PSL Quarterly Review

vol. 78 n. 314 (September 2025)

Article

On Professor Patinkin's *Money, Interest, and Prices*

LUIGI SPAVENTA*

Abstract:

The purpose of this essay is to point out two errors which exist in Patinkin's Money, Interest and Prices. The aim is to show that the rehabilitation of the neoclassical theory of money and interest is not convincing. I shall try to show that Patinkin's refined version of the quantity theory presents the same pitfalls as the older versions; that his attack on the Keynesian theory of liquidity preference misses the point, while his theory of the demand for money and of the rate of interest is open to many objections.

How to cite this article:
Spaventa L. (2025), "On Professor Patinkin's *Money, Interest, and Prices*", *PSL Quarterly Review*, 78 (314), pp. 287-298.

DOI: https://doi.org/10.13133/2037-3643/19115

JEL codes:
E13, E12, E40

Keywords:
neoclassical macrotheory, real balance effect, redistributive effects, comparative statics, stability analysis

Journal homepage:
https://rosa.uniroma1.it/rosa04/psl_quarterly_review

1.

The purpose of this paper is purely negative: to point out some errors which I think exist in Professor Patinkin's *Money, Interest and Prices* [(Patinkin, 1956)]. Moreover the kind of criticism I shall move, far from being new, is of the same brand of those moved against certain aspects of the classical and neoclassical theory by the Keynesian and post-Keynesian economics. These latter criticisms Professor Patinkin believes to have overcome with his new approach: I maintain that it is not so, at least as far as the questions I shall touch upon are concerned. I shall try to show that Patinkin's refined version of the quantity theory presents the same pitfalls as the older versions; that his attack on the Keynesian theory of liquidity preference misses the point, while his theory of the demand for money and of the rate of interest is open to many objections; and that his attempt to bring close together the classical and the Keynesian theory of employment, eliminating some alleged inconsistencies in the latter, fails to be successful.

All through this paper I shall try to remain as much as possible on the same ground as Patinkin, not questioning his basic assumptions and using the same tools. In particular I shall attribute as

* Paper presented at Mr. Nicholas Kaldor's seminar for research students at King's College, Cambridge, Easter Term 1957-58. For information about its publication here, see previous note by Di Matteo (2025) in this issue [Editor's note].

much importance as he does to the concept of money illusion and to the assumption that individuals are free from it as well as to price flexibility and to the working of the real-balance effect. Indeed it must at once be said that Patinkin's approach could be easily criticized on a general and methodological ground, and many of his conclusions accordingly dismissed *a priori*. For he explicitly admits that his main concern is the formal consistency of the model: and in this picture the real balance effect matters only as a purely abstract piece of thinking. Thus Patinkin is not very interested in representing the actual working of the economic system; though rigid quantity theorist, he recognizes that in the reality things might not follow the rules of the quantity theory; and as for the real balance effect, once dropped the many and so severe assumptions which condition its working (and which Patinkin duly emphasizes), what remains is a world largely Keynesian in character. This being so, one cannot help wondering what is the relevance of Patinkin's achievement for the economic analysis, and, for that matter, of any discussion of his system in the same terms and on the same assumptions. But I prefer not to insist any further in this kind of general criticism; and instead to devote my attention to see whether, even accepting those abstract concepts and irreal assumptions, Patinkin's conclusions are justified.[1]

2.

Let us first recall in what the concepts of real balance effect and money illusion consist and sketch briefly the essentials of Patinkin's model.

The first version of the real balance effect was presented by Pigou [(1947)], and generalized by Patinkin in his "Price Flexibility and Full Employment" [(1948)]. It consisted in making savings and consumption a function not only of income and of the rate of interest, but also of the real value of cash balances, M/p, held by the individuals, in order to show "That always exists a sufficiently low price level such that, if expected to continue indefinitely, it will generate full employment". The nature of the effect is more extensively dealt with in *Money, Interest and Prices*. In a money economy, the individual's excess demand function for any commodity depends not only on the relative prices and on the real income, but also on the real balances, that is on the real value of his initial money balances: the individual will adjust his money balances "so as to maintain a desired relationship between them and his planned expenditures on commodities" [(Patinkin, 1956, p. 20)]. The nature of this relationship depends on objective and subjective factors: the important thing is that the individual, in establishing this relationship, is only guided by the *real* value of the balances. It follows that a change in real balances, due to a change either in nominal money holdings or in prices, insofar as it alters the relationship, is followed by an adjusting change in the demand for commodities: the real balance effect "measures the influence on demand of a change in real balances, other things being held constant" [(ibid., p. 21)].[2] In general (an exception being inferior goods) the effect is positive, in the sense that an increase in real balances causes an increase in demand.

