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"KEYNES'S DICHOTOMY AND WAGE-RIGIDITY KEYNESIANISM: A PUZZLE IN KEYNESIAN THOUGHT"

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1. Introduction

Keynesian macroeconomics is usually distinguished - by mainstream supporters and detractors of Keynes alike - from the alternative new classical approach in having rigid prices. Among Keynesians, Modigliani (1986) reiterates that short-run wage rigidities cause the economy to depart from full employment and necessitate Keynesian aggregate demand management, but in the long run full employment prevails. From the new classical side, McCallum (1987, p. 126) writes that the "key characteristic of Keynesian macroeconomics that distinguishes it from classical theory is a postulated stickiness in some nominal price ..."

Yet Keynes (JMK, VII) emphatically denied that his theory had anything to do with wage-price stickiness. While he did assume the money wage to be fixed, he stated that

> this simplification, with which we shall dispense later, is introduced solely to facilitate the exposition. The essential character of the argument is precisely the same whether or not money-wages, etc., are liable to change. [JMK, VII, p. 27].

Moreover, had Keynes's theory departed from those whom he called 'classical' only in this respect, one would have to conclude that Keynes had nothing new to say. Keynes was obviously aware of these contributions, for he writes:

> ... 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, where there is rigidity, to lay on this rigidity the blame of maladjustment. [JMK, VII, p. 257].

A review of the work of these 'classical' economists - for example Marshall (1920), Pigou (1927, 1933) - seems that they were well aware of the fact that wage rigidity causes unemployment.

It is an interesting puzzle in the history of Keynesian thought as to why, despite Keynes's emphatic statements to the contrary, the crucial feature of his work has been considered to be price-rigidities in general, and specifically,

wage rigidity. Given that this view - henceforth called the wage-rigidity view- is still widely entertained, a definitive answer to this puzzle (based on a thorough post-mortem) seems premature, we will here be content with the discussion of some relevant facts and some speculations as to why this state of affairs has come about.

We will proceed by first (in section 2) providing an interpretation of Keynes's method in the General Theory which views Keynes as using an analytical dichotomy, to serve as a background for our discussion. This will be followed, in section 3, with a discussion of the wage-rigidity view. The next three sections will discuss and evaluate three possible answers to the puzzle. Section 4 will examine whether Keynes was wrong and his approach requires wage rigidity; section 5 will explore whether Keynes is to blame because he was not emphatic enough - or at worst equivocal - in presenting his case that unemployment did not depend on wage-rigidity; and section 6 will assess to what extent the blame can be laid on the 'Keynesians'.

2. Keynes's dichotomy

Keynes can be interpreted as using a dichotomy in the General Theory, which divides his analysis into two parts.

The first, which we call the static or equilibrium part, takes the money wage to be given, and examines the determination of short-run equilibrium. This part begins with chapter 3, where he clearly assumes "that the money-wage and other factor costs are constant per unit of labour employed." (JMK, VII, p. 27). That chapter goes on to discuss the determination of the level of employment at the intersection of the aggregate demand and aggregate supply curves, given the money wage, and subsequent chapters fill out the skeleton of this analysis; a summary is presented in chapter 18. Here Keynes does not consider the effects of changes

in the money wage due to the existence of unemployment.[1] The main implication of the analysis is that for a given money wage, the level of employment in the economy can settle at a position which is below the full-employment level.

In the other part, which we can call the dynamic or historical part, presented in chapter 19, Keynes dispenses with the fixed money-wage assumption and explains how the classical analysis of a reduction in the money wage, which made firms move down the marginal product curve for labour until full-employment was reached is erroneous. This ignores the general equilibrium aggregate demand and expectational effects. The rest of the chapter examines how a reduction in money wages may quite possibly depress employment, rather than solve the problem of unemployment.[2]

