

# Hayek, Business Cycles and Fractional Reserve Banking: Continuing the De-Homogenization Process

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Science sinks or swims based on the quality of the distinctions it makes, and social science is no exception to this general rule. It is as important to make accurate differentiations in the history of economic thought as it is in any other branch of this discipline.

In this regard, the accomplishments, writings, and analytic apparatus of Ludwig von Mises and his pupil and friend, F. A. von Hayek, have been widely viewed as all but indistinguishable. And this holds true not only within the profession as a whole, but also among economists associated with the Austrian or praxeological school.

There is good reason, at least at first glance, for such a conflation. Both economists shared, or at least appear to share, a philosophical outlook, and a methodology; their views on socialism, government regulation of the economy, the free society, and the causes of the business cycle, were in many ways similar. But there were also some sharp and important differences between them, which are rather technical. Perhaps this is one reason why they have been little appreciated. But these divergences are basic, with implications for the entire corpus of Austrian economics, and, indeed, economics in general. It is therefore all the more important to distinguish between the views of these two scholars.

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Salerno forcefully makes the point that the unrecognized incompatibility between Mises and Hayek is of far more than mere antiquarian interest:

Unfortunately, the majority of those who currently regard themselves as "Austrian economists" have failed to recognize the considerable differences between these two paradigms. And because Mises was the main influence on Hayek's early writings on business cycle theory and on socialist calculation, the most important manifestation of this failure is the tendency to attribute to Mises positions originated by Hayek or independently developed by those working within the Hayekian paradigm. This tendency is reinforced by what may be called the "Whig presumption," still inexplicably prevailing among many Austrians despite the publication of Thomas Kuhn's book three decades ago, that since Hayek "came after" Mises he must have incorporated in his own work all that was worthwhile in his predecessor's. The result is that attention has been deflected from the Misesian paradigm, and those seeking to deepen and extend it have found it increasingly difficult to gain recognition for their own efforts or to channel the interests and efforts of younger Austrian scholars into the same endeavor. There thus currently exists a pressing need, especially for Misesians, to undertake the task of a courageous and thorough-going doctrinal dehomogenization of Hayek and Mises. (Salerno 1993, pp. 115, 116)

It is not sufficient to show only that the perspectives of Mises and Hayek are not fully reconcilable; and that this fact is not widely appreciated. Once this is conceded, the question naturally arises, Which is correct and which is not? Therefore, it is important to follow Salerno's lead even further, and take a stand on that issue as well.

There is a small but ever growing literature which might be called "Hayek revisionism." It takes the view that the analysis of the teacher is very distinct from that of the student, and vastly preferable. Hayek, a 1974 Nobel Prize winner in economics, is widely known as a radical advocate of the Austrian or free enterprise philosophy. And to a certain extent this reputation is well deserved. After all, Hayek (1944, 1989) are classic critiques of socialism and central planning, Hayek (1960, 1973) defend the rule of law, Hayek (1978) shows the flaws in "indicative" or "market" planning, and many of his other books and articles demonstrate the

beneficial workings of the market (1948, 1954, 1967, 1981). Of late, however, scholars have shown that some of his most basic writings cannot be reconciled with a thoroughgoing adherence to praxeological analysis (Salerno 1993) and economic freedom (Rothbard 1982).

Even within the corpus of Hayek's own work a distinction may be made. A scholar who distinguishes two different strains of thinking within Hayek's own writing was Hutchison (1981). He labels the early publications as Hayek I (before 1936) and the later ones as Hayek II (1937 and thereafter). Of the earlier period Hutchison (1981, p. 211) states: "Affinities with the ideas of Austrian predecessors, notably with those of his 'mentor' Mises, are apparent." In contrast, the first publication of the latter period (Hayek 1937),<sup>1</sup> Hutchison comments:

It certainly marks a vital turning point, or even U-turn, in Hayek's methodological ideas, *and ought to be, but has not been recognized as marking a fundamental shift . . .* The main insights of this article are quite incompatible . . . with the methodological ideas in his previous writings. (1981, p. 215; emphasis in the original).

The new dispensation in Hayek had mainly to do with a shift from praxeological (e.g., Misesian) methodology to that based on logical positivism (e.g., Popper), and from an emphasis on appraisal to one of lack of full information regarding questions of central planning and socialism (Salerno 1993). This is not to say that in the earlier period Hayek was indistinguishable from Mises, nor that the latter period constituted a total break. There were differences before, and similarities afterward. But it is our contention that even though Hayek I was preferable to Hayek II, the errors in the former are still well worth exploring.