Accordingly the concept of money illusion can be defined in a way which is different from the one normally used. As the individual is only concerned with the *real* value of his money holdings (which determines his *real* expenditure, his *real* amount of bond holdings, etc.), his behaviour

[1] A different approach, based on the general criticisms mentioned in the text, should be followed, if one were to examine Patinkin's work not in isolation, but in the more comprehensive picture of the trends of the economic thought in the United States. Of this thought, or at least of one of its currents, conservative in its approach both to theory and to policy, Patinkin is now one of the outstanding exponents: and this accounts for the great favour with which his book has been received in America, as well as for the indifference which has surrounded it in the United Kingdom.

[2] Unless otherwise mentioned, all the passages quoted below are taken from *Money, Interest, and Prices*.

should not be affected by a change in his endowment of money holdings *and* by a simultaneous equi-proportional change in all money prices, which together leave the real value of the balances unchanged; but it should be affected by either a change of his money endowment or a proportionate change of all money prices (it is this point which makes the Patinkian definition of money illusion different from the traditional one). If it is not so, that is if the individual's demand for commodities does not depend solely on relative prices, real income and real balances, the individual is said to suffer from money illusion.

The main assumptions which underlie Patinkin's model are: perfect competition, wage and price flexibility, absence of money illusion, as defined above, absence of changes in expectations, absence of distribution effects, as far as both changes in the quantity of money and changes in prices are concerned. Nothing needs to be said about the first two assumptions; Patinkin's interpretation of the third I consider one of the weak points of his treatment; dropping the fourth, as Patinkin does at a certain stage, gives rise to other difficulties; and the last I believe to be inconsistent at least in one case. This points will be developed later, in the attempted critique to the model.

Four markets are included in the model: for labour services, for commodities, for bonds and for money. Assuming full employment, and therefore considering fixed the aggregate supply and the aggregate capital equipment, we have the following demand and supply functions:

Table 1

	Demand	**Supply**
Labour	$N^d = Q(w/p\,, K_o)$	$N^s = R(w/p)$
Commodities	$E = F(Y_o, r, M_o\ /\ p)$	$Y = Y_o$
Bonds	$B^d/rp = H(Y_o, 1/r, M_o^H\ /\ p)$	$B^s/rp = J(Y_o, 1/r, M_o^F\ /\ p)$
Money	$M^d = pL(Y, r, M_o\ /\ p)$	$M^s = M_o$

where w represents wages, p prices, K the capital equipment, Y the gross real national income, r the rate of interest, B the nominal amount of bonds and M the money balances.

Following my program of remaining on Patinkin's ground as much as possible, I shall not question the form of these functions nor the variables taken into account. All the functions, as it can be seen, imply the absence of money illusion, insofar as they express the relevant variables in real terms: a proportional variation in the quantity of money and in prices leaves the real value of these variables unaffected, altering proportionally, when it is the case (e.g. in the demand and supply of bonds), their nominal values. In more general terms, "any change which affects neither real income, the rate of interest, nor real balances does not affect economic behaviour" (p. 134). Accordingly the functions reflect the operation of the real balance effect, as due to a change in prices, on the real value of the variables. For the moment I shall not touch upon other properties of the functions and of the model, which, if necessary, I shall mention later.

The functions of demand and supply written above must be equal in equilibrium. First Patinkin shows that the system so obtained has a determinate solution and that it is stable, owing to the corrective force of the real balance effect. With this I am not concerned. However a point is worth noting, which we shall find of a certain importance in dealing with the working of the model in conditions of unemployment: as it also appears from the form of the function, the real balance

effect is assumed to operate through, and the stability brought about by, simple changes in prices, whether or not also wages change, and therefore whether or not prices move in relation to wages. After that Patinkin goes on to analyse at length the effect on the system of an exogenous disturbance taking the form of a change in the quantity of money: his conclusion being that, because of the operation of the real balance effect and the assumed absence of money illusion, prices will vary in proportion while the rate of interest remains unaffected. These results allow Patinkin to vindicate the pre-Keynesian position as regards both the quantity theory and the invariance of the rate of interest, and to invalidate the Keynesian interest theory. In order to test their validity, let us follow the path which leads to them, through an analysis of the demand and supply functions of bonds, of the working of the commodity and bonds markets, of the money market and the demand for money.

