analysis of the Treatise required an extension of the fundamental equations to incorporate balance of payments consideration. Within this framework, the price level of output as a whole depends on per unit cost and on the difference between national investment and savings. National investment equals to the sum of domestic investment (I_1) and the current account balance (B). National savings equals the sum of domestic savings (S_1) and foreign lending (L) minus gold outflows (G). Thus, equation [1] becomes,

$$\pi = (1/e)W + ((I_1 + B) - (S_1 + L - G))/O \quad [2]$$

For a given per unit labor cost the equilibrium condition becomes,

$$I_1 + B = S_1 + L - G \Leftrightarrow I_1 = S_1 \text{ and } G = 0 \quad [3]$$

Under an open economy with a fixed exchange rate regime, variations in the interest rate could not fulfill simultaneously both internal ($I_1 = S_1$) and external equilibrium ($G = 0$) conditions.

Starting from a position of full equilibrium an increase in thrift will result in an excess of internal savings over investment ($I_1 < S_1$) and the

market rate of interest will exceed the natural rate of interest. A decrease in the market rate of interest to overcome the resulting deflation and slump would result in gold outflows ($G > 0$) and foreign exchange reserve losses. If the authorities wanted to abate gold outflows they could increase the market rate of interest. Whatever the policy options, the results would be similar: price and profit deflation would ensue resulting in decreases in output and employment.

Under these circumstances Keynes thought of two possible remedies: a decrease in the per unit cost of production $[(1/e)W]$ or an increase in home investment which would restore the natural rate of interest to its previous level. The reduction in unit labor costs would decrease further the price level of output as a whole but would restore the balance between profits and costs. However, Keynes not only explicitly reiterated his earlier posture regarding downward wage rigidity (“money costs of production show but little resistance to an upward movement” *Treatise*, p. 165) due to trade union power (p. 347) but also argued that it was a dangerous remedy in a capitalistic and democratic society (p. 346), (see also *CW*, vol. XIII, p. 360). Hence his preference to increase investment *via* loan financed public works, calling it “my favorite remedy” (Clarke, p. 115).²²

Later on, in “The Means to Prosperity” [(1933),(1972), *CW*, vol. IX], Keynes argued for a public works program, using essentially the logic of the multiplier. Under less than full employment conditions, an increase in autonomous expenditure translated into a higher level of income. Also, the income generated by the expenditure process created the required savings to ‘finance’ the initial investment. In this sense, a loan financed program of public works need not generate a budget deficit: “...it is a complete mistake to believe that that there is a dilemma between schemes for increasing employment and schemes for balancing the budget...Quite

²² In 1931, in his Harris Lectures, Keynes proposed that the United States decrease their rate of interest to remedy unemployment rather than carry out a public works program arguing that the country could be considered a closed economy. In the *Treatise*, Keynes neglected the fact that the resulting increase in income by increasing imports could affect in a negative way external equilibrium. Roy Harrod (1900-1978) noted this flaw in Keynes’s reasoning. See, Young (1989).

the contrary. There is no possibility of balancing the budget except by increasing the national income, which is much the same thing as increasing employment” (CW, vol. IX, p. 347). However, it was in this pamphlet that Keynes suggested, perhaps for the first time, the use of deficit spending (*i.e.*, the use of budget deficits as a stabilization tool). Indeed, he mentioned tax cuts and thus unbalanced budgets as an alternative way to increase income.²³

Keynes’s case for demand and output expansion through fiscal policy, in the guise of public works, was the basis for his recommendations to the Macmillan Committee, for the views presented in “Can Lloyd George Do It?”, and for his earlier views on the *Great Slump*. In the GT, Keynes did not advocate a systematic policy of loan expenditure public works or budget deficits by governments.²⁴ In fact, as shown earlier and quite to the contrary of what is generally believed, the case for budget deficits is more a product of Chicago economics than that of Keynes. Ironically, these policy recommendations became, over time, the essence of what was thought to be *Keynesian economics i.e.*, deficit spending and, in general, compensatory finance.²⁵

²³ See CW, vol. IX, p. 348 and Clarke (1988), p. 290.