Keynes mentions effects through which a reduction in money wage could affect employment, which are worth recounting if only for their relative neglect in the mainstream literature. (1) It will redistribute income away from wage earners to others, and from entrepreneurs to rentiers (as a result of a fall in the price); the effect on employment depends on the marginal propensities to consume of the different groups: a negative effect is likely. (2) It will increase investment spending if the reduction is expected to be reversed in the future, but will reduce investment if further reductions are expected. (3) It will result in a decline in the price level, which will reduce the need for cash balances, reduce the interest and therefore tend to stimulate investment. However, if the wage and the price are expected to rise again in the future and the interest rate is expected to fall, the demand for money may not increase. (4) It may improve the confidence of entrepreneurs and break through their pessimism and encourage investment; but it may cause worker unrest and discontent, which may have exactly the opposite effect. (5) The resulting fall in price will increase the burden of

debt of the entrepreneurs and indeed lead some of them to insolvency with a consequent an adverse effect on investment. (6) In an open economy, the reduction in the price will stimulate exports and reduce imports, increasing aggregate demand for a fixed exchange rate economy.[3] Also in the open economy the terms of trade will worsen, reducing real income except for the newly employed (due to the increase in aggregate demand), and the effect on spending will depend on the relative propensities to consume. Keynes states that

> [t]his is not a complete catalogue of all the possible reactions of wage reductions in the complex real world. But the above cover, I think, those which are usually the most important. [JMK, VII, p. 266].

He also adds that a flexible-wage economy is not desirable, since

> [t]he chief result of this policy would be to cause a great instability of prices, so violent perhaps as to make business calculations futile in an economic society functioning after the manner of that in which we live. [JMK, VII, p. 268].

This division into two parts can be thought of as an analytical dichotomy,[4] the use of which involves taking certain things as given - or of ignoring them altogether - in the analysis of certain other things. Some of the factors left out or held constant can, and usually are, later brought into the analysis, but in a less formal manner than the analysis which ignored them or their variability. Economic theorizing necessitates the use of such dichotomies, since the interdependence of all possible things cannot be taken into account in every analysis. However, the validity of a particular dichotomy depends on whether the structure of the theory using the dichotomy is not fundamentally altered by the incorporation (in an appropriate way) of some of the factors left out or held constant.[5]

Keynes's dichotomy involves first examining the behaviour of the economy by taking the money wage to be given. Although he did not set up a formal model for this analysis, he came (in chapter 18) very close to doing so. The interaction

between the money wage and the rest of the variables was discussed later (in chapter 19), at a less formal level.[6] There appear to be three main justifications for using this dichotomy.

First, if the money wage is relatively stable in the short run, assuming it to be given for a short run model seems justified. Keynes seems to suggest that the money wage was rigid (JMK, VII, pp. 251, 303), and provides at least one reason for this in terms of workers' concern with their relative rewards (JMK, VII, p. 14). Although he does not explicitly provide this rationale, his discussion on dependent and independent variables [JMK, VII p.247] seems to suggest that he would approve of it. The relative rigidity of the money wage, however, does not absolve Keynes of the responsibility of showing how changes in it would affect the structure of his theory, since the money wage did in fact change, even if slowly.

Second, the effects of changes in the money wage are complicated and uncertain. The relationships discussed in the 'core' of his work (in which the money wage is taken as given) are in his mind more predictable and systematic. The actual outcome depends on a large variety of forces, many of which are difficult to formalize. Thus when Keynes finally does discuss them, he discusses them relatively informally, almost by the way of providing some examples.

Finally, Keynes postpones the discussion of the effects of changes in money wages for a tactical reason. He writes that

> It was not possible ... to discuss this matter fully until our own theory had been developed ... My difference from ... [classical] theory is primarily a difference of analysis; so that it could not be set forth clearly until the reader was acquainted with my own method. [JMK, VII, p. 257].

His discussion suggests that this difference had to do with stressing effective demand and expectations and uncertainty: the effects on changes in the money wage on employment are not due to the effect on production costs as in the classical

analysis but due to its effect of consumption and investment spending, and much depends on business confidence and on perceptions regarding future changes in the variables. These are issues that he developed in earlier chapters, and can be interpreted as his main departures from classical theory.

3. The Development of the Wage-Rigidity View

The wage-rigidity view of Keynes's General Theory appeared soon after the book appeared. Early formalizations of Keynes's model by Hicks (1937), Meade (1937) and Lange (1938) assumed that the money wage is fixed.

