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Non-stabilizing flexibility: from the contributions by Keynes and Kalecki towards a post-keynesian approach

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"… For the classical theory has been accustomed to rest the supposedly self-adjusting character of the economic system on an assumed fluidity of money –wages; and, when there is rigidity, to lay on this rigidity the blame of maladjustment"

(Keynes, 1936, p. 257)

Introduction

The mainstream macroeconomic approach continues to accept, implicitly or explicitly, the assumption that flexibility in wages and prices is always able to ensure full employment equilibrium[1]. The argument goes that, should a fall in aggregate demand lead to involuntary unemployment, the more rapidly wages and prices fall, the faster will be the adjustment towards full employment. As we have all read, the income and employment stabilising function works above all through Pigou's "real balance effect" (1943; 1947; 1949).

And yet both Keynes (1923; 1931; 1936) and Kalecki (1937; 1944; 1966) denied the existence of *self-balancing* endogenous mechanisms able to stabilise the economic system, and opened the way to an alternative approach seeking to demonstrate that wage and price flexibility can be *destabilising*. In fact in the *Tract on Monetary Reform* (1923), in one set of writings which took place in 1931-33 and in the *General Theory* (1936: Ch. XIX), Keynes questioned the viability of flexible wages and prices to restore full employment. On the other hand, in a comment on Pigou (1944) and in *Studies in the Theory of Business Cycles* (1966), Kalecki argued that falling prices will not necessarily stimulate an increase in aggregate demand when firms and households have extensive debt commitments.

[1] Cf. Mankiw, 1990.

Our object in this paper is to review these contributions with the aim of discussing alternative approaches in the spirit of post-keynesian and showing their relevance to an essentially critical appraisal of the mainstream analysis.

The paper is organised thus: in section 1 we look at the traditional theory and the *"Pigou effect";* in sections 2 and 3 we analyse the contributions by Keynes and Kalecki respectively on the *destabilising* role of *wage and price flexibility*; in section 4 we consider the possible implications of the alternative approach to be found in the literature; in section 5, we draw our conclusions.

1. Stabilizing flexibility and the "Pigou effect"

The *mainstream* approach sees *price flexibility* as the means by which the market economy is always able to guarantee that full utilisation of all resources can be achieved. For example, if an excess of supply comes on the labour market, then monetary wages will have to drop, and the marginal cost will fall below the marginal revenue, bringing about an increase in production and a fall in the level of prices. The effect of resources being under-utilised will be to generate in the aggregate a drive towards deflation in the prices of goods and thus to stimulate demand in such a way that full employment be achieved. The adjustment comes about *automatically* as the *prices* of goods and factors are *flexible*.

Thus, in terms of the traditional AD-AS model, if the economic system as a whole were to meet with involuntary unemployment, caused by a fall in aggregate demand, then wage and price flexibility would bring about adjustment both on the supply side (downward shift in AS) and on the aggregate demand side (movement along the AD). The *stabilizing* role that deflation plays on aggregate demand, as we learn, is accomplished essentially along two channels: a) the so-called "*Keynes effect"*[2] and b) the *"Pigou effect"* or "*real balance effect*". In the former case the fall in the general level of prices produces an increase in the supply of money in real terms and so leads to a fall in the interest rate, which in

[2] Cf. Haberler, 1958, p. 491

turn should favour an increase in investments and the generation of expansive effects. However, there is also a "*liquidity trap*" at work, which could compromise the regular functioning of this adjustment mechanism. Thus, as we well know, the *stabilization* process makes use of the *"real balance effect"* by virtue of which price deflation, generating an increase in wealth in real terms, favours the expansion of aggregate consumption, and thus of income and employment.

In terms of the theoretical background, the emphasis placed on the "*Pigou effect*" as relevant to macroeconomic analysis is due above all to Don Patinkin. In fact, in an article under the 'unequivocal' title of "*Price Flexibility and Full Employment*" (1948), making critical comparison between Keynes's analysis (1936) and Pigou's contribution (1943), Patinkin identifies precisely in the absence of the *real balance effect* from the consumption function the factor that had led the author of the *General Theory* to suppose, erroneously, that there were no *automatic* mechanisms that could favour the attainment of full employment (cf. Patinkin, 1948, p. 555). On the other hand, according to Patinkin Pigou's analysis "has demonstrated the *automaticity* of full employment within the framework of the classical *static* model – the main mechanism by which this is brought about being the effect of a price decline on cash balances" (ibid. p. 555). As this quotation shows, however, Patinkin makes a point of limiting the validity of Pigou's conclusions to the *static* context[3]. Indeed, he warns that on proceeding from *static* to *dynamic* analysis, it immediately becomes crucial to consider the role of *expectations* vis-à-vis future prices, for "It is quite possible that the original price decline will lead to the expectation of further declines. Then purchasing decisions will be postponed, aggregate demand will fall off, and the amount of unemployment increased still more" (ibid. pp. 557-58). Patinkin returned to these points and elaborated upon them further in the 1950s, as a result growing somewhat sceptical about the effective functioning of the "*Pigou effect"*, to the extent that he concluded that "… only further investigation will tell us