²⁴ Kahn (1984, pp. 128-129) identifies only one passage in the GT (Chapter, 10) where Keynes refers to “loan expenditure ‘by public authorities’: “ ‘wasteful’ loan expenditure may [...] enrich the community on balance. Pyramid building, earthquakes...may serve to increase wealth.” Later on in the GT (Chapter 16) Keynes returns to the same idea and focuses this time on ‘digging holes in the ground’ (1936, p. 220). Both alternatives, building pyramids and digging holes in the ground, refer to activities that are undertaken when investments are worth nothing. Under these conditions any alternative is valid and building pyramids has no precedence as economic policy tool over digging holes in the ground. Thus in the GT there is really no trace of deficit spending as a policy recommendation. See, Keynes CW, vol. XIV, p. 58 for an explanation of the *digging holes in the ground* policy recommendation.

²⁵ Compensatory finance was much debated in the 1930’s and was a common policy recommendation. See, Keynes [(1933), (1955)]; Clark [(1939), (1955)]; Lutz [(1938), (1955)]; Myrdal [(1939), (1955)]; Haley [(1942), (1955)]. However, it has been wrongly identified with Keynes. Williamson (1941) is a case in point. In this vein, Harris (1955), in Lekachman (1964) wrote:

KEYNES AND FISCAL POLICY FOLLOWING THE PUBLICATION OF THE GENERAL THEORY (1936-1945)

Following the publication of the GT Keynes fiscal policy stance was derived directly from its logic and the views expressed therein.

As mentioned above, the General Theory divided economic categories of final demand into two types of expenditures: those related to income (consumption) and those independent of income. The expenditures that were independent of income were “ ‘linked to the amount which it (the community) is expected to devote for new investment’ ” (Davidson, 1994, p. 48) and were greatly dependent on expectations.

In the GT, Keynes demonstrated that the expenditures not related to income, *i.e.* investment, need not equal planned full employment savings. As a result, he recommended state intervention to encourage investment. Increasing the scale of investment had clear precedence over expanding the level of consumption. As he put it:

The question then arises why I should prefer rather a heavy scale of investment to increasing consumption. My main reason for this is that I do not think we

he (Keynes) predicated what later became common knowledge: the government has to spend more and tax less in a depression; and spend less and tax more in a peak. These simple truths were Keynes discoveries that had to be repeated hundreds of times before they produced the desired impression.”

This has served as the basis for the categorization of economists as *keynesians*. Wadill Catchings (1879-1967) and William Trufaut Foster (1879-1950) are cases in point, not to mention the “unconscious keynesian” Marriner Eccles. This tradition has in fact been the source of numerous unnecessary and confusing debates. Ohlin (1977) provides a clear example. He mentions that budget deficits and public works were implemented in Sweden in 1930 before the publication of the GT. Thus: “My impression is that most of the practical conclusions about economic policy under periods of unemployment, which were the outcome of the General Theory in 1936...were put forward in Stockholm in the early thirties.” (p. 161). On these issues see Patinkin and Leigh (1977), Garvy (1975), Winch (1966), Patinkin (1982) and Hall (1989).

have yet reached anything like the point of capital saturation. It would be in the interests of the standards of life in the long run if we increased our capital materially. After twenty years of large-scale investment I should expect to have changed my mind... (CW, vol. XXVII, p. 350).

His analysis of budget and fiscal policy followed the expenditure category logic of the GT: he sought to separate the budget in two components, a current (government consumption) and a capital budget (government investment). The capital budget was simply a survey of capital expenditure to keep it at an optimal level. As he put it: “a regular survey and analysis of the relationship between sources of savings and different types of investment and a balance sheet showing how they have been brought into equality for the past year, and a forecast of the same for the year to come.”²⁶

In a situation where the “necessary investment is no longer greater than the indicated level of savings and is capable of being adjusted by encouraging useful investment.” (p. 321) (*i.e.*, when the stock of capital was inadequate or capital was scarce) the capital budget could maintain equilibrium and play the fundamental stabilizing role. It could and would compensate cyclical fluctuations if two thirds or three quarters of total investment would be under public or semi public auspices.²⁷ This latter idea which had permeated Keynes’s mind early on responded to a Burkean *query* regarding the delimitation of the state and the individual competencies and responsibilities.²⁸

²⁶ Keynes, CW, vol. XXVII, p. 368. Though government is present in the GT, it is not a major player and does not appear on the same footing as entrepreneurs, speculators or consumers. In this sense, Keynes’s analysis of government, contained mostly in his CW, vol. XXVII, truly marks its incorporation into the framework of effective demand.