Subsequently Modigliani (1944) analyzed a Keynesian model in which the money wage was rigid below full employment and showed that the crucially distinctive feature of Keynes's work was the assumption of the fixed money wage, and this was the assumption that allowed Keynes to have unemployment equilibrium. Only if the liquidity trap existed, so that the interest rate became rigid, could unemployment exist without a rigid money wage.[7] Otherwise a reduction in the money wage would reduce the price, raise the real supply of money, reduce the interest rate, raise investment spending and employment.

Pigou (1943), Haberler (1946a, 1946b) and Patinkin (1956) pointed out that money wage rigidity was essential for Keynes's conclusion of unemployment equilibrium - even if the interest-elasticity of investment was zero and the liquidity trap existed - because as the price level fell the real balance effect would increase aggregate spending.[8,9]

More recently, Kohn (1981) has made the claim in a stronger form, removing the qualifications made by them: even without the real balance effect, money wage rigidity is argued to be a necessary and sufficient condition for unemployment equilibrium. As stated above, most macroeconomists now seem to identify Keynesianism with the fixed-money-wage assumption. Indeed, the research agenda

of mainstream Keynesians has been to analyze models which assume wage-price stickiness.[10] Partly in response to the new classical attack that such rigidities are irrational (since they leave room for Pareto-improving contracts), Keynesians have developed 'realistic' macroeconomic models which exhibit wage-price stickiness, models which make wage-price stickiness consistent with rational behaviour, and models which show that wage-price stickiness are 'near-rational'.[11]

4. Was Keynes wrong?

One possible answer to our puzzle is that the dynamic part has been found wanting, and the 'Keynesians' have decided to make the assumption of wage rigidity to rescue Keynes's analysis from logical error.

This view claims that if unemployment results in a reduction in the money wage, aggregate demand increases by the interest rate mechanism or the real balance effect.[12] It claims that although Keynes does discuss the first effect (and it has been dubbed as the "Keynes effect" in the literature), but according to this argument, does not give it its due despite the fact the cases in which it disappears - the liquidity trap and the absolute interest-inelasticity of investment - are very special ones. He is criticized for completely overlooking the real balance effect.

Keynes, actually, did point out that there were several reasons why the "Keynes effect" could be subverted. A reduction in the price level could increase the real supply of money, but if such changes resulted in greater uncertainty, there could be an increase in the demand for money; it was not obvious that a reduction in the interest rate would follow. Moreover, even if the interest rate did fall, the increased uncertainty and the possible fall in aggregate demand due to the redistribution of income could reduce investment demand.

Regarding the real balance effect, although Keynes did not mention it in his chapter 19 discussion, there is every evidence that this is not simply an oversight on his part since, as Presley (1986) argues, Keynes was closely involved in Robertson's examination of the working of this effect; it would seem to follow that Keynes _chose_ to leave it out of consideration. The effect, in any case, provides an incomplete picture of changes in the position of asset holders in the economy. Since nominal assets held by them are not just liabilities of monetary authorities (outside money), but more importantly, those of other individuals, firms and banks, a fall in the price level redistributes real wealth from debtors to creditors. The effect on real spending then depends on the extent of wealth redistribution and the partial derivatives of real spending with respect to real wealth: if debtors have higher marginal propensities to spend than creditors, a net reduction in real spending follows.[13]

Also, as we have already seen above, Keynes mentioned several other reasons why a wage-cut need not expand employment, which seem to have been completely ignored by the proponents of the wage-rigidity view [see Kohn (1981), for example].

Keynesians other than the believers of the wage-rigidity view have buttressed Keynes's arguments (especially the one relating to income distributional changes) and provided some additional reasons why a fall in the money wage may not increase the level of employment.[14]

For example, the arguments made by the wage-rigidity theorists assume an exogenously given nominal supply of money: when the price level falls, _given_ the nominal supply of money, there will be a real excess supply of money. This need not happen, however if the supply of money is endogenous. For example, when the price falls, firms may find it harder to repay their loans from banks; many of them may default. This would result in reductions in bank assets and

liabilities, resulting in a decline in credit money. The situation could be aggravated by a spurt of bank failures, further reducing the supply of credit money. Even without such dramatic evens, banks may recall loans to firms when the price begins to fall. These possibilities have been explored by the Post Keynesians, although Keynes does not seem to have made more than a reference to it [JMK, VII, p. 266].