3.

The invariance of the rate of interest is first shown by Patinkin to result from the form of the demand and supply functions from [for] bonds, which are assumed to determine the rate of interest. As for the demand, which comes from households, because of the absence of money illusion, "a doubling of prices and initial household money holdings, real income and the rate of interest being held constant, does not affect the amount demanded of *real* bond holdings, B^d/rp; that is, it causes a doubling of the amount demanded of *nominal* bond holdings, B^d" (p. 138). As for the supply side, which is mainly constituted of firms, the above changes do not affect the real position of the firms nor their planned activities. "Hence there is no change in the real value of bonds, B^s/rp, which firms deem it desirable to have outstanding. But, due to the increase in costs and prices, these same activities now require twice the nominal volume of bond financing as before. Hence B^s doubles" (p. 141).

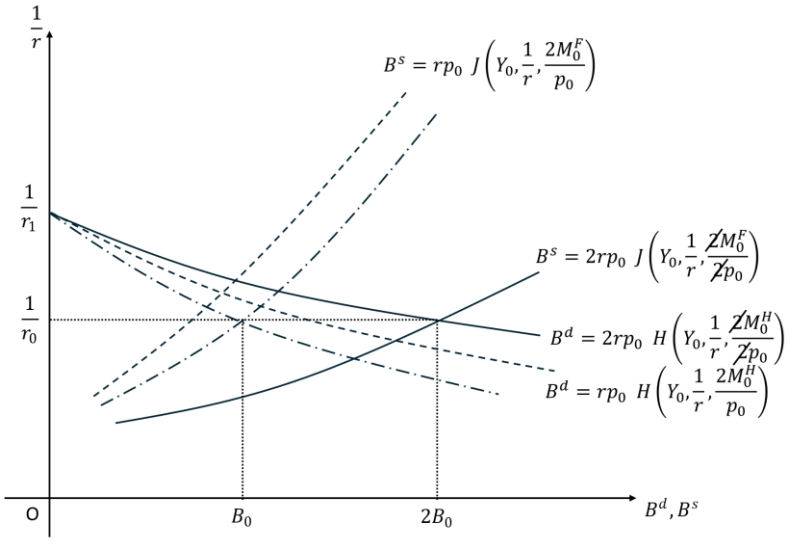
Now of course this argument, insofar as it *assumes* the rate of interest to be invariant and remains in the field of comparative statics, is formally unquestionable. But perhaps, already at this stage, some doubts might be advanced on the justifications brought forward for the behaviour of the supply side, and on the restrictions which the absence of money illusion seems to impose on this behaviour. Let us maintain the simultaneous doubling of prices and money holdings (comparative statics), but let us drop the assumption that the rate of interest must be held constant. Now it seems to me that a distinction must be drawn between the bonds already outstanding before the doubling of money holdings, wages and prices and the bonds which the firms had planned to issue before this doubling, to carry on their future investments. If it is sensible to say that the firms, after the doubling of prices, will double the amount of bonds to issue, there is no reason for them to double the amount of bonds already outstanding: the investments corresponding to these bonds had already taken place before the doubling; and if their running costs are now twice as much as before, also the prices of their products are twice as much as before. If this is so, the nominal volume of bonds in circulation will increase but less than double; but if at the same time the demand for nominal bond holdings has doubled, the price of bonds will increase and the rate of interest will fall. Nor this implies any money illusion: for this very decline of the rate of interest allows, as it can be verified from the function, the real value of bond holdings to remain constant, even if the increase in prices is not matched by a proportionate increase in the nominal amount of bonds – the gap being filled by the increase in the price of bonds.

We now pass to considering all the functions together, in the working of the model. The argument is first presented by Patinkin in terms of comparative statics: "if for the amount of

money M_o the system is in equilibrium at the wage rate w_o, price level p_o, and r_o, then for the amount $2M_o$ it is in equilibrium at $2w_o$, $2p_o$ and r_o" (p. 158). In what he calls the dynamic approach Patinkin admits that the doubling in the quantity of money determines an initial fall in the rate of interest, as the improved liquidity position shifts in figure 1 the demand curve to the right and the supply curve to the left. But he adds:

> "this fall in the rate of interest is temporary [...]. In Wicksell's familiar terms, this initial decline in interest creates a discrepancy between the market rate and the natural rate... Hence the investment component of the aggregate demand curve rises, further strengthening the inflationary pressure on the commodity market.

