

The Demand for Money and the Time-Structure of Production

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Hans-Hermann Hoppe is famous for his ground-breaking studies on the epistemology of the social sciences, on the ethics of capitalism, and on democracy. But he also made original and important contributions in various other fields, such as monetary economics.¹ Money and banking were actually our shared research interest many years ago, when I first got in touch with him. It is therefore appropriate to offer an essay on this topic to my dear friend Hans, a great mentor and a magnificent source of inspiration.

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¹See in particular Hoppe, "Banking, Nation States and International Politics. A Sociological Reconstruction of the Present Monetary Order," *The Economics and Ethics of Private Property* (Boston: Kluwer, 1993), chap. 3, pp. 61–92; idem, "How is Fiat Money Possible?—or, The Devolution of Money and Credit," *Review of Austrian Economics* 7, no. 2 (1994); idem with Jörg Guido Hülsmann and Walter Block, "Against Fiduciary Media," *Quarterly Journal of Austrian Economics* 1, no. 1 (1998): 1–50.

I. INTRODUCTION

The classical economists rejected the notion that the supply of and demand for money had any systematic impact on aggregate wealth. According to Adam Smith, the true factors determining economic growth were the division of labor and capital accumulation—real, not monetary factors. Austrian economists have always cherished and held onto these central insights, yet they have nuanced them in several respects. Most notably, Menger and Böhm-Bawerk have introduced the *time* dimension into the theory of capital, showing among other things the classical wage fund theory to be inaccurate in important respects.² Similarly, Mises stressed that *money is not neutral*. While the supply of money and the demand for money have no systematic impact on aggregate growth, these forces do affect the distribution and allocation of resources. They shape the type and relative quantities of goods being produced. In short, they determine the *structure*, though not the *level* of production.³

The purpose of present paper is to analyze the impact of the demand for money on the pure rate of interest, and thus on the *time* structure of production. Conventional Austrian monetary theory holds that while the supply of money does have a systematic impact on the rate of interest, the demand for money does not. The latter is so-to-say “time-neutral.” We will criticize this contention and proceed as follows: after a reminder of some basic concepts (section II), we will briefly restate the traditional Austrian analysis of the time dimension of the money relation (section III), and then offer a critique, stressing that the demand for money is *not* time-neutral in the case of natural money, whereas it is in the case of fiat

²See Carl Menger, *Grundsätze der Volkswirtschaftslehre* (Vienna: Braumüller, 1871); Eugen von Böhm-Bawerk, *Positive Theory of Capital* (1959 [1921]); see also W.S. Jevons, *Theory of Political Economy* (1871).

³See Ludwig von Mises, *Theory of Money and Credit* (Indianapolis: Liberty Fund, 1980 [1924]), chap. 19; idem, *Human Action* (Auburn, Ala.: Ludwig von Mises Institute, 1998), chaps. 17–20. It goes without saying that the demand for and the supply of money concern cash balances; they do not concern short-term loans made on the so-called “money market” (see *ibid.*, p. 400).

money (section IV). Finally we shall discuss some implications of our findings (section V).

II. THE DEMAND FOR MONEY

Definition

The demand for money can be defined either as the demand for monetary payments (flow), or as the demand for cash balances (stock). As far as the determination of the price level is concerned, both definitions lead to the same result. We will work with the second definition (money demand concerns cash balances) because it highlights the crucial fact that money renders its services not only at the moment when it is used in spending, but also during the entire period when it is being held or “hoarded.” Money is the most marketable commodity. Thus cash balances, even while they are not being spent, provide liquidity services to their owners.

Cash balances are demanded for the liquidity services they provide. They are demanded for their purchasing power. The only exception is the merely nominal demand for money by collectors. The latter are not interested in the purchasing power of the bank notes and coins they collect. They are only interested in the notes and coins per se—that is why we call them collectors. But true money users do not demand mere *nominal* cash balances, but *real* cash balances. They demand a certain purchasing power.⁵

The Demand for Money and the Price Level

Standard demand and supply analysis shows that any increase of demand entails an increase of the price of the good in question.

⁴See Rothbard, *Man, Economy, and State* (3rd ed., Auburn, Ala.: Ludwig von Mises Institute, 1993), pp 662. Money itself is defined as a generally used medium of exchange; see *ibid.*, p. 165; see also Menger, *Grundsätze der Volkswirtschaftslehre*, pp. 253f.; Mises, *Human Action*, p. 395.