The neo-Ricardians have added yet another argument. If capital goods are interpreted as heterogeneous produced goods, and the prices taken for the valuation of capital are Sraffian prices of production, it may turn out that the value of capital may not be a declining function of the rate of profit (or interest). In this case, the investment schedule may well be upward-rising, and there may be no (stable) intersection with the full employment saving schedule. With the rate of interest failing to bring saving and investment to equality at full employment, output must be the equilibrating variable; it may therefore fall to a level less than full employment. Without investment having the required interest-elasticity, wage flexibility would not result in full employment.

5. Was Keynes misleading?

A second argument may be made that even though Keynes was not wrong, he misled his followers by not focussing enough on the dynamic part of his theory.[15] Several arguments may be made.

First, he did not spend much time on the dynamic or historical model which examined the consequences of wage movements, spending most of his effort on the development of the static model which in fact did assume a fixed wage; it is thus natural for the reader to be misled by this lopsidedness. This, however, overlooks several facts. First, as already noted, Keynes very early in the book points out his assumption regarding the fixed wage and its role. Second, although

he devoted only one chapter to effects of changes in the money wage, he did discuss the issues relevant for his method in previous chapters, especially in second investment chapter and section on essential properties of money.[16]

A second argument is that Keynes made some statements in the General Theory which revealed the importance of the assumption of wage-rigidity. In his discussion on price changes in chapter 21, for example, he writes:

> If ... money-wages were to fall without limit whenever there was a tendency of less than full employment ... there would be no resting place below full employment until either the rate of interest was incapable of falling further or wages were zero. In fact we must have some factor, the value of which in money terms is, if not fixed, at least sticky, to give us any stability of values in a monetary system. [JMK, VII, pp. 303-4]

This does not confirm that Keynes is saying that this money-wage-rigidity is required for unemployment to exist. It is true that he is saying that for the constancy of the price level (and the wage rate) in the face of unemployment, the money wage must not fall. But since there it is not generally true that a fall in the money wage (or its downward flexibility) will remove unemployment, the blame for it cannot necessarily be laid on wage-rigidity. It is also possible to have a fall in money wage have no impact on unemployment. In this case, the unemployment rate would be an equilibrium one, although money values would not be stable.

A third argument supporting this interpretation is that Keynes, after the publication of the General Theory, endorsed the static equilibrium interpretation of his work by writing of Hicks's (1937) formalization: "I found it very interesting, and really have next to nothing to say by way of criticism." [JMK, XIV, p. 79]

It should be remembered, however, that Hicks - unlike Modigliani and the others - did not argue that wage rigidity explains unemployment; he simply provided a formalization of the static aspect of Keynes's theory. As Hicks (1982, p. 100)

himself was to write later of his creation, "it is no more than a part of what Keynes was saying, or implying, that can be represented in that manner." The Post Keynesians have been overly critical of the IS-LM model, in that it ignores expectations, uncertainty and historical time, and these criticisms give Keynes's endorsement of the model more significance than it deserves. The model - as even Hicks states - should be thought of as formalizing only a part of Keynes's analysis: that which analyses the determination of short-run equilibrium. There need be nothing wrong in confining attention to that part if it is remembered that it is not the whole. However, the model should not be used for purposes for which is was not intended: in particular, it should not be used to explore what is the crucial feature of the Keynesian revolution. It is this illegitimate use of the model that led - at least in part - to the development of the wage-rigidity view. Recognition of the dynamic arguments, with appropriate attention to uncertainty and a variety of other influences, is essential for understanding the complete Keynesian system, influences which are hidden and lost in the functional forms of the equations of the IS-LM model. Also, this focus on a single piece of evidence seems unwarranted. A look at his 1937 paper [JMK, XIV] in response to his critics tells a different story. There he spends more time on the discussion of uncertainty and expectations, central to his dynamic or historical analysis which is relevant for his wage flexibility discussions, than on the static model. Indeed, Young (1987) has gone so far as to argue that this paper may well have been in part Keynes's answer to the formulations by Hicks (and others).