Following in Hutchison's footsteps on this research is Salerno (1993). Salerno has shown that as the years went by, and Hayek moved from his Hayek I position to his Hayek II views, he pulled further and further away from the uncompromising praxeological and free market analysis of his mentor Ludwig von Mises (1963); that whereas Hayek I was reasonably close to Mises in many ways, Hayek II began resembling him in philosophical outlook less and less.

<sup>1</sup>For a good critique of this paper, see Selgin (1988, pp. 28, 29).

In the view of Salerno (1993),<sup>2</sup> there is not one Austrian strand emanating from Menger (1950), the founder of this School, but rather two. The first is transmitted to us by Böhm-Bawerk (1959) and Mises (1912, 1957, 1966, 1981); the second comes to us courtesy of Wieser (1967) and his follower Hayek. Salerno's contention, and our own, is that the first strand is preferable to the second (1993, especially footnotes 3 and 4). As well, and perhaps of even greater importance, Salerno shows that even the relatively preferable version, Hayek I, is not without its flaws. We shall try to show several of them: business cycles, fractional reserve banking, governmental growth enhancement, and 100 percent money.

### **Business Cycles**

The majority of contemporary viewpoints within the economics profession favor a strong role for the state as necessary to combat the business cycle.<sup>3</sup> With regard to the problem of booms and busts in particular, it is the consensus among economists (Frey et. al., 1984; Block and Walker 1988) that the market, uncontrolled by central authority, will continually veer into either unemployment or inflation.

In contrast, it is the Austrian contention that these problems are not "natural" results of the market system; on the contrary, they are in large part created by interventionistic acts on the part of the government in the first place. The public sector, in this view, is the problem, not the solution.

Hayek (1931) is clearly part of Hayek I. And not only that: it is also part of the Hayek I contribution which is not at all problematic. In it, he makes the point that our inability to tame market instability is not due to deficient economic acumen on the part of members of the private sector. Rather, it comes about because of the interference and regulation of credit markets by the state. Specifically, this follows from credit expansion, which drives interest rates down below the levels which would otherwise result. This, in turn, leads entrepreneurs to mistakenly

<sup>2</sup>Friedman (1991) made much the same point about the publications in the two epochs of this scholar's life, only in support of Hutchison, and in sharp contrast to Salerno, he praised Hayek II while denigrating Hayek I. Friedman's distinction, although based on methodological differences, mainly revolved around the psychological issue of "intolerance."

<sup>3</sup>For this view, which encompasses virtually all of the mainstream perspectives, see Friedman and Schwartz (1963), and Keynes (1936). For a reply to the latter, see Hoppe (1992).

invest in the higher orders of production. But Hayek is careful to point out that the error is only from the long term point of view: in the immediate run, placing money in heavy industry is fully justified by the now (artificially) lower rates of interest.

Hayek (1931) leans heavily on the work of Mises (1912, 1966); his, like his mentor's, is a malinvestment theory of depressions: these cycles come about not because of too much<sup>4</sup> investment, nor yet because of too little. For all that can be known, exactly the "right amount" of investment may be undertaken. But because it enters too high in the structure of production, compared with where it would have gone had businessmen not been subsidized by low interest rates, the seeds of future economic destruction are sown. Moreover, in the Misesian tradition, Hayek (1931) makes important contributions of his own. For one thing, the now famous<sup>5</sup> "Hayekian triangles" owe their appearance to this work.

If Hayek (1931) was a part of the Misesian Hayek I, then Hayek (1933) would have to be counted as an aspect of the non- or anti-Misesian<sup>6</sup> Hayek I. In this discussion on cyclical fluctuations, he denies that banks are wholly or even partially responsible for the nature of the recurring trade cycle. He contends that these financial institutions have never been prohibited from holding fractional reserves and therefore should not be held responsible for any of the repercussions. We flow, seemingly endlessly, from periods of prosperity to periods of struggle and recuperation, but Hayek labels it "nonsensical" to blame banks or to hold any other party "guilty" for the continuous boom-and-bust nature of our economic cycle. Hayek states:

we can also see how nonsensical it is to formulate the question of the causation of cyclical fluctuations in terms of "guilt," and to

<sup>4</sup>This is not an "over-investment" theory, as asserted by Hutchison (1981, p. 224, n. 1); rather, strictly speaking, it is a misallocation of investment theory. This is a fine point of distinction, as for the Austrians there is typically excessive investment in the boom phase of the cycle. But this is not logically necessary. The key point is that these funds go to orders of production which are too high (e.g., far removed in time from consumption) for sustainability, given the public's time preference rates. Although unusual, it is compatible with the praxeological theory of the cycle to contemplate *under* investment as a causal agent. As long as these funds are placed in improperly high orders of production, there can still be projects begun for which financing necessary for completion will not be forthcoming.