[3] That is, only in the case that the fall in wages and prices be not such as to generate expectations of *further* reductions. It is, in fact, only in this case that: "there always exists a sufficiently low price level such that, *if expected to continue indefinitely*, it will generate full employment" (Patinkin, 1948, p. 557). On this argument see also Lange (1944).

whether a price decline does indeed have a positive net effect on total expenditure (Patinkin, 1951, p. 263)[4].

Nevertheless, despite the reservations stressed by Patinkin (1948; 1951), both the authors of the subsequent "*Neoclassical Keynesian Synthesis*" (Hicks, 1957 e 1974) and many exponents of the more recent current of *New Keynesians*[5] (Mankiw, 1986; 1992; Romer, 1993) have continued to argue that only the presence of *"rigidity"* or *"stickiness"* in wages and/or prices can effectively prevent the "*Pigou effect*" from fully exercising its function as endogenous *self-balancing* mechanism. Keynes's theory would thus prove to remain even today an interesting and useful *"special case"*, valid only inasmuch as there are institutional factors or the imperfections of the real world that *curb* the regular functioning of market forces.

2. Non-stabilizing flexibility: Keynes's contributions

As announced in the introduction, by referring to certain contributions by Keynes and Kalecki we intend to show how both held *wage and price flexibilities* totally unable to perform a *stabilising* function. As early as the first three introductory chapters of the *General Theory* (1936), as is well known, Keynes denies the existence of *endogenous adjustment mechanisms* able to guide the economic system *automatically* towards full employment income. It is, however, above all in chapter XIX, entitled "*Changes in money wages*", that the Cambridge economist delivers his decisive blow against the "classical" approach, on the basis of which the capitalistic economic system is always capable of *self-balancing* and reaching full employment equilibrium[6]. According to Keynes the

[4] In the 1951 book these considerations are further clarified and developed (cf. Simonazzi-Vianello (2004)). It is, moreover, to be added that Patinkin was also convinced that a policy of wage and price deflation would be difficult to implement from the practical viewpoint, and the adjustment due to the *real balance effect* would actually be a very long-term process.

[5] Here, however, distinction must be made between the so-called New Keynesians who took nominal rigidities into consideration (e.g. Mankiw 1986, 1992 and Romer,1993), and the New Keynesians who analysed the effects of asymmetric information on the financial market (e.g. Greenwald-Stiglitz, 1993). In fact, while the former do not deny that wage and price flexibility can play a stabilising role, the latter, by contrast, see pro-cyclic flexibility as destabilising. On this point see the study by Ardeni-Boitani-Delli Gatti-Gallegati in Messori (1999).

[6] Cf. the epigraph quotation.

“classical” economists were mistaken in holding that a reduction in wages necessarily leads to an increase in employment since such could be the case if, and only if, the reduction were accompanied by *unvaried* aggregate effective demand: “….whilst no one would wish to deny the proposition that a reduction in money-wages *accompanied by the same aggregate effective demand as before* will be associated with an increase in employment, the precise question at issue is whether the reduction in money-wages will or will not be accompanied by the same aggregate effective demand as before measured in money, or, at any rate, by an aggregate effective demand which is not reduced in full proportion to the reduction in money-wages …” (1936, p. 259- 260).

Keynes shows, on the contrary, that *wage and price deflation* leads to a *decline* in effective demand and thus to a fall in income and employment. As for the effects on the propensity to consume, he remarks: “A reduction of money-wages will somewhat reduce prices. It will, therefore, involve some redistribution of real income (*a*) from wage-earners to other factors entering into marginal prime cost whose remuneration has not been reduced, and (*b*) from entrepreneurs to rentiers to whom a certain income fixed in terms of money has been guaranteed. What will be the effect of this redistribution on the propensity to consume for the community as a whole? The transfer from wage-earners to other factors is likely to diminish the propensity to consume. The effect of the transfer from entrepreneurs to rentiers is more open to doubt. But if rentiers represent on the whole the richer section of the community and those whose standard of life is least flexible, then the effect of this also will be unfavourable. What the net result will be on a balance of considerations, we can only guess. Probably it is more likely to be adverse than favourable.” (1936, p. 262).