While we have argued against this interpretation, we cannot help but notice that Keynes could have been perhaps a little more explicit, a little more forceful, in differentiating his theoretical contributions from those of the

classics. If he did not, can there be a reason for it? Perhaps a part of him did believe in the wage-rigidity argument to some extent? One may justify an affirmative answer by turning to his work prior to the General Theory to trace the development of his views on the role of wage rigidity in generating unemployment. In the Treatise [JMK, V, pp. 171, 183-6], in discussing the effects of a reduction in the quantity of money or a rise in the bank rate, Keynes argues that there may be a temporary fall in the level of output causing a unemployment to occur if the wage rate was sticky; but unemployment will over time reduce the money wage, and raise employment both by reducing the cost of employing workers and by raising investment demand (due to a lower interest rate caused by the deflation), so that full employment is restored.[17] Keynes is thus well in the 'classical' tradition; unemployment is caused by wage rigidity. In his lectures of 1932 and 1933 Keynes argued:

> In the case of a machine, we assume that when it is in over-supply - its short-period supply curve - drops like a stone ... We do not make any allowance for the machine disliking work ... Accordingly, whilst the short-period supply price of a machine is almost vertical, the short-period supply price of labour is nearer horizontal ...
>
> Now suppose the short-period supply price of labour was just like that of a machine; what would happen then? Prime cost would be next door to zero. There could be much more violent changes in relative prices and relative wages without affecting output. - Thus there would be no need for unemployment even during severe transitions. ...
>
> ... If we assume that the short-period supply price of labour is determined on the same principles as that of machines - and that prime costs (in terms of money) is next door to zero, - there will be no unemployment in the short period any more than in the long. ... It seems to me that this is that state of affairs generally postulated in Marshall's Principles of Economics ... [JMK, XXIX, pp. 50-52].

Thus it seems that Keynes did entertain this wage-rigidity view not too long before the publication of the General Theory, and this may serve to show that he had not yet truly broken the umbilical cord from this approach. But he certainly was on his way to doing so since around about the same time, and even before

these lectures, Keynes was beginning to reveal his doubts about the efficacy of wage cuts in removing unemployment. As early as June 1931, in a discussion on the question 'Are Wage Cuts a Remedy for Unemployment?' [JMK, XIII, pp. 367-372], Keynes discusses the adverse (from the point of view of reducing unemployment) income distributional consequences of wage cuts on aggregate saving and investment; similar doubts - again based on income distributional consideration- are raised in the early drafts of the General Theory [JMK, XIII, pp. 390-394], where Keynes argues that the overall effect of a wage cut on output may well be unfavourable.[18] A full analysis of when and why Keynes definitely changed his mind on the matter remains to be conducted.

6. Is the wage-rigidity view wrong?

If Keynes cannot be dismissed to be wrong, as argued in section 4, and if he is not entirely to blame for the misinterpretation as argued in section 5, it follows that the wage-rigidity view may be in error in its interpretation of Keynes and for this error its proponents may be to blame.

This raises two questions. First, why have Keynes's 'followers' followed him and fought so strongly in his name although they have not followed his interpretation for the causes of unemployment? Second, why have they erred?

Regarding first question it would seem that there is much, aside from the fundamental cause for unemployment, to fight for. First, there is the existence of unemployment and its policy implications. It turns out that policy implications of whether one believe or does not believe in the wage-rigidity view are rather similar (except for that regarding whether the wage should be made more flexible). Second, there was a theoretical advance compared to 'classics', even if Keynes's unemployment, like theirs', was caused by wage rigidity. Keynes discussed spill-over effects into goods market through his use aggregate demand

and aggregate supply schedules, and advanced the discussion of elements of demand. Keynes's analysis also lent itself easily to empirical investigations: in fact even the rational expectations group has taken over much of his theoretical apparatus.

Regarding the second question several tentative answers may be given.

First, its method was more familiar, and its results could be readily absorbed into mainstream theory and be understood in its terms; indeed, as we have already seen, unemployment had already been explained in terms of wage rigidity. In contrast, the method of the dynamic part was unfamiliar. This is the truly revolutionary character of Keynes's method, the full implications of which are yet to be grasped[19].