<sup>5</sup>If only within Austrian circles.

<sup>6</sup>A way of characterizing this, alternative to Hutchison's (1981), is that we date the onset of Hayek II earlier than Hayek (1937). For us, it occurred at least as early as Hayek (1933).

single out, e.g., the banks as those "guilty" of causing fluctuations in economic development. Nobody has ever asked them to pursue a policy other than that which, as we have seen, gives rise to cyclical fluctuation, seeing that the latter originate not from their policy but from the very nature of the modern organization of credit. (Hayek 1933, p. 189)

Now this is more than just passing curiosity. If true, it would be, perhaps, the first case on record in all of recorded economic history, where an industry took no interest whatsoever in the regulations pertaining to it, nor in proscribing competition against extant members.

On the face of it, it would be as if the taxi industry were completely unconcerned with legislation that limited the participation of gypsy cabs (Williams 1982, chap. 6), or as if the American Medical Association were totally uninvolved in precluding the entry of new doctors into that profession (Friedman 1962, chap. 9; Hamowy 1984). In perhaps the most famous statement in all of economics, Adam Smith warned that:

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. (1776, vol. 1, bk. 1, chap. 2)

According to the view of Hayek we are now considering, bankers, of all people, would appear to be an exception to that general rule.

Fortunately, we need not rely on theoretical public choice (Buchanan and Tullock 1971; Buchanan, Tollison, and Tullock 1980) and realistic historical investigation (Kolko 1963) to show that Hayek's belief is without merit. There is also a plethora of empirical examples which can serve as a refutation of the banker-as-innocent hypothesis.

For example, Paul and Lehrman note that

America's bankers had long chafed to cartelize the banking system still further. . . . The growing consensus [in the nineteenth century], then, was to redirect the banking system by establishing, at long last, a central bank. The central bank would have an absolute monopoly of the note issue, and reserve requirements would then ensure a multilayered pyramiding on top of these central bank notes, which could bail out banks in trouble, and, moreover, could inflate the currency in a smooth, controlled, and

uniform manner throughout the nation.<sup>7</sup> (Paul and Lehrman 1982, pp. 119–20)

There is another grave problem with Hayek's 1933 analysis. He believes that the banks are not "guilty" of causing business cycles *also* because he thinks that in the early stages the "natural rate of interest" or profit on the market increases, and that the banks are not astute enough to realize it, so that they only pull the loan rate of interest below the natural rate, that is, by not raising their loan rates fast enough to match changes in the natural rate. The difficulty with this is that it misconceives the Misesian (1912) insight. The problem is *not* one of omission, rather it is one of commission; it is not that the banks are too passive and ignorant about finding the right loan rate to match the natural rate. Instead, it is that they actively *expand credit* beyond the cash in their vaults, thereby *pushing* the loan rate below the natural rate. In short, the Misesian view is that the banks don't have to search for the natural rate in order to avoid generating the business cycle; all they have to do is not expand credit beyond their cash holdings. This is surely a much easier task. The banks' insistence on expanding credit generates the business cycle, and makes them responsible and thus "guilty" as charged.<sup>8</sup>

### **Fractional Reserve Banking**

But Hayek is not content to exonerate bankers as embodiments of free enterprise virtue. He goes on to offer a defense for their anti-market activities (the harm of which he has just finished denying). Hayek maintains:

So long as we make use of bank credit as a means of furthering economic development we shall have to put up with the resulting trade cycles. They are, in a sense, the price we pay for a speed of development exceeding that which people would voluntarily make possible through their savings, and which therefore has to be extorted from them. (1933, pp. 189–90)

During the course of his discussion, Hayek focuses on the structure of our current monetary organization of credit and upon the inherent flaws in this structure that create the cycle. He is

<sup>7</sup>For a critique of this initiative, see Hoppe (1993) and Rothbard (1975, 1994).

<sup>8</sup>The authors of this paper wish to thank Murray N. Rothbard for this insight.

correct in identifying fractional reserve banking in particular as a major source of disruption to economic welfare, but then fails to label the state's utilization of this system as detrimental to overall growth.

The most glaring manner in which government has impeded the natural workings of the free market lies with its ability to control the volume of money. Hayek made this the basis of his Misesian-based (1931) theory of cyclical fluctuations. With the introduction of money to a society, control over the economy can be shifted from the individual's natural tendency to produce and trade to one where government disturbs and hampers the production process through its manipulation of the money supply.