The problem of *redistributive* effects associated with variations in the value of money is, as we know, one of the issues already addressed by Keynes in the *Tract on Monetary Reform* (1923). Here, in the chapter entitled “*The Consequences to Society of Changes in the Value of Money”*, he remarks: “Thus a change in prices and rewards, as measured in money, generally affects different classes unequally, transfers wealth from one to another, bestows affluence here and embarrassment there, and redistributes Fortune’s favour so as to frustrate design and disappoint expectation” (1923, p. 1)**.** According to Keynes, while on the one hand the fall in price level favours the class of *rentiers* (as creditors), on

the other hand it penalises the entrepreneurs (as debtors), but it is on their decisions that the levels both of current production and of investment depend.

With regard to the former aspect, Keynes observes that " a fall in prices, effects redistribution of real wealth from those who make the decisions which set production into motion to those who are inactive once they have lent their money" (1923, p. 30). In the *Tract on Monetary Reform*, moreover, Keynes makes it quite perfectly clear that, as he sees it, the *expectation* of a fall in the level of prices can entail a drastic cut in production: "During the lengthy process of production the business world is incurring outgoings in terms of *money* – paying out in money for wages and other expenses of production – in the expectation of recouping this outlay by disposing of the product for *money* at a later date[7]. That is to say, the business world as a whole must always be in a position where it stands to gain by a rise of price and to lose by a fall of price….Now it follows from this, not merely that the *actual occurrence* of prices changes profits some classes and injures others…but that a *general fear* of falling prices may inhibit the productive process altogether… For if prices are expected to fall …entrepreneurs will be reluctant to embark on lengthy productive processes involving a money outlay long in advance of money recoupment- whence unemployment. The *fact* of falling prices injures entrepreneurs; consequently the *fear* of falling prices causes them to protect themselves by curtailing their operations" (1923, pp. 33-34).

As for the effects produced by a decline in wages and prices on aggregate investment, on the other hand, Keynes makes a distinction between the fall in current wages and the *expectation* of further reductions in them in the future: "If the reduction of money-wages is expected to be a *reduction relatively to money-wages in the future,* the change will be favourable to investment….. If, on the other hand, the reduction leads to the expectation, or even to the serious possibility, of a further wage-reduction in prospect, it will have precisely the opposite effect. For it will diminish the marginal efficiency of capital and will lead to the postponement both of investment and of consumption." (1936, p. 263)[8]. Keynes thus shows particular attention to the effects produced by a

[7] Thus it is already clear in the Tract that Keynes accepts the M-C-M' process as underlying a monetary economy. As we know, this is a point that goes back to Marx and was to occupy a central position in *The Monetary Theory of Production* of 1933a,b. This aspect will be discuss further in section n. 4.
[8] This point was discussed further by Oscar Lange (1944) p. 20.

cumulative process in expectations of a fall in prices, and thus to the effects of wage and price *flexibility* in a *dynamic* context[9].

However, it is above all when we consider the effect that the deflationary process has on the *debt burden*, in the case of agents who have borrowed money, that we find particularly good reason for a substantial critique of Pigou's "*real balance effect"* and its alleged *stabilising* role. In this connection Keynes observes that " …the depressing influence on entrepreneurs of their greater burden of debt may partly offset any cheerful reactions from the reduction of wages. Indeed if the fall of wages and prices goes far, the embarrassment of those entrepreneurs who are heavily indebted may soon reach the point of insolvency, — with severely adverse effects on investment. Moreover the effect of the lower price-level on the real burden of the national debt and hence on taxation is likely to prove very adverse to business confidence." (ibid. p. 264).