Figure 1



> But as these pressures push the price level upwards, there is a reaction back on the bond market. Specifically, the price rise causes the dashed demand curve to shift to the right less than the corresponding supply curve. Hence the downward movement of the interest rate must eventually be reversed. In particular, when the price level has finally doubled, this rate will have necessarily climbed back again to its original value, r_o. For [...] at this rate individuals originally demanded B_o units of bonds and supplied the same amount; hence now, at a doubled price level and quantity of money, they must – by the absence of money illusion – demand $2B_o$ units of bonds and again supply the same amount. Therefore, the demand and supply curves must again intersect at the price corresponding to the rate of interest r_o" (pp. 160-61).

Now, the first thing to be noted here is that the formal distinction between comparative statics and dynamics does not prevent a substantial confusion between the two approaches, a confusion which occurs again and again in Patinkin's treatment, and which must be an hereditary trait of the quantity theorists. Conceptually the distinction should be quite straightforward. In one case we consider two situations which only differ in that money holdings in one of the two are, say, twice as much as in the other. The usual examples are a change in the monetary unit or a doubling overnight of the quantity of money or the comparison of two systems which only differ as for the quantity of money: the change has an instantaneous character, no lag and no dynamic process being involved. But in the other case, when we want to follow a dynamic approach, we cannot be

content with comparing two situations, disregarding the path which should lead from a situation to the other, for it might well happen that the results we obtain in this second case be quite different from those obtained with the dynamic approach. This was true for the traditional form of the quantity theory and it is not less true for the Patinkian version, which never succeeds in disentangling the argument from the comparative statics.

Thus the passage quoted above clearly involves a circular reasoning from a dynamic point of view: for, once we allow the rate of interest to vary, prices can be shown to double only if the rate of interest is back in its previous position; while the previous position of the rate of interest can be reestablished only if prices have doubled. In other words, in order to obtain the desired result for either of the two variables (prices and rate of interest), we must assume that the other has already settled in the new equilibrium position: and this is comparative statics, not dynamics. Dynamically, the argument presented above in the analysis of the supply function of bonds acquires all its importance, no matter whether it was valid or not in the static case. We saw that a) firms are not likely to double their supply of bonds, and therefore the rate of interest is likely to fall; b) this is perfectly compatible with the absence of money illusion, even if prices double, insofar as the real quantity of bonds may be kept constant not only by an increase in the number of bonds, but also by a rise in their price. *A fortiori*, a consideration of the dynamic process in all the markets shows us that prices do not react instantaneously to the increase in the quantity of money, and therefore that the decline in the rate of interest has more chances to last without being corrected. At this point Patinkin brings in the discrepancy between natural and market rate, which should reinforce the pressure of demand in the investment sector, increase the inflationary gap already existing and further increase prices; while this increase should in turn react on the demand and supply curves for bonds and lower the rate of interest. I need not here question that there exists such a relationship between rate of interest and investments and between prices and rate of interest. I simply deny that the B_s curve *must* intersect the B_d curve in the point corresponding to the previous rate of interest. For it is perfectly consistent that, the rate of interest remaining at a lower level, the equality between it and the natural rate be brought about by a more than proportional increase in the prices of investment goods. On the other side this more than proportional increase in the price of investment goods need not create an inflationary gap, which would bring prices down, as its negative effect on the entrepreneurial decisions is matched by the positive effect of the decline of the rate of interest. In this way an equilibrium could be reached, in which prices have more than doubled and the rate of interest has fallen, and in which moreover the real quantities have remained the same, so that no money illusion is involved.

This result, of course, has no importance in itself, being only one of many possibilities. The foregoing argument was only meant to be a first hint of the feeling that Patinkin's neat model is unable to deal with a dynamic process, however oversimplified it be, even without questioning the unrealistic assumptions and the hypotheses about the determinants of the variables which condition its working.

4.