⁵For a detailed discussion of the factors determining the demand for money, including a thorough critique of the Keynesian approach, see Rothbard, *Man, Economy, and State*, pp. 671–98. See also Philipp Bagus, “The Quality of Money” (Working paper, Universidad Rey Juan Carlos, 2008).

This price increase is not contingent (accidental), but systematic (necessary), which is what we mean when we assert that the increase of demand *causes* the price increase. Now in the case of money, its “price” can be defined as the total array of goods and services that can be exchanged for one unit of money.⁶ In other words, the price of money is the purchasing power of a money unit. If the demand for money increases, therefore, the purchasing power of money tends to increase beyond the level it would otherwise have reached, which means that the general level of money prices will tend to decrease. Inversely, when the demand for money diminishes, the purchasing power of money will tend to fall below the level it would otherwise have reached, or, which is the same thing, the general level of money prices will tend to increase.

The Demand for Money and the Pure Rate of Interest

The question now is whether there is a systematic relationship between money demand, on the one hand, and the pure rate of interest (PRI) on the other hand. The latter can be defined as the pure return on investment as it would exist in general inter-temporal equilibrium or, equivalently, as the pure exchange rate between present goods (money and consumers’ goods) and future goods (producers’ goods and financial titles).⁷ It follows that the demand for money could be said to affect the PRI only under one condition, namely, if it had a systematically *different* impact on present goods than on future goods. For example, if increases in the demand for money tended to reduce sales revenues more than cost expenditure, then there would be a *negative* relationship between the demand for money and interest rates (as held in standard Keynesian analysis).

III. THE TIME DIMENSION OF THE MONEY RELATION
IN CONVENTIONAL THEORY

The time dimension of the “money relation” – of the demand for and supply of money – has been neglected in contemporary

⁶See Rothbard, *Man, Economy, and State*, pp. 204f.

⁷See *ibid.*, p. 299.

economic analysis. Only the Austrian economists found it worthy of any systematic consideration. Conventional Austrian monetary theory holds that while the supply of money does have a systematic impact on the rate of interest, the demand for money does not.

The Time Dimension of the Money Supply

Mises and the Austrian literature after him focused on the supply side. Mises analysed in particular the impact of *increases* of the money supply on the time structure of production, distinguishing between systematic effects and non-systematic (accidental) effects.

On the one hand, increases of the money supply *systematically* provoke artificial reductions of the interest rate—“artificial” because they do not result from a lower time preference of the market participants, but from (unanticipated) increases of the money supply. Such artificial reductions of the interest rate entail inter-temporal misallocations of resources and, therefore, business cycles.⁸

On the other hand, increases of the money supply may also affect the interest rate *without* entailing misallocations, namely, to the extent that they modify the distribution of income and wealth. The increased money supply benefits the early users of the new money at the expense of the later users. Thus if the early users have a lower time preference than the later ones, then the average or social time preference will fall, thus entailing a reduction of the interest rate. Similarly, if the early users of the new money have a higher time preference than the later ones, then the average time preference will rise, thus provoking a higher rate of interest.

However, these distribution effects are *not systematic*. The early users of the new money do *not necessarily* have a lower or higher time preference than the later users. The increased money supply *might* therefore result in a lower interest rate; but it might just as well result in a higher interest rate, or not affect the interest rate at all.⁹

Analogous conceptions prevail in the case of changes of the *demand* for money.

⁸See Mises, *Human Action*, chap. 20.

⁹See *ibid.*, pp. 545–47.

The Time Dimension of the Demand for Money

Mises dealt with the time dimension of the demand for money only incidentally. Still a clear case can be made that in his eyes changes of the demand for money does not have a systematic impact on the time structure of production. An increased demand for money (cash hoarding) merely entails a tendency for the prices of all goods to fall, but this event “does not require an adjustment of production activities” – it “merely alters the money items to be used in monetary calculation.”¹⁰ Changes in money demand can affect the interest rate only to the extent that they have an impact on the distribution of income and wealth. But, again, such distribution effects may work out one way or another—their impact “depends on the specific data of each case.”¹¹

Rothbard analyses this question in much more detail and comes to the same conclusion. He states that a “man may allocate his money to consumption, investment, or addition to his cash balance” and proceeds to show that, in the light of this distinction, the demand for money is time-neutral. Changes in the demand for money do not systematically affect time preference, and thus do not determine the PRI. Let us quote him here at length:

His time preferences govern the *proportion* which an individual devotes to present and to future goods, i.e., to *consumption* and to *investment*. Now suppose a man’s demand-for-money schedule increases, and he therefore decides to allocate a proportion of his money income to increasing his cash balance. *There is no reason to suppose that this increase affects the consumption/investment proportion at all.* It could, but if so, it would mean a change in his *time preference* schedule as well as in his demand for money.