Should the debt burden be such as to produce a state of widespread insolvency, then entrepreneurs faced with increasing liabilities may well be tempted to sell the assets. This would lead to a fall in the price of the assets[10], with negative repercussions on the stability of the general financial structure. In fact, in "*The Consequences to the Banks of the Collapse of Money Values"* of 1931[11] Keynes notes how a sharp fall in the value of equitable assets can also mean greater financial fragility for the banks since they would see a drastic reduction in their "*margin of safety*"[12]; in fact he wrote (p. 156): "It is for this reason that a decline in money values so severe as that which we are now experiencing threatens the solidarity of the whole financial structure. Banks and bankers are by nature blind. They have not seen what was coming ….In the United States some of them employ so-called "economists" who tell us even today that *our troubles are due to the fact that the prices of some commodities and some services have not yet fallen enough*, regardless of what should be the obvious fact that their cure, if it could be realised, would be a menace of their

[9] See also Keynes (1925). As noted in section 1, this aspect has been closely and further analysed by Patinkin (1948).
[10] The fall in the cost price of capital goods has two causes: there exists no 'perfect' secondary market for the sale of these goods, and at the same time they are *firm-specific*.
[11] For very similar arguments see the letter of 22 June to Hubert Henderson, CW XX, p. 555.
[12] Capital goods often constitute collateral, and thus a guarantee to the creditor against debtor insolvency. These aspects have come under the attention of the so-called "*debt deflation school"*, which we consider in section n. 4.

institution". The deterioration in the "state of credit"[13] would ensue, again with negative impact on investment, income and employment[14].

3. Non-stabilizing flexibility: Kalecki's contributions

In his criticism of Pigou, Kalecki (1944) arrives at considerations remarkably close to those formulated by Keynes[15] in the *General Theory* and various other contributions mentioned above[16]. In fact, referring to the increase in wealth in real terms brought about by deflation in prices, he observes: "…The increase in the real value of the stock of money does not mean a rise in the total real value of possessions if all the money (cash and deposits) is "backed" by credits to persons and firms, *i.e.* if all the assets of the banking system consist of such credits. For in this case, to the gain of money holders there corresponds an equal loss of the bank debtors. ....The adjustment required would increase catastrophically the real value of debts, and would consequently lead to wholesale bankruptcy and a 'confidence crisis' " (1944, p. 132).

Kalecki returned to the problem of the rising debt burden consequent upon wage and price deflation in chapter V of his *Studies in the Theory of Businness Cycles* (1966) entitled *Money and Real Wages* . In fact, analysing the indirect effects of a change in the general level of prices and wages on employment, Kalecki observes that: "A general reduction of prices increases the

[13] Keynes refers to the "confidence" which the financial institutes place in loan applicants.

[14] Thus the deflationary process of wages and prices produces effects of *persistence* for real magnitudes, in part due to the fact that it can open the way to deterioration in the *state of credit*. Here, too, as in the case of the M-C-M' process, there are distinct echoes of Marx.

[15] Keynes had had the opportunity to read Kalecki's critical comment on Pigou as early as the first months of '44. In a letter of 22 February addressed to Kalecki (Collected Works, vol. 1, p. 567) he expresses his agreement with him, while also offering some suggestions: "Looking through your note on Pigou again, the following point occurs to me. Is there anything in it? I offer to you, for what it is worth, as a possible addition. On Pigou's assumption, the *real* rate of interest in Irving Fisher's sense would be constantly rising. This would have two effects: a) people would save more, and not less, as Pigou assumes. b) if the real value of money is constantly increasing, there will be a strong pressure to repay debts. Thus, at the limit, it would become impossible for the banks to keep the stocks of money constant except in so far as it was backed by gold. Thus, in effect, Pigou is assuming two contradictory hypothesis". Keynes had also asked for Pigou's answer to Kalecki's criticisms, but to no avail.

[16] Here we do not deal with the simililarities and/or differences between Keynes and Kalecki on the principle of effective demand (on this topic see: Davidson, 2000; Lopez, 2002), but only to their analysis concerning "*Pigou effect*".

burden of indebtedness, since money incomes diminish while the "old" debts do not. This causes difficulties in servicing the debts, ending frequently in failures. As a result confidence in the solvency of firms is undermined which may lead to an increase in the long-term rate of interest even though the short-term rate declines " (1966, p. 49). As for the *redistribution* of wealth occurring subsequent to a fall in prices and wages, Kalecki (1966, p. 49-50, note 2) – juts like Keynes (cf. Chapter 1 of the *Tract on Monetary Reform* (1923)) – sees it having unfavourable effects on production and employment. In this respect, Kalecki states: "…when prices decline in the same proportion as wages, this will also be true of profits. But the money income of rentiers consisting of the interest on "old" debts does not change and therefore, their relative share in profits increases". Thus the shift in distribution occurs at the expense of the entrepreneurs and to the advantage of the *rentiers.* All this adds up to the fact that "If the entrepreneurs are "poorer" than the rentiers, this kind of shift will result rather in a decrease of total capitalists' consumption[17]. In the contrary case the result would be an increase. The first pattern applies usually to societies where the concentration in industry is not too far advanced; the second to developed capitalist economies. But the final outcome is by no means certain even in this case, because quite a number of firms are in a precarious financial position, as a result of the decline in income while their "old" debts remain unchanged, and this discourages any investment activity on their part." (ibid. p. 50, note n. 2).