²⁷ This proposal has been identified with Keynes’s socialization of investment. However, there are alternative interpretations of what Keynes meant by the “socialization of investment.” See, Skidelski (1998) and Ph. Arestis & M. Glickman (1998). On the capital budget issue see also Smithin (1989) and Seccareccia (1994).

²⁸ See Keynes’s “The End of Laissez-Faire” (1926) and “Am I a Liberal?” (1925) in *Essays in Persuasion* (1931), p. 313 and p. 331.

Keynes (1931) conceived of public or semi public corporations whose operating criteria were to be found outside the sphere of individual interest. These corporations were to be autonomous but subject to the control of parliament and run by technical experts.²⁹ Later on in 1945 as he became an advocate of planning, he decided that the government rather than semi public corporations should oversee the functioning of the capital budget. He wrote:

At one time I had conceived that this (reporting on the present and prospective state of the capital budget) should be the task of a semi-independent statutory authority to be called the National Investment Board. But with modern developments of policy, decisions on such matters have become so much part of the government's economic program as a whole that they should not be dissociated from the Chancellor of the Exchequer as the responsible minister and his official department. (CW, vol. XXVII, p. 408.)

The distinction between a capital and an ordinary budget allowed Keynes to distinguish, in turn, between two types of fiscal policy: deficit budgeting (deficit finance) and capital budgeting. Deficit budgeting was a means to cure disequilibrium whereas capital budgeting "is a method of maintaining equilibrium." He thus argued against a deficit budgeting strategy to smooth out the phases over the economic cycle and, in particular, he opposed public works and the use of taxation to affect the level of consumption.³⁰ Regarding the former he asserted: "a fluctuating volume of public works at short notice is a clumsy form of cure and not likely to be completely successful" (*Ibid.*, p. 319). With regard to the latter he argued:

²⁹ Keynes termed this a return "toward medieval conceptions of separate autonomies" [(1926), (1931), p. 314].

³⁰ This was in the context of a proposal by James Meade in 1943 of two types of fiscal stabilizers. The first he called an 'instantaneous automatic stabilizer' which consisted of variations in social security contributions during the economic cycle which would dampen fluctuations and "prevent the multiplier from doing its evil work of exaggeration" (CW, vol. XXVII, p. 318). The other was the use taxation to counteract fluctuations.

In the first place, one has not enough experience to say that short term variations in consumption are in fact practicable. People have established standards of life. Nothing will upset them more than to be subject to pressure constantly to vary them up and down. A remission of taxation on which people could only rely for an indefinitely short period might have limited effects in stimulating their consumption. And, if it was successful, it would be extraordinarily difficult from the political angle to reimpose the taxation again when employment improved. (*Ibid.*)

For these reasons Keynes opposed the use of the current budget as a way to stabilize the cycle. Rather, the current budget should show a balanced position or a surplus to be transferred to the capital budget when in deficit.³¹ He considered unbalancing the current budget as “a last resort, only to come into play if the machinery of capital budgeting had broken down” (*Ibid.*, p. 352).³²

However, these recommendations were valid until the saturation point of investment was reached. Beyond this point where, as Keynes indicated, “investment demand is so far saturated that it cannot be brought up to the indicated level of savings without embarking upon wasteful and unnecessary enterprises” (*Ibid.*, p. 321), savings should be discouraged and consumption encouraged by increasing leisure hours, vacation time and shorter work hours. While this stage was seen to be far into the future, it would mark the change from capital to deficit budgeting as the guiding principle for fiscal policy.

CONCLUSION

During the early 1930's, Chicago economists and Keynes argued along similar lines for a cure for unemployment. They saw it as a question of restoring business profits. They both thought that wages were downwardly

³¹ This does not imply that the capital budget should always be in a deficit position. The financial position of the capital responds countercyclically to the fluctuations in the economic cycle.

³² Regarding debt management he relegated the use of the term structure of interest rates to a secondary role relative to the rationing of the volume of issues (*Ibid.*, p. 397).

rigid and in particular Keynes did not recommend large cuts in wages on practical grounds [“To attempt it would be to shake the social order of its (Britain’s) foundation” (CW, vol. XIX, p. 360)]. As a result, and due to the inability of the banking system to ignite a recovery, they recommended that a counter cyclical fiscal policy be followed. As Keynes wrote in his letter to President Roosevelt: “The object is to start the ball rolling” [(1933), (1955) p. 36].