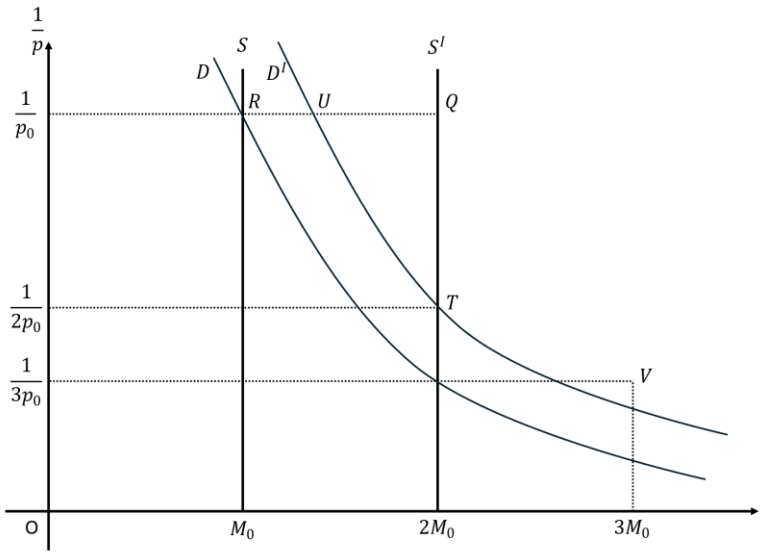
An analysis of Patinkin's treatment of the money market, the demand for money and the liquidity preference reinforces this feeling and offers fresh examples of the confusion between dynamic and static approach and of the inconsistency in the definition of money illusion already noted. When the confusions are clarified and the inconsistencies eliminated, the Patinkian automatism vanishes, and one finds oneself in the world of ch. 21 of the *General Theory*, where the extent to

which a change in the amount of money affects prices is determined by the value of the relevant elasticities.

From the form of the demand function for money it can be seen that the demand for money can be made dependent either on the price level, the rate of interest being held constant, or on the rate of interest, the price level being held constant. Patinkin deals with both approaches, and in each of them considers separately the case in which the quantity of money is allowed to vary and the case in which it is kept constant. In this connection he introduces a conceptual complication, the relevance of which I have not been able to grasp fully – namely the distinction between individual demand curves and market equilibrium curves. Eventually he examines together the reactions of the money market and of all the other markets to a change in the quantity of money.

If we assume the demand for money to depend on prices and we keep constant the supply of money, the demand curve for money (measuring on the y axis the reciprocal of the price level and on the x axis the amount of money demanded) will be downward sloping, but with a less than unitary elasticity. For, Patinkin argues, an increase in prices not accompanied by an increase in the money endowments creates a negative real balance effect in the demand for real balances as well as in the demand for commodities; it follows that the demand for real balances will decrease and the demand for nominal balances increases less than in proportion to the increase in prices. But if we assume that the initial money endowments are, say, doubled, the curve will shift to the right (fig. 2).

Figure 2



At first, when prices have not yet changed, individuals will "feel themselves able to indulge in a higher level of liquidity" (p. 43). Then prices rise, and the new demand curve *must* intersect the new supply curve (corresponding to $2M_o$) at $1/2p_o$ because of the absence of money illusion. If we now trace the locus of all the equilibrium points generated changing the amount of money, we

obtain a rectangular hyperbola, a market equilibrium curve with unitary elasticity. This latter curve, Patinkin says, was mistaken by the neoclassical cash-balance approach for the demand curve for money. The neoclassical economists did not realize that if the excess demand for money in terms of the cash-balance equation, $KPT - M$, correctly reflects the property "that an equi-proportionate change in P and in M causes a proportionate change in the amount of money demanded", on the other side "a change in P alone generates a real balance effect, hence a change in the planned volume of transactions, T, and hence a non-proportionate change in the amount of money demanded, KPT" (p. 103).

Now, in connection with this part of Patinkin's argument, it must first be noted that, if the neoclassical theorists did not think of the possibility that a change in P affects T, Patinkin has not thought of the possibility that a change in M affects K. Yet he admits that individuals confronted with increased money balances feel themselves able to indulge in a higher level of liquidity: but if they decide to preserve this higher level of liquidity, if, one could say, money balances have a positive income elasticity, prices will never double, unless the doubling of prices is statically implied by definition. True, Patinkin deals later with the effects of shifts in the liquidity preference, but he does not relate them in any way to changes in the quantity of money. It must be observed incidentally that with an adequate change in K another possible solution, different from the one suggested by Patinkin, can be found for the model: a solution in which, following to a doubling in the quantity of money, prices do not double; or in which prices double and the rate of interest falls.