Second, and because of reason just given, wage-rigidity could be more easily introduced into formal models. The initial contributions of Hicks and Lange did that, as also did later contributions. But not so for other arguments. Only a start has been made, by introducing these factors as basically exogenous elements into standard static equilibrium models (Dutt, 1986-7), or by endogenizing some of the arguments into macromodels (Howitt, 1986). If neoclassical micro-foundations is required, that too can be provided, but by limiting attention to a few factors, as in Hahn and Solow (1986). The difficulties involved in formalizing these issues, coupled with the methodological morality of neoclassical economics [see Dow (1980)] which puts a premium on modelling as opposed to verbal analysis, implies attention being shifted away from the other, dynamic, issues: the focus on wage rigidity is the result.

Third, the tendency in academia not to read originals, but to read 'recent' literature. Thus, if there is a misinterpretation somewhere, especially by some influential interpreter, it tends to persist, since many others - who do not read

Keynes - are influenced by it. Now very few people read Keynes (perhaps due to a love for fashionable issues and pressures of publishing formal material and mathematically elegant models), and even fewer, if they read the General Theory, reach chapter 19.

Finally, there could be political and ideological reasons. A strong belief in the benefits of free markets, and the observation that unemployment exists, naturally leads to the conclusion that the latter is explained by (temporary and perhaps removable) distortions and imperfections. An even more obvious ideological position is revealed if the blame for these rigidities is placed on the labour unions. While not all theories of wage rigidity seem to take this position, workers seem to have the major - if hidden - role in creating this 'mischief'.[20]

7. Conclusion

We conclude that the identification of Keynesian economics with wage rigidity is not warranted, and can be explained mainly in terms of the theoretical structure and methodological morality of mainstream economic theory, by academic pressures and fashions, and perhaps by ideology.

Once this is more widely recognized, the debates between the new classicals and mainstream Keynesians regarding whether rigidities are important will become largely irrelevant. Keynes's revolution will be seen as having much more to do with the introduction of dynamic factors than with money wage rigidity, and more effort will be expended on understanding them.

FOOTNOTES

1. A few brief points are made regarding the effects of wage changes. See, for example, pg. 251.

2. The coexistence of a static model and a dynamic or historical-time model in the General Theory has also been pointed out by Chick (1985), who argues that Keynes's device of expressing aggregate demand and aggregate supply curves in terms of wage-units (so that changes in wage units would not shift them) allows the "historical-time attributes of production" to be captured in a static model. Our terminology is somewhat different, reserving the term static or equilibrium model for the fixed-wage analysis (which nevertheless ought to take into account the fact that the economy is travelling along historical time), and the term dynamic or historical to examine the effects of changes in the money wage.

3. These effects will be inoperative with flexible exchange rates.

4. See Coddington (1983).

5. See Dutt (1987) for a more precise discussion.

6. According to Keynes the so-called 'classical' economists used a dichotomy by which monetary factors were ignored in the analysis of 'real' phenomena. He criticized this dichotomy, and in our interpretation replaced it with this one. Coddington (1983) also argues that Keynesian economics replaced the classical dichotomy by another one, involving the determination of output given the price level (the price being determined by costs in another part of the analysis). While this type of dichotomy is seen to be present in the IS-LM model, it is not to be found in The General Theory, in which the price level is a variable right from chapter 3.

7. Modigliani seems to have overlooked the case of zero interest inelasticity of investment.

8. Patinkin, however, has always stated that the real balance could not be relied in practice to take the economy to full employment.

9. There were early critics of these positions as well. See, for example Scott (1949).

10. See Malinvaud (1985) for example.

11. See Fischer (1977) and Taylor (1979); Akerlof and Yellen (1986), McDonald and Solow (1985) and Solow (1979); and Akerlof and Yellen (1987), for the three types of models, respectively.

12. If involuntary unemployment is not interpreted as an excess supply of labour but as a position of supply-demand balance in the labour market, from which increases in the level of employment are possible due to increases in aggregate demand [due to wealth-effects of labour supply, for example, as in Darity and Horn (1983)], unemployment will not result in a fall in the money wage, so that this argument is nipped in the bud (and the existence of unemployment has nothing to do with rigid wages). To give the argument a change, in what follows we assume that involuntary unemployment implies a situation of excess supply of labour, so that there is a tendency for the money wage to fall.