We find the fall in aggregate demand ensuing upon a decline in wages and prices further reflected in Kalecki's work if we consider the *"principle of increasing risk*" formulated in 1937[18]. Here, in fact, he argues that the level of investment depends negatively on the degree of indebtedness (given by the ratio between debt and internal sources of financing). An increase in the debt burden brought about by plunging prices would have the effect of reducing the *internal net-worth*[19] of the firms, increasing the risk involved in indebtedness (debtor's risk) and leading to a decline in investments and so in income and employment,

[17] In fact, in Kalecki's analysis (1966) "the fluctuations in production and profits depend on the fluctuations in capitalists' consumption and investment" (p. 46)…since the workers spend on consumption goods as much as they receive in wages, the remainder of the national income, being the share of capitalists, is just equal to their expenditure on consumption and investment goods. Therefore the capitalists as a class determine by their expenditure their profits and in consequences the aggregate production." (p. 44-45)

[18] The principles of increasing borrower and lender risk are keystones to H. P. Minsky's post-Keynesian analysis (1975); they will be discussed in the following section.

[19] Given by the difference between financial assets and liabilities.

producing effects in sharp contrast with the results expected according to the *mainstream* approach.

The analysis proposed by Keynes and Kalecki regarding the *destabilising* effects brought about by the *increase in debt burden* contains distinct echoes of the theoretical contribution by Irving Fisher on the Great Depression of '29. In his article entitled "*The Debt Deflation Theory of Great Depressions*" (1933), Fisher had in fact traced the phenomenon of *persistence* in income and employment decline precisely to the effect produced by wage and price *deflation*. The chain reaction sweeping through both firms and the banks and financial institutions, plunging them into bankruptcy in late 1933, went so far as to threaten the stability of the capitalistic economic system at the worldwide level, eloquently demonstrating the fallaciousness of the *laissez-faire* principle.

In the light of the considerations presented in this and the previous section, it appears fairly evident that, reading anew the contributions Keynes and Kalecki, the need is for a radical reappraisal of the role of self-balancing mechanism which the *mainstream* macroeconomic attributes to Pigou's "*real balance effect"*: in a depressive phase, wage and price flexibility is more likely to produce *destabilising* rather than stabilising effects.

4. Towards a post-keynesian approach

The critical observations that Keynes and Kalecki had to make on the alleged *stabilising* role performed by *wage and price flexibility* were subsequently taken up and further formulated by various authors working on Keynesian lines, thus giving rise to a stimulating new current in research that turns out to be in sharp contrast with the *mainstream* approach. Suffice it here, as illustration of the point with a few representative examples, to cite the contributions by Tobin (1975, 1980; 1993), Minsky (1975; 1982; 1984)[20] and, more recently, Caskey-Fazzari (1987; 1989; 1992)[21]. As is well known, in the chapter entitled "*Real balance effects reconsidered"*, Tobin (1980) demonstrated that if the *marginal propensity to spend* of debtors' (represented mainly by entrepreneurs) is, as one

[20] Minsky is often counted among the supporters of the so-called "*debt deflation school"* which grew up mainly in the United States thanks to Fisher's 1933 contribution.
[21] This listing of significant contributions is by no means exhaustive. On the issue of destabilising flexibilities see also: Davidson (1972); Delong-Summers (1986); Hahn-Solow (1986); Greenwald-Stiglitz (1993); and, more recently, Simonazzi-Vianello (2004).

may reasonably suppose, greater than that of creditors, then the effect that *wage and price deflation* has on the *debt burden* (i.e. the "*Fisher effect"*, or *debt deflation effect*) can predominate and force out Pigou's *real balance effect*, with *destabilising* consequences. To this we must add that if the fall in the general level of prices should trigger *expectations* of further falls in them, then the resulting increase in the *real interest rate* can induce a further decline in investment, income and employment (Tobin, 1975), and possible states of insolvency for the debtors: the creditors, for their part, would experience a dramatic loss of *confidence*[22], facing the heavy costs of credit recovery.