If the demand for money increases, *there is no reason why a change in the demand for money should affect the interest rate one iota.* There is no necessity at all for an increase in the demand for money to raise the interest rate, or a decline to lower it—no more than the opposite. In fact, there is no causal connection between the two; one is

¹⁰Ibid., p. 519.

¹¹Ibid., p. 417.

determined by the valuations for money, and the other by valuations for time preference.

. . . An increased demand for money, then, tends to lower prices all around without changing time preference or the pure rate of interest. Thus, suppose total social income is 100, with 70 allocated to investment and 30 to consumption. The demand for money increases, so that people decide to hoard a total of 20. Expenditure will now be 80 instead of 100, 20 being added to cash balances. Income in the next period will be only 80, since expenditures in one period result in the identical income to be allocated to the next period. If time preferences remain the same, then the proportion of investment to consumption in the society will remain roughly the same, i.e., 56 invested and 24 consumed. Prices and nominal money values and incomes fall all along the line, and we are left with the same capital structure, the same *real* income, the same interest rate, etc. The only things that have changed are nominal prices, which have fallen, and the proportion of total cash balances to money income, which has increased. . . .¹²

He concludes:

The only necessary result, then, of a change in the demand-for-money schedule is precisely a change in the same direction of the proportion of total cash balances to total money income and in the real value of cash balances. Given the stock of money, an increased scramble for cash will simply lower money incomes until the desired increase in real cash balances has been attained.¹³

¹²Rothbard, *Man, Economy, and State*, pp. 678f.

¹³*Ibid.*, p. 679. Similarly, he states a few pages later:

A greater proportion of funds hoarded can be drawn from three alternative sources: (a) from funds that formerly went into consumption, (b) from funds that went into investment, and (c) from a mixture of both that leaves the old consumption-investment proportion unchanged. Condition (a) will bring about a *fall* in the rate of interest; condition (b) a rise in the rate of interest, and condition (c) will leave the rate of interest unchanged. Thus hoarding may reflect either a rise,

However, the conscientious Rothbard did not fail to remark that this conclusion stood on somewhat shaky grounds. In an end-note he wrote:

Strictly, the *ceteris paribus* condition will tend to be violated. An increased demand for money tends to lower money prices and will therefore lower money costs for gold mining. This will stimulate gold mining production until the interest return on mining is again the same as in other industries. Thus the increased demand for money will also call forth new money to meet the demand.¹⁴

This observation will be the starting point for our following discussion.

IV. THE TIME DIMENSION OF THE DEMAND FOR MONEY RECONSIDERED

The Demand for Commodity Money is Not Time-Neutral

Rothbard is correct in pointing out that changes in the demand for money do not have any systematic *direct* implications for the relative spending on consumers' goods and on the corresponding producers' goods. But as he admits, they do have implications for the return on investment (ROI) of money production, at any rate in the case of commodity monies such as silver or gold. An increased demand for silver will increase the ROI of silver production, because the factors of production needed to produce a given amount of silver now tend to become available at lower silver prices. This in turn will modify the spending on all other goods. In particular, capital will move from other industries into the silver industry, prompting the ROI of silver production to fall and the ROI of all other industries to rise, until the ROI of all lines of

a fall, or no change in the rate of interest, depending on whether *time preferences* have concomitantly risen, fallen, or remained the same. (Ibid., p. 690)

¹⁴Ibid., p. 916, endnote 10.

business is equal. Thus there will be a new PRI that is higher than the PRI that prevailed before the increase of the demand for money was priced into the market.

In other words, there is a positive causal relationship between the demand for commodity money and the PRI. The demand for commodity money is not time-neutral. Increases of the demand for commodity money tend to increase the PRI. Decreases of the demand for commodity money tend to decrease it.¹⁵

This relationship holds not only during a period of adjustment, during which more silver is being produced according to the higher demand. It also holds in *final equilibrium*, because the wear and tear increases along with the greater silver supply. The silver production will be increased permanently, and thus the PRI will also permanently be higher than it otherwise would have been.