Both used the same framework, the quantity theory of money, though Keynes’s version was more elaborate, focusing on the relationship between investment and savings and was dubbed the *fundamental equations*. The case for counter cyclical fiscal policy was thus built on a combination of the quantity theory of money and a rigid price structure. A key difference between both is that, where as arguments for deficit spending (*i.e.*, using the budget deficit as a stabilization tool) can be found in the writings of Chicago economists, this is not the case of Keynes. It is thus ironic that the latter is often considered as one of the architects of budget finance when that title belongs rather to the former.

Later, both Chicago economists and Keynes recanted their views on fiscal policy but for opposite reasons. The Chicago team emphasized the dangers that a pro cyclical fiscal policy might bring about in terms of inflation. Over time, this new view of fiscal policy was fully adopted when the view that monopolistic behavior characterized capitalism was replaced with the axiom that full employment and perfect competition were good analytical approximations to the real world. Ultimately, Chicago economists, following the logic of the quantity theory, became preoccupied basically with price stability and were not able to build the foundations for an alternative approach to fiscal policy. Fiscal issues became subsumed in monetary policy and theory.

Keynes was well aware of inflationary finance but was simply more concerned with cost inflation. While demand inflation could be easily brought under control cost inflation was harder to eradicate. As he put it (CW, vol. XXVII, p. 417):

We have been using “inflation” to mean pressure of demand to raise prices above current cost of production...But inflation of this sort is a temporary

factor,...and one we have learned to keep under good control. The real question is the price level which is going to be determined by costs of production, internal and external. If the costs can't be controlled, it is futile and dangerous to attempt to exercise any general control over the price level.

His change of vision regarding fiscal policy came about as an intellectual escape from the confines of the quantity theory of money and the elaboration of the theory of effective demand. Keynes's new approach to fiscal policy followed the logic of the GT and distinguished between a current budget and capital budget just as the GT separated income and non-income related categories, *i.e.*, investment. The current budget was to be in balance or show a surplus which would be transferred to the capital account. The idea behind the separation of a current and a capital budget was not to respond to short term disequilibria but to maintain the stability of investment, which was thought to be the *causa causans* of the economic system's behavior. In consistency with this point of view Keynes discouraged taxation policies that aimed at tampering with consumption. Consumption habits were far too stable to be liable to manipulation by the authorities and taxation policies that aimed at consumption were too costly to be implemented. Underlying this view was an essential assumption of the GT: capital was scarce and the increment in its stock would yield a positive return and would thus benefit society as a whole. In a similar vein, Keynes warned about the limitations of a debt management fiscal policy.

As seen through this prism, Keynes's approach to fiscal policy was an integral part of the theoretical framework put forward in the GT. Given a set pattern of consumption habits, fiscal policy was concerned with maintaining the stability of investment under conditions of capital scarcity. This needed above all planning and the elaboration of a long-term program. Keynes thought this possible for, as he put it, "In the long run almost anything is possible."³³ The identification of Keynes with deficit spending as a stabilization tool and short run counter cyclical fiscal policy tools

³³ Keynes, *CW*, vol. XXVII, p. 268.

have little foundation in Keynes earlier writings, and only find a place in his mature works past the stage of capital saturation.³⁴

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³⁴ This idea can perhaps shed light on the debate surrounding the relationship between Keynes and Abba Lerner's concept of functional finance. Keynes relation to functional finance and its progenitor Abba Lerner are not clear cut. Kregel (1985) and Artis (1987) sustain that Keynes never abided by the principles of functional finance. Scitovsky (1984) pinpoints Keynes initial skepticism and his subsequent conversion. Metzler (1988) recognizes Keynes's conversion but asserts that he never used functional finance as a basis for policy. Both Scitovsky and Metzler draw on Colander (1984). Colander presents evidence that Keynes publicly denounced Lerner's ideas as 'humbug' but that later on, he admitted in private correspondence to be a closet Lernerian. In his *CW*, vol. XXVII, p.320 Keynes (1943) praised Lerner's (1943) reasoning on the national debt and two years later (according to Moggridge, Keynes, *Ibid.*, p. 405) maintained his enthusiasm for functional finance.

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