In this connection Minsky (1975; 1982; 1984) applied the *principle of increasing risk* formulated by Kalecki (1937)[23] to demonstrate that the decline in *internal net-worth* brought about by wage and price deflation has the effect of increasing not only the "*lender's risk*" but also the "*borrower's risk*"[24], entailing a rise in the cost of financing and so a further decline in investment, income and employment. As we know, the theory of financial instability formulated by Minsky seeks to yoke various aspects of Kalecki's analysis to the theory of Keynes and finds consistency precisely in abandonment of the "*Pigou effect*" as means of *automatic* adjustment. In fact, remarking critically on the "*Neoclassical Keynesian Synthesis*", he observes that (1975, p. 54): "… . Falling wages, prices and cash-flows to enterprises will make the burden of debt to potential bank borrowers increase over the life of the loan. A decline in wages and prices will tend to set off a money-decreasing debt deflation process, which will exacerbate the initial deficit of demand of labor – that is wage and price-level flexibility is disequilibrating". Moreover, Minsky goes on to point out, the revolutionary scope of Keynes's thought also extends to the crucial role played by money and credit in the process of financing production and investment[25]. As Keynes inverted the causal relation between savings and investments this means that investment decisions are not financed by savings but with the money created by banks: the diffusion of *bank money* makes trasparent the keynesian theory's casual

[22] Cf. Keynes (1931).
[23] Cf. section 3.
[24] Cf. Minsky, 1975 p. 145. We also find explicit references to the question of "lender's risk" and "borrower's risk" in Keynes's *General Theory* (cf. 1936, trad. it. p.284) **.**
[25] These aspects were central both in *The monetary theory of production* (1933a) and in *The distinction between a co-operative economy and an entrepreneur economy* (1933b). Unfortunately they were overlooked in *The General Theory* where particular emphasis is put on the concept of money demand as store of wealth but not as means of payment (see Minsky, 1975; Palley 2002 and Bertocco, 2005). The more recent monetary circuit approach (Graziani, 1996) has emphasized this point of Keynes's analysis.

relationship between investments and savings (cf. Rochon, 1999; Bertocco, 2005). Debt and credit positions are therefore a consequence of the spreading of a fiat money made up by bank money.

In virtue of the fact that a monetary capitalistic economy moves along the lines of the M-C-M' process (with M'>M), it follows that the change in the *debt burden* brought about by the variation in the level of prices has fundamental repercussions on the *stability* of the economic system. In fact, as soon as *fiat money* is taken into account, income fluctuations caused by a lack of effective demand, become more frequent. Minsky (1982) argued that the latter can be properly described as a *monetary* phenomenon. In fact, the alternation of phases of boom and bust is due to changes in banks' criteria in appraising firms' investment project.

The analysis proposed by Tobin and Minsky has in turn given rise to particularly relevant results from the macroeconomic point of view (cf. Caskey-Fazzari, 1987; 1989; 1992), although they have yet to find wider circulation. They have, in fact, led to a substantial modification of the traditional AD-AS model (cf. sec. 1), above all with respect to aggregate demand. Indeed, should the "*Fisher effect*" successfully oust the "*Pigou effect*", then the AD curve would no longer prove negative in relation to prices, with the consequence that, were the economy to be in a depressive phase, then *wage and price deflation* could cause a further *decline* in income and employment[26], with destabilising effects. Thus, in accordance with the thesis of Keynes and Kalecki, and in contrast with the *mainstream* approach, wage and price flexibility is seen to be totally unequipped to ensure that full employment be reached.

5. Conclusions

The *mainstream* macroeconomic approach has it that, thanks to the action of Pigou's "*real balance effect"*, *price flexibility* for goods and factors represents the endogenous mechanism by means of which the economic system can achieve *self-balancing*. In this paper, by contrast, drawing upon various

[26] On this question see: Greenwald-Stiglitz, 1993 e D'Orlando- Nisticò, 1998.

considerations contained in contributions by Keynes and Kalecki, and taking into account subsequent the developments offered by the literature, we have sought to demonstrate that the alleged role of *stabilisation* played by the *"Pigou effect"* calls for radical reappraisal.

The first point of departure was Keynes himself (1923; 1936 ch. 19) as he noted that a falling money wages and price levels will lead to *redistributions of income* firstly from wage-earners to non-wage earners, the net effect of which would be the reduction in the economy-wide marginal propensity to consume. The income redistribution effect was taken up by Kalecki: if profit-earners have a lower propensity to consume than wage-earners then the average marginal propensity to consume in the economy declines and thus aggregate demand decline. Thus, far from being stabilizing the reduction in money wages in a situation of unemployment can lead to reductions in aggregate demand and thus more unemployment.