The time structure of production will tend to be modified accordingly. A higher demand for money creates incentives to shorten the structure and to make it thicker than it otherwise would have been. And a lower demand for money will tend to lengthen the structure and make it thinner than otherwise. In short, the demand for money does affect the time structure of production.

The same effects hold in the case of *temporary* increases of the demand for money, as it is often the case at the onset and in the middle of the deflationary bust phase of the business cycle, when market participants seek to sell their non-monetary assets at a discount (thus the increase of the PRI), but a discount that is lower

¹⁵One could raise the question whether increases of the demand for money, because they entail a reduction of the price level and thus a corresponding wealth effect for money owners, did not actually *reduce* the PRI. Some Austrian economists such as Hoppe (*Democracy – The God that Failed*, p. 2) hold that increased wealth tends to lower time preference schedules. It seems to follow that an increased demand for money tends to diminish time preference schedules and thus implies a reduction of the PRI. However, the connection between wealth and time preference schedules does not hold *a priori*, but is a historically contingent relationship, as Barnett and Block have argued in “The Relationship between Wealth or Income and Time Preference is Empirical, Not Apodictic: A Critique of Rothbard and Hoppe,” *Review of Austrian Economics* 19 (2006).

than the one they expect for the near future. In such cases the increase of the demand for money lasts only until the price structure has been adjusted to its new (lower) final equilibrium level.¹⁶

The Demand for Fiat Money Tends to Be Time-Neutral

Things are very different in the case of fiat money. The characteristic feature of fiat money is that the demand for it is at least partially determined by violations of property rights, in particular by monopoly or legal-tender laws. As a consequence, the producer of fiat money is able to choose for his product an inexpensive physical support, such as paper or electronic data.

Paper money and electronic money are fiat moneys *par excellence* because (1) their marginal cost of production is close to zero and (2) they need to be imposed on the market lest they would have no circulation *at all*, whereas other types of money such as the precious metals do not need fiat backing to be used at all. Typically, therefore, fiat money is being produced monopolistically and the producer enjoys complete discretion in maximizing his profits through time according to his inter-temporal value scales.¹⁷

Now here the causal mechanism that in the case of commodity monies links up the demand for money with the PRI vanishes. An increased demand for money will have next to no impact on the costs of fiat money and thus on the profitability of producing it. It will therefore not attract additional resources and thus increase the ROI in other industries. The long-run PRI is not modified—the demand for fiat money tends to be time-neutral.

Moreover, in the case of *temporary increases* of the demand for money, their tendency to increase the price level *can* be offset, without technical or commercial limitations, by a corresponding increase of the money supply, thus preventing the necessity to sell assets at a discount. As is well known, this is not a mere theoretical possibility. Present-day fiat money producers—the central banks—pursue a policy of price level stabilisation, and they vigorously

¹⁶This temporary impact of the demand for money on the PRI has been stressed by Rothbard, see *Man, Economy, and State*, pp. 692, 864f.

¹⁷See Hülsmann, *The Ethics of Money Production* (Auburn, Ala.: Ludwig von Mises Institute, 2008), chap. 1, sections 5 and 6; idem, *Logik der Währungskonkurrenz* (Essen: Management Akademie Verlag, 1996).

fight any form of price deflation. Thus we may say that, under the present-day fiat money regimes, any increases of the demand for money are actually *causing* corresponding increases of the money supply. It is true that such increases of the money supply will create a tendency for the price level to increase, thus entailing sooner or later a price premium within the *gross* rate of interest. But the crucial point is that the PRI need not increase. It follows that, even in the case of *temporary* increases of the demand for money, fiat money tends to have different consequences than commodity money.

Misleading Distinction between Money and Present Goods

Thus we see that the traditional Austrian position, according to which the demand for money is time-neutral, only applies to the case of fiat money. It does not apply to the case of commodity money. Why did the Austrians, and Mises and Rothbard in particular, overlook this fact? The main reason seems to be that they define money without reference to its physical characteristics. They see money as a particular “disembodied” class of goods that is therefore not subject to the laws ruling the time market. Changes in the demand for money do not affect time preference schedules because the latter concern only non-monetary goods (“real goods”), namely, consumer goods and producer goods. By contrast, money is a good in a class of its own.