As for the critique to the traditional quantity theory, it does not seem to me that Patinkin's remarks are very sensible. Once we admit the stability of equilibrium, the individual demand curve, which assumes the supply of money to be constant, becomes irrelevant: whatever its shape, the system is always bound to get back to the point of intersection with the supply curve; and this is uniquely dependent on the price level, which is the independent variable. On the other side, in the quantity equation the independent variable is the quantity of money, and the case of an independent increase in P is not considered; moreover the equation always depicts a state of equilibrium, in which $KPT - M = 0$. The unitary elasticity of the curve follows from this very assumption of equilibrium and by the fact that the curve does not and cannot reflect a change in P not accompanied by a change in M. Why this curve should not be called a demand curve, I fail to understand: the distinction between an "individual demand curve" and a "market equilibrium curve" being analogous to that between an individual's or a firm's demand curve and the aggregate demand curve in the value theory.

Next Patinkin assumes the price level constant and obtains a demand curve for money which depends on the rate of interest and is negatively sloping. But this curve, again, is an individual demand curve, which assumes that the supply of money be kept constant and only the rate of interest be allowed to vary: it tells us nothing, Patinkin emphasizes, about the dependence of the rate of interest upon the amount of money, and therefore has nothing to do with the Keynesian curve of liquidity preference. The latter, with its negative inclination, shows Keynes's failure to distinguish between the dependence of the demand for money on the rate of interest and the dependence of the rate of interest on the amount of money. When we examine the interdependent reactions of the various markets to a change in the quantity of money, we realize that while the first relationship is true, the second is not; for the rate of interest is independent from the amount of money, and therefore the market equilibrium curve can be represented with a straight line at the level of the current rate of interest.

At these conclusions, already reached by the analysis of the commodity and bond markets, Patinkin arrives again by the analysis of the money market. First, in order to better criticize Keynes, he decomposes the demand function for money into demand for real transactions and precautionary balances and demand for real speculative balances:

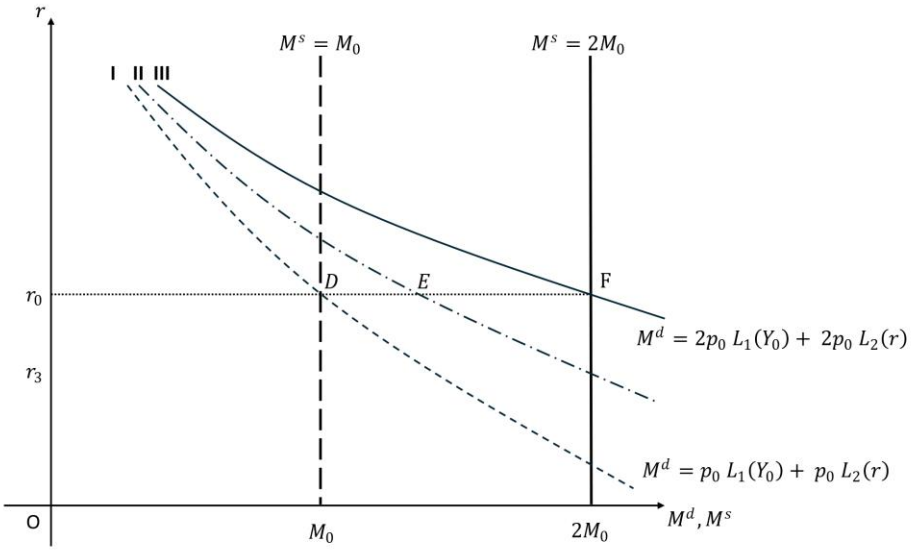
$$p \cdot L_1(Y_o) + p \cdot L_2(r, M_o / p_o) = M_o.$$

This equation, however, differs from the Keynesian equation, which Patinkin writes

$$p \cdot L_1(Y_o) + L_2(r) = M_o,$$

not so much because of the introduction of the real balances in the speculative demand, as because of the p by which $L_2(\ \ )$ is multiplied. This p reflects the absence of money illusion in the speculative demand and assures the invariance of the rate of interest: for, according to the Patinkian equation, if money and prices double, the demand for nominal speculative balances will double and the demand for real balances will remain unchanged. On the other hand the Keynesian equation implies that in such a situation the demand for nominal speculative balances will remain unchanged and hence that the demand for real speculative balances will decrease: "in other words it implies that the demand for *real* speculative balances is at one level when the monetary unit is called the dollar and at quite another level when it is called the peseta" (p. 174). After that Patinkin shows, with the same kind of reasoning used for the bond market, how a doubling in the quantity of money shifts the demand curve for money to the right: the first shift will not be sufficient for the demand to absorb all the additional quantity of money at the existing rate of interest; but then, once prices have doubled, the position of the curve will necessarily be such that its intersection with the new supply curve will take place at the previous rate of interest (fig. 3).