The second point was already expressed, once more, by Keynes (1923; 1931), by Irving Fisher (1933) and by Kalecki (1944) in a comment on Pigou, it is known as the "*debt deflation effect*": as financing contracts are established in nominal terms, then the redistribution of wealth between debtors and creditors coming about subsequent to *wage and price deflation* can bring about a further decline in income and employment. Moreover, if the decline in prices is such as to generate *expectations* of yet more declines, then the resulting rise in the *real* interest rate will, once again, trigger destabilising effects. As we have tried to show these aspects was given a central role to elaborate an alternative approach particularly by Minsky (1975), Tobin (1980) and Caskey and Fazzari (1987).

Bibliography

Bertocco G. (2005) "The Role of Credit in a Keynesian Monetary Theory", *forthcoming,* Review of Political Economy

Caskey J. – Fazzari S. (1987) "Aggregate Demand Contractions with Nominal Debt Commitments: Is Wage Flexibility Stabilizing?", Economic Inquiry, vol.XXV, pp. 583-597.

Caskey J. – Fazzari S. (1989) “Debt Commitments and Aggregate Demand: A Critique of the Neoclassical Synthesis and Policy”, in W. Semmler ed. Financial Dynamics and Business Cycles, New York: M.E. Sharpe, 1989, pp. 188-202.

Caskey J. – Fazzari S. (1992) “ Debt, Price Flexibility, and Aggregate Stability”, Revue Economie Politique, vol. 102, n. 4, pp. 4-27.

Davidson P. (1972) “ Money and the Real World”, New York, John Wiley and Sons.

Davidson P. (2000) “ There Are Major Differences Between Kalecki’s Theory of Employment and Keynes’s General Theory of Employment Interest and Money”, Journal of Post Keynesian Economics, fall 2000, 23 (1), 3-25.

DeLong J.B.- Summers L. (1986) “Is Increased Price Flexibility Stabilizing?”, American Economic Review, pp. 1931-44.

D’Orlando F. – Nisticò S. (1998) “ Some Questions for New Keynesians”, in Roy Rotheim , Routledge, 1998.

Fisher I. (1932) “ Booms and Depressions” New York, Adelphi

Fisher I. (1933) “The Debt-Deflation Theory of Great Depressions”, Econometrica, vol. 1, pp. 337-57.

Greenwald B.C. – Stiglitz J. (1993) “Financial Market Imperfections and Business Cycles” The Quarterly Journal of Economics (February) pp. 77-112.

Graziani A. (1996) “Money as purchasing power and money as a stock of wealth in Keynesian economic thought” in: G. Deleplace & E. Nell (Eds) Money in Motion, (Houndmills: Mcmillan).

Haberler G. (1958) “Prosperity and Depression. A theoretical Analysis of Cyclical Movements” New Revised and Enlarged Edition, Cambridge, Massachussets, Harvard University Press.

Hahn F. – Solow R. (1986) “ Is Wage Flexibility a Good Thing?” in W. Beckerman ed. “Wage Rigidity and Unemployment”, London, Gerald Duckworth and Co.

Hicks J.R. (1957) “A Rehabilitation of “Classical” Economics”, The Economic Journal, vol. 67, n. 266 (march) pp. 147-159.

Hicks J.R. (1974) “The Crisis in Keynesian Economics”, Basil Blackwell, 1974

Kalecki M. (1937) “The Principle of Increasing Risk”, Economica, vol. 4, pp. 440-47.

Kalecki M. (1944) “Professor Pigou on ‘The classical Stationary State’- A Comment”, Economic Journal pp. 131-32.

Kalecki M. (1966) “Studies in the Theory of Business Cycles, 1933-39”, Oxford Basil Blackwell trad. it. “Salari monetari e salari reali” in Studi sulla teoria dei cicli economici 1933-39, Il Saggiatore, Milano (1972).

Kalecki M. (1990) “*Collected Works*” vol. 1 edited by Jerzy Osiatynski, Claredon, Oxford.

Keynes, J. M. (1923) “A Tract on Monetary Reform”, *Collected Writings*, Vol. IV.

Keynes, J. M. (1925) “ The Economic Consequences of Mr. Churchill”, *Collected Writings,* vol. IX p. 207-230.

Keynes J.M. (1931) “The Consequences to the Banks of the Collapse of Money Values”, The *Collected Writings*, vol. IX, Cambridge University Press, pp. 150-58.

Keynes , J. M. (1933a) A Monetary theory of Production, in *Collected Writings*, vol. XIII (D. Moggridge, Ed.) (London: Mcmillan, 1973).