Mises follows the German economist Carl Knies in classifying all economic goods into three mutually exclusive categories: consumers’ goods, producers’ goods, and media of exchange.¹⁸ The

¹⁸See Mises, *Theory of Money and Credit*, pp. 96–102; Knies, *Geld und Credit* (2nd ed., Berlin: Weidmann, 1885), vol. 1, pp. 20ff. Mises argued (1) that money is not always “needed” in production processes. “There is no need for money either in the isolated household or in the socialized community. Nowhere can we discover a good of the first order of which we could say that the use of money was a necessary condition of its production” (p. 99). Furthermore, he contended (2) that money is not useful from an aggregate point of view. Whereas changes in the supply of consumers’ goods or producers’ goods make “mankind” poorer respectively richer, the “same cannot be said of the loss or gain of money” (p. 101).

Both arguments are weak. In *Socialism* (1922) and *Human Action* (1949), Mises stressed that only a monetary economy allowed for a complex and

pure interest rate is the inter-temporal exchange rate between present goods (consumer goods) and future goods (producer goods). The demand for money does not affect this exchange rate at all. As we have seen, this contention is correct in the case of fiat money. Here the marginal costs of producing paper money are virtually zero, and thus investment spending on money production does not depend at all on changes of demand. It follows that changes in the demand for paper money do not have any *a priori* impact on the proportion between consumption and investment, and thus on inter-temporal value-scales and the interest rate. But as we have seen as well, things are different in the case of commodity money.

Astonishingly, this fact has also been overlooked by Murray Rothbard. In chapter 11 of *Man, Economy, and State*, he modifies the analysis of present and future goods stated in earlier chapters, to take account of the impact of money hoarding.¹⁹ Rothbard now abandons his previous classification of all goods into exactly two classes (present and future goods). Like Knies and Mises, he now champions the three-tier distinction between consumers' goods, producers' goods, and cash balances.

Clearly, a good case can be made that money is neither a consumers' good, nor a producers' good. However, for the determination of the PRI this is beside the point. Here the only relevant distinction is between present goods and future goods. Money could be said to be time neutral only if it fell into a third class of goods that would be neither present goods nor future goods. However, Rothbard does not deliver any demonstration to this

roundabout division of labour. Clearly, therefore, money is needed for most production projects. Similarly, the contention that the money supply has no positive or negative welfare implication for "mankind," even if true, has no scientific foundation whatever as long as we are unable to compare the subjective value judgments of different individuals.

¹⁹See Rothbard, *Man, Economy, and State*, p. 678. Previously he had identified hoarding as one of the *sources* of "the money that [capitalists] save and invest" – the other two sources being selling receipts from present production and money production (see *ibid.*, p. 351). This classification begs the question whether money hoards are not in fact one of the *forms* in which one can save and invest one's capital.

effect, but simply *asserts* that money falls into a class of its own—an assertion that moreover contradicts his own previous emphasis that money is “the present good *par excellence*.”²⁰

As soon as it is admitted that money is a present good, though not a consumers’ good, the impact of the demand for money on relative spending between present goods and future goods is obvious. Let us recall Rothbard’s argument, quoted above:

A greater proportion of funds hoarded can be drawn from three alternative sources: (a) from funds that formerly went into consumption, (b) from funds that went into investment, and (c) from a mixture of both that leaves the old consumption-investment proportion unchanged.²¹

If money is a present good, then condition (a) does not imply any change inter-temporal value scales, but simply a different composition of present goods in one’s portfolio. It follows that hoarding (a rise in the demand for money) in this case leaves the PRI unaffected, while in all other cases—conditions (b) and (c) it implies an *increased* PRI.

V. SOME IMPLICATIONS OF THE TIME-DIMENSION OF THE DEMAND FOR MONEY

The demand for commodity money is not time-neutral, but positively related to the pure rate of interest. By contrast, the demand for fiat money tends to be time-neutral. These results of our analysis seem to imply that fiat money, despite its manifold known shortcomings, conveys definite advantages over commodity

²⁰Rothbard, *Man, Economy, and State*, p. 320. Rothbard’s definition of present goods stresses the act of consumption (destruction). It would be more appropriate to define a present good as one that needs no further physical transformation to render the services for which it is ultimately desired. Money in one’s cash balances no longer needs any physical transformation to be used, but is not destroyed through this use.