13. These arguments were originally made by Kalecki (1944). Even Patinkin (1987) writes that "since the operation of this effect this deflationary context suffers from the same limitations described in ... chapter [19], I do not believe that taking account of it would have affected Keynes's basic conclusion about the inefficacy of a wage decline as a means of increasing employment".

14. See Dutt and Amadeo (1988) for more details and references.

15. In starting Chapter 19, Keynes seems to be hinting in this direction when he says that "[i]t would have been an advantage if the effects of a change in money-wages could have been discussed in an earlier chapter." [JMK, VII, p. 257].

16. Dynamic issues had to be incorporated into the static model to take account of the fact, as noted above, that the economy was travelling along historical time.

17. See Amadeo (1988) for a more complete analysis.

18. See Amadeo (1988) for a fuller discussion.

19. Skott (1983) also emphasizes the dynamic aspects of Keynes's work. See, however, Kohn (1986) for a view that Keynes was shunting macroeconomics from the path of sequential (dynamic) analysis to equilibrium (static) analysis. While this interpretation is correct for the relatively formal aspect of Keynes's work, it does injustice to the many dynamic issues that he analyzes, although using the equilibrium approach as a point of departure with which to analyze them.

20. Even the efficiency-wage theory, which explains wage rigidity in terms of the profit-maximizing behaviour of the firm usually assumes an efficiency-wage relationship which can be interpreted to be resulting from worker 'mischief'.

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TEXTOS PARA DISCUSSÃO

DEPARTAMENTO DE ECONOMIA - PUC/RJ

150. Abreu, M.P. e W. Fritsch; "GSP Graduation: Impact on Major Latin American Beneficiaries".

151. Franco, G.H.B.; "Fiscal 'Reforms' and the Ends of Four Hyperinflations".

152. Carneiro, D.D.; "The Cruzado Experience: An Untimely Evaluation After Ten Months/1".

153. Amadeo, E.J. e A.K. Dutt; "The Neo-Ricardian Keynesians and the Post-Keynesians".

154. Modiano, E.M.; "The Cruzado Plan: Theoretical Foundations and Practical Limitations".

155. Franco, G.H.B.; "Política de Estabilização no Brasil: Algumas Lições do Plano Cruzado".

156. Neto, A.F.; "Problemas do Controle Monetário no Brasil".

157. Abreu, M.P. e W. Fritsch; "G-5 Policies, Credit Availability and Latin American Growth".

158. Bacha, E.L.; "Do Acordo de Plaza à Moratória Técnica: os Tortuosos Caminhos da Renegociação da Dívida Externa Brasileira, 1983-87".

159. Franco, G.H.B.; "The Rentenmark 'Miracle'".

160. Moggridge, D.E.; "Problems in the History of the International Economy since 1870: the Gold Standard".

161. Correa do Lago, L.A.; "Investimentos Diretos no Brasil e a Conversão de Empréstimos em Capital de Risco".

162. Moraes, P.B.; "Keynes and the Role of Monetary Policy in a Stabilization Program".

163. Werneck, R.L.F.; "Public Sector Adjustment to External Shocks and Domestic Pressures in Brazil, 1970-85".

164. Moggridge, D.E.; "On Editing Keynes".

165. Modiano, E.M.; "Necessidade e Dificuldade de um Novo Cruzado".

166. Modiano, E.M. e W. Fritsch; "A Restrição Externa ao Crescimento Econômico Brasileiro: uma Perspectiva de Longo Prazo".

167. Franco, G.H.B.; "Um Modelo para a Adoção de Indexação em Condições de Alta Inflação".

168. Amadeo, E.J.; "Multiplier Analysis".

169. Amadeo, E.J.; "Expectations in a Steady State Model of Capacity Utilization".

170. Bacha, E.L.; "Project Analysis and Income Distribution: Notes on the IDB/ OECD Conference".

171. Modiano, E.M.; "Plano Cruzado: a Primeira Tentativa".

172. Feinberg, R.E. e E.L. Bacha; "When Supply and Demand don't Intersect: Latin America and the Bretton Woods Institutions in the 1980s".