Keynes, J.M (1933b) The distinction between a co-operative economy and an entrepreneur economy, in *Collected Writings* vol. XXIX (D. Moggridge, Ed.) (London: Mcmillan, 1973).

Keynes J. M. (1936) “The General Theory of Employment, Interest and Money“, Mcmillan, London, trad. it: General Theory dell’Occupazione, dell’Interesse e della Moneta”, (1971) UTET, Torino.

King M. (1994) “Debt Deflation: Theory and Evidence”, European Economic Review, pp. 419-445.

Lange O. (1944) “Price Flexibility and Employment”, Bloomington Indiana, Principia Press.

Lopez J. (2002) “Two Versions of the Principle of Effective demand: Kalecki and Keynes”, Journal of Post Keynesian Economics, summer, 24 (4).

Mankiw G. (1986) “Issues in Keynesian Macroeconomics: A Review Essay”, Journal of Monetary Economics, September

Mankiw G. (1990) “A Quick Refresher Course in Macroeconomics”, Journal of Economic Literature, December, vol. 28 pp. 1645-60.

Mankiw G. (1992) “The Reincarnation of Keynesian Economics”, European Economic Review, April.

Messori M. (1999) “Financial Constraints and Market Failures”, Edward Elgar.

Minsky H. (1975) “John Maynard Keynes”, Columbia University Press, New York.

Minsky H. (1982) “Debt Deflation Processes in Today’s Institutional Environment”, Banca Nazionale del Lavoro Quarterly Review, dicembre, pp. 375-93.

Minsky H. P. (1984) “Potrebbe ripetersi?”, Instabilità e finanza dopo la crisi del 29. , Einaudi, Torino.

Palley T. (2002) “Endogenous Money: What it is and What it Matters”, Metroeconomica, 2, pp. 152-180.

Patinkin D. (1948) “Price Flexibility and Full Employment”, American Economic Review, vol. 38 pp. 543-64.

Patinkin D. (1951) “Price Flexibility and full Employment”, revised edition, in AEA, Readings in Monetary Theory, Allen and Unwin, 1951

Patinkin D. (1965) “Money, Interest and Prices”, Harper and Row, New York

Pigou A.C. (1943) “ The Classical Stationary State”, Economic Journal, vol. 53 pp. 313-351.

Pigou A.C. (1947) “Economic Progress in a Stable Environment”, Economica, vol. 14, pp.180-90.

Pigou A.C. (1949) “Employment and Equilibrium: a theoretical discussion”, MacMillan

Rochon L. (1999) “Credit, Money and Production” Aldershot, Edward Elgar.

Romer D. (1993) “The New Keynesian Synthesis”, Journal of Economic Perspective, Winter.

Rotheim R. (1998) “New Keynesian Economics/Post Keynesian Alternatives”, Routledge 1998.

Simonazzi A. – Vianello F. (2004) “Deflation. The Happy Short Life of Unconventional Thinking”, Working Paper Series, *mimeo*, Università di Roma “La Sapienza”.

Tobin J. (1975) “Keynesian Models of Recession and Depression”, American Economic Review, Papers and Proceedings vol.55, pp. 195-202.

Tobin J. (1980) “Asset Accumulation and Economic Activity”, Oxford Blackwell.

Tobin J. (1993) “Price Flexibility and Output Stability: An old Keynesian View”, Journal of Economic Perspectives, vol. 7 n. 1 , winter pp. 45-65.

JEL. E31, E32

Abstract: New and old *mainstream* macroeconomics argues that price flexibility stabilizes the economy. After a decline in aggregate demand, the more rapidly prices fall, the faster output returns to its full employment level. The theoretical basis for this result is the well known "Pigou effect": as prices fall the public's real outside money balances increase and consumption rises. However both Keynes and Kalecki rejected the thesis that price flexibility, in a demand-induced recession, can be stabilizing. In fact, in the chapter titled "*The consequences to Society of Changes in the Value of Money*" (*Tract on Monetary Reform*, 1923), in one set of writings which took place in 1931-33 and in the *General Theory* (1936: Ch. XIX) Keynes questioned the viability of flexible wages and prices to restore full employment. On the other hand, in a comment on Pigou, Kalecki (1944) argued that falling prices will not necessarily stimulate an increase in aggregate demand when firms and households have extensive debt commitments. This paper seeks to contrast Keynes's and Kalecki's ideas with the *mainstream* and discuss an alternative approach in the spirit of the post-Keynesian's "*debt deflation school"*.