²¹*Ibid.*, p. 690.

money, in particular, in facilitating economic growth.²² Let us therefore briefly discuss some of these implications.

First of all we should point out that our foregoing analysis of the *comparative* impact of the demand for money on the PRI conveys no information about its *quantitative* impact. Considering that the long-run demand for money represents just a small fraction of aggregate wealth, and that it varies only marginally, it is very well possible that the long-run quantitative impact of changes in the demand for money on the PRI be negligible after all. On the other hand, there is scant empirical evidence about the behaviour of savers under a pure commodity-money standard. If and to the extent that saving occurs to a significant extent in the form of money hoarding, the quantitative impact on the PRI could increase accordingly.

It is obvious that such money-induced changes of the PRI can be highly useful, especially if we consider the reasons of a changing aggregate demand for money. Acting persons typically have an *increased* demand for money when they are concerned about looming deteriorations of the general economic and political environment. For example, they might expect troubles on the financial markets, or bad economic policy decisions such as tax hikes. Increased cash hoarding provides a partial protection against such events. Most importantly, the resulting increase of the PRI creates incentives to adjust the structure of production to the perceived riskier environment. More roundabout (and therefore riskier) investment projects will tend to be abandoned, while shorter investment projects will be encouraged. This helps preserving the all-important aggregate capital stock. Inversely, a *reduced* demand for money, which typically reflects a brighter outlook of the general economic and political environment, will induce a lengthening of the structure of production to the detriment of shorter (less physically productive) investment projects.

However, as we have seen, this mechanism for the protection of the capital stock only exists in the case of commodity money. In the case of fiat money, there are no similar incentives to adjust the

²²For analysis of the economics, social and cultural consequences of paper money (respectively of electronic money), see Hülsmann, *The Ethics of Money Production*, chaps. 12 and 13.

structure of production, neither for switching it over to “safe mode” under the impact of an increased demand for money, nor in the opposite sense when the demand for money diminishes. It follows that fiat money regimes tend to waste more capital than commodity money regimes. Growth rates and living standards therefore would tend to be lower under fiat money than under commodity money.

Similarly, we should stress again the beneficial role of *short-run* variations of the PRI, resulting from increases of the demand for commodity money, in speeding up the adjustment of the structure of production after a boom phase, or in reaction to a looming crisis resulting from war, government interventionism, or natural disasters. These adjustments would not take place as quickly and automatically under a fiat money regime, as discussed above. It follows that, far from being advantageous from a macroeconomic point of view, the tendency to offset the impact of the demand for money on the PRI is actually another one of fiat money’s major shortcomings.

Finally, as we have shown in a recent contribution, there is no systematic relationship between the aggregate volume of savings-investment and the PRI.²³ It follows that the demand for money, too, is not related to the aggregate level of savings-investment. Given individual inter-temporal value scales, it follows by logical necessity that both the demand and the supply of present goods are exclusively determined by those value scales, and that the latter are therefore the unique cause of the PRI. A higher demand for money not only implies an increased demand for present goods on the time market, but also a reduced supply. Therefore, the only necessary consequence of higher demand for money is for the PRI to increase. *But there is no systematic impact on the volume of the market (aggregate savings exchanged for aggregate future goods).* Depending on the (contingent) elasticity of supply and demand on the time market, the new final equilibrium might involve a somewhat larger volume of aggregate saving, but it might just as well, and with equal likelihood, involve a somewhat reduced volume of

²³See Jörg Guido Hülsmann, “Time Preference and Investment Expenditure,” *Procesos de Mercado* 5, no. 2 (2008): 13–33.

aggregate saving. Similarly, a lowering of the demand for money has only one necessary implication, namely, a reduction of the interest rate. Yet it has no systematic impact on aggregate saving, and thus on aggregate investment.

VI. CONCLUSION

In the present contribution we have shown that the demand for commodity money is *not* time-neutral. It affects the pure rate of interest and, therefore, the time-structure of production. By contrast, the demand for fiat money tends to be time-neutral—in other words, it tends not to affect the time structure of production. We have argued that this basic difference further bolsters the traditional Austrian case for commodity money and against fiat money. Indeed, the demand for commodity money is a very basic way for the unsophisticated citizen to bring the structure of production in line with his assessment of the macroeconomic environment. Fiat money takes this power out of his hands. The consequence is a greater tendency for capital to be wasted. ☞