Figure 3



In this way the additional amount of money is wholly absorbed by the rise in prices, and need not seek an outlet in purchasing securities and depressing the interest rate. The Keynesian proposition holds only if prices are not flexible or, assuming, as the classical and neoclassical theories do assume, full employment, only if there is money illusion.

This, in sketch, is Patinkin's argument. It would be tiresome to point out again the usual confusion between statics and dynamics, clearly shown by the example of the dollar and the peseta. Something has already been said about the irrelevance of the distinction between demand curve and market equilibrium curve. This is particularly true for the criticism to the Keynesian liquidity preference: the Keynesian curve is clearly intended to represent the behaviour of the rate of interest in response to changes in the quantity of money. These changes may or may not determine shifts of the curve, according to whether they affect or not the state of liquidity preference; one might also maintain that the curve does not exist, insofar as every change in the quantity of money would shift it [(cfr. Kahn, 1954)]. But such shifts have nothing to do with those considered by Patinkin, they depend on the change of the liquidity preference and therefore are not logically inherent in the nature of the curve.

Let us now consider Patinkin's contention that the Keynesian equation of liquidity preference implies money illusion. I have shown above that the adjustment of the real quantity of bond holdings to an increase in the quantity of money and in prices can be brought about not only by an increase in the nominal quantity of bond holdings, but also by a rise in the price of bonds, that is by a decline in the rate of interest. Now, the speculative balances, for the very fact that they are speculative, are directly sensitive not so much to the price of commodities as to the price of bonds: in other words the margin is between holding speculative balances and holding bonds, not between holding speculative balances and buying commodities. These balances, however, are responsive to an increase in the quantity of money and a rise in commodity prices; but their adjustment is mediate, and takes place through the rise in the price of bonds. I cannot see why this should be imputed to money illusion, when there is no illusion whatever in the corresponding behaviour of the individuals, unless the notion of money illusion is so narrowed as to imply the impossibility for the rate of interest to decline by definition. And this represents a further proof of what I have been trying to show: namely that the Patinkian approach, in spite of the new tools of which it makes use, does not provide any fresh valid reason to justify the acceptance of old theories and the dismissal of new ones.

This of course is even more true if we take into account uncertainty and expectations. Patinkin is proud to prove that "an internally consistent theory of money can be constructed even on the assumption that perfect certainty exists with respect to the future value of the variables" (p. 172) (which is of course analytically irrelevant: insofar as uncertainty exists in this world, any theory which does not take it into account is valueless). When he introduces the speculative motive, one would expect him to drop the assumption of perfect certainty, but he insists in making the individuals' behaviour dependent only on the real value of the variables. But those very changes in the nominal quantities, which are supposed to leave the real value of the variables unchanged, alter the state of expectations. And the absence of money illusion, inasmuch as it means neglect of the future course of the economic variables or perfect certainty, appears to be a sign of a more singular and less realistic kind of illusion.

5.

I now come to Patinkin's theory of unemployment. Its essence consists in the belief that in principle, abstracting from the influence of expectations and from the length of time required for the adjustment, an adequate price decline can always, through the real balance effect, restore the system to a position of full employment. Keynes systematically neglected the real balance effect, that is the effect of a price decline on aggregate demand: a fall in wages and prices was considered

by him only in the light of an increase in the real quantity of money, and therefore assumed to operate on the economy only through a fall in the rate of interest. When we take the real balance effect into account, we must accept the classical contention that automatic market forces exist, which could succeed in raising income to the full employment level. The question is open, however, on the efficacy of these adjusting forces. The intensity of the price decline required to restore full employment, the length of the time necessary for the adjustment, the adverse effect of the price fall on expectations, the embarrassment caused by it to those entrepreneurs who are heavily indebted: all these factors, Patinkin admits, prevent us from relying on the adjusting properties of the real balance effect. But in this way, whatever are the differences in the policy suggested and in the faith in monetary policy, from a purely theoretical point of view the distance between Keynesian and classical economics is narrowed. Moreover, the consideration of the real balance effect enables us to explain the involuntary unemployment without placing any restriction on the movement of the real wage rate, the reduction of which is neither a necessary nor a sufficient condition for the reestablishment of full employment; if the real balance effect were not prevented to work by the adverse factors mentioned above, unemployment could be eliminated even if real wages remained the same or even rose (provided that prices declined sufficiently and the real wage rate were not absolutely rigid); for, in any case, the effect of the increased real value of cash balances would still be present [(Patinkin, 1956, ch. XIII; 1948, p. 265)].