173. Modiano, E.M.; "O PIB em 1987: Expansão, Recessão ou Estagnação?".

174. Bacha, E.L.; "Escaping Confrontation: Latin America's Debt in the Late Eighties".

175. Werneck, R.L.F.; "Um Modelo de Simulação para Análise do Financiamento do Setor Público".

176. Amadeo, E.J.; "Controversies over the Equilibrium Position in Keynes's General Theory".

177. Amadeo, E.J.; "Teoria e Método nos Primórdios da Macroeconomia [IV]: Hicks e o Difícil Compromisso entre Tempo e Equilíbrio".

178. Franco, G.H.B.; "Direct Investment in Brazil: Its Role in Adjustment and Emerging Issues".

179. Carneiro, D.D.; "Heterodoxia e Política Monetária".

180. Modiano, E.M.; "Repasses Mensais X Reajustes Trimestrais".

181. Bacha, E.L.; "Moeda, Inércia e Conflito: Reflexões sobre Políticas de Estabilização no Brasil".

182. Corrêa do Lago, L.A.; "Economic Relations of Brazil and the European Economic Community in the Post-War Period: a Historical Perspective and the Present Situation".

183. Modiano, E.M.; "Novo Cruzado e Velhos Conflitos: o Programa Brasileiro de Estabilização de 12 de Junho de 1987".

184. Franco, G.H.B.; "Assimetrias Sistêmicas sob o Padrão Ouro".

185. Fritsch, W. e G.H. Franco; "Investimento Direto: Teoria e Evidência Empírica".

186. Moraes, P.B. e L. Serven; "Currency Substitution and Political Risk: México 1978-82".

187. Abreu, M.P. e W. Fritsch; "Obstacles to Brazilian Export Growth and the Present Multilateral Trade Negotiations".

188. Abreu, M.P. e W. Fritsch; "New Themes and Agriculture in the New Round: A View from the South".

189. Abreu, M.P. e W. Fritsch; "Market Access for Manufactured Exports from Developing Countries: Trends and Prospects".

190. Modiano, E.M.; "The Two Cruzados: The Brazilian Stabilization Programs of February 1986 & June 1987".

191. Abreu, M. de P.; "Indicadores Sociais Revisitados: Paradigmas Internacionais e Brasileiros".

192. Abreu, M. de P.; "British Investment in Brazil: The Relevant Century, 1850-1950".

193. Abreu, M. de P.; "Brazil as a Creditor: Sterling Balances, 1940-1952".

194. Abreu, M. de P.; "On the Memory of Bankers: Brazilian Foreign Debt, 1824-1943".

195. Fritsch, W. e G.H.B. Franco; "Investimento Direto: Tendências Globais e Perspectivas para o Brasil".

196. Werneck, R.L.F.; "Uma Contribuição à Redefinição dos Objetivos e das Formas de Controle das Empresas Estatais no Brasil".

197. Bacha, E.L.; "Capturing the Discount: Towards a Debt Facility at the Bank and the Fund".

198. Bacha, E.L.; "Latin America's Debt Crisis and Structural Adjustment: The Role of the World Bank".

199. Bacha, E.L.; "Latin America's Economic Stagnation: Domestic and External Factors".

200. Moraes, P.B.; "A Condução da Política Monetária durante o Plano Cruzado".

201. Franco, G.H.B.; "O Balanço de Pagamentos do Brasil: 1870-1896: Novas Estimativas".

202. Carneiro, D.D. e R.L.F. Werneck; "External Debt, Economic Growth and Fiscal Adjustment".

203. Fritsch, W. e G.H.B. Franco; "Brazilian External Adjustment in the 1990s: The Role of Foreign Direct Investment".

204. Moraes, P.B.; "Inflação e o Número de Intermediários Financeiros".

205. Franco, G.H.B. e E.J. Amadeo; "'Finance', Poupança e Investimento: Nem Keynes nem Robertson".

206. Fritsch, W. e G.H.B. Franco; "Foreign Direct Investment and Patterns of Industrialization and Trade in Developing Countries: Notes with Reference to the Brazilian Experience".