Now remaining on the purely theoretical plan, I think that a fundamental objection should be moved against these propositions. First it must be noted that, while a neutral distribution of the increase in the nominal quantity of money is explicitly assumed in the case of full employment, the absence of distributional effects is not even mentioned as a condition for the working of the real balance effect in the case of unemployment. Nor, and that is even more singular, changes in distribution are taken into account when Patinkin considers the factors which prevent the price flexibility from operating. There is only one possible explanation for this omission: while a neutral distribution of an additional nominal quantity of money is thinkable in principle, an increase in the real quantity of money determined by a decline in prices and wages cannot be dissociated from a redistribution of real income, which inevitably follows it.

From this point of view we can distinguish three possible situations: the fall in prices is accompanied by a more than proportional, by an exactly proportional or by a less than proportional fall in money wages; i.e. real wages fall, remain constant or decline. In all three cases the distribution of income alters: in the first in favour of non wage earners in general; in the second in favour of rentiers; in the third in favour of wage earners. Now, if we assume that the proportion of income consumed out of wages is larger than the proportion of income consumed out of profits in general, and that the propensity to consume of profit earners is larger than the propensity to consume of rentiers, it appears that the real balance effect is likely to be positive only in case of a rise in real wages, which Patinkin considers to be a limiting case for the validity of his theory. If real wages fall or remain constant the probabilities are that the real balance effect, far from raising the aggregate demand, be negative. In the former case, however, the rise in the demand for wage goods will be offset by the adverse effect which the rise in real wages has on the investment demand, and again no corrective force will operate.

All this, of course, can be translated very easily in Keynesian terms of shifts of the consumption function; for a positive real balance effect is nothing but an increase in the propensity to consume. Nor this represents an *ex post* rationalization of the *General Theory*: Keynes more than once explicitly considered the effect of a price decline. This is particularly true of ch.19 of the *General Theory*, from which Patinkin quotes extensively in order to substantiate his charge against Keynes

for neglecting the importance of price flexibility. There the problem is posed whether a reduction in money wages and prices is likely to increase employment through increasing the effective demand. This can happen if this reduction affects the propensity to consume, the marginal efficiency of capital or the rate of interest. Far from neglecting the real balance effect, Keynes devotes three pages to analyse the effects of the fall in prices and wages on the propensity to consume, which amounts to the same thing. But, as he properly takes into account the distributional changes, whereas Patinkin neglects them, he concludes that the propensity to consume is more likely to decrease than to increase – in Patinkin's terms, that the real balance effect is more likely to be negative than to be positive. It follows that the increase in the real quantity of money can only be assumed to operate through a decline in the rate of interest: and it seems to me that this conclusion still holds, notwithstanding Patinkin's argument.

Again, the inflationary pressure of postwar excess liquidity which Patinkin takes as the empirical evidence of the actual working of the real balance effect, can be equally explained in Keynesian terms. For one could say that a forced decline in the propensity to consume has taken place during the war, because of rationing and other restrictive measures; and that, once these controls have been released, the propensity to consume has immediately risen, so as to reestablish its normal average value over the whole period [(cfr. Brown, 1955)].

References

Brown A.J. (1955), *The Great Inflation, 1939-1951*, London: Oxford University Press.
Di Matteo M. (2025), "Introduction", *PSL Quarterly Review*, 78(314), pp. 285-286.
Kahn R.F. (1954), "Some Notes on Liquidity Preference", *Manchester School*, 22(3), pp. 229-257.
Patinkin D. (1948), "Price Flexibility and Full Employment", *American Economic Review*, 38(4), pp. 543-564; repr. in Lutz F.A. and Mints L.W. (eds.) (1951), *Readings in Monetary Theory* (pp. 252-283), Homewood: Richard D. Irwin.
Patinkin D. (1956), *Money, Interest, and Prices. An Integration of Money and Value Theory*, Evanston: Row Peterson.
Pigou A.C. (1947), "Economic Progress in a Stable Environment", *Economica*, 14(55), pp. 180-188; repr. in Lutz F.A. and Mints L.W. (eds.) (1951), *Readings in Monetary Theory* (pp. 241-251), Homewood: Richard D. Irwin.