Changes in the volume of money by the government can be effected in two ways: alteration of note circulation by central banks and by "creation" of deposits in other banks. Hayek correctly argues that it is the ability of independent banks to "create money" that is harmful to the economy. But these financial institutions are able to increase the money supply due to the system of fractional reserve banking. For example, if a deposit is made of one hundred dollars, the bank is only required to hold "in reserve" or "on hand" a small fraction of this amount. The rest can be granted as credit to customers who will inevitably follow the same deposit process with their newly acquired funds. In this way, in a decentralized system, money travels from bank to bank, multiplying each time it is lent out. And the original depositor, of course, is still able to draw on the funds entrusted to the bank on demand. As the process continues, the volume of money increases, lowering the money rate of interest below the natural rate, which Hayek (1933, p. 147) defines as the rate "at which the demand for and the supply of savings are equal."

Rothbard (1975, p. 19) agrees with Hayek on his thesis with regard to the causes of cyclical fluctuations, and refers to a "boom" period as one of misinvestment created by the government sanctioned credit system through its control of the money rate of interest. With banks offering credit at an artificially low level of interest, capitalists invest in production processes that must inevitably be abandoned when the banks eventually curb the amount of credit being offered because of increasing cash requirements or a rise in the discount rate (Hayek 1933, p. 175). As soon as the banks cease to increase the volume of money in circulation, the interest rate at which credit is offered will rise to the natural level and leave unfinished the investments previously made possible by increased levels of credit. The freedom given to the banks

by the state to control the volume of money and interest rates initiates production that cannot possibly be completed. The periods that we know as “crisis” or “depression,” or, in the most recent euphemism, “recession,” are in fact the time needed for the process of abandoning or reallocating the investment mistakes of the boom period.

Despite his accuracy in identifying the source of fluctuations, Hayek suggests that we must continue to use fractional reserve banking in order to spread the development of technical and commercial knowledge. This, despite the price paid in economic disruption during every bust period. He states:

And even if it is a mistake—as the recurrence of the crises would demonstrate—to suppose that we can, in this way, overcome all obstacles standing in the way of progress, it is at least conceivable that the non-economic factors of progress, such as technical and commercial knowledge, are thereby benefited in a way which we should be reluctant to forego.<sup>9</sup> (Hayek 1933, p. 190)

He contends that extension of credit, even though it results in a recurring crisis, is necessary in order to enhance man’s ability to discover and produce things not possible from his own personal savings. Hayek views the “benefit” derived from providing credit to those not in effect credit worthy as outweighing the consequences of decimating the entire economy every few years. But this is mistaken. It is in fact an undermining of Hayek’s own work and defeats the logic of his entire business cycle discussion.

Contrary to Hayek,<sup>10</sup> in order to enhance economic welfare, any prospective technological or commercial advancement should be funded based upon its own merits, and not depend upon an artificially low money rate of interest. An economy void of fractional reserve banking would be less able to overextend itself through excess credit and more likely to produce an optimal amount of technical and commercial services. These businesses may not come to fruition as quickly and powerfully as they would were they backed by artificially extended credit, but the economic foundation predicated upon voluntary choice will be stronger. The

<sup>9</sup>Hayek’s reference is presumed by the present authors to be to “existing monetary organization” (1993, p. 187) of which fractional reserve banking is an integral part.

<sup>10</sup>That is, to the flawed part of Hayek I whom we have been citing.

percentage of failures, e.g., wasted resources, will be therefore reduced. Moreover, an economy that sustains constant growth will outproduce one which sacrifices an undetermined number of years to crisis in order to artificially encourage growth.

Nor is this a matter of mere cost-benefit analysis. The point here is not that of the two values, economic stability and technical progress, we hold that the former necessarily outweighs the latter. On the contrary, given the impermissibility of interpersonal comparisons of utility (Rothbard 1977), our view is that it is impossible, *a priori*, to determine which one is more important. Why, then, our opposition to Hayek's preference for technical progress *vis-à-vis* stability?<sup>11</sup> It is because the burden of proof is on him who would upset the natural order of the laissez-faire economic system, and Hayek has not even seen this as a challenge, let alone attempted to overcome it.

In order to see this point more clearly, suppose that someone, call him Mr. H, had contended that war enhances scientific innovation (radar, better planes, rockets, improved medical techniques learned on the battlefield). And that, further, the value of these improvements was greater than the loss due to people being killed in war. One possible response would be based on a cost benefit analysis. Here, we might make the contrary claim that no deaths due to battle impose more of a loss on humanity than the inventions thereby conferred gain for us. But interpersonal comparison of utility considerations render such a tack invalid. Instead, we would say that the natural order of society is peace, and that the intellectual burden of proof rests on those such as Mr. H who claim, somewhat paradoxically, that the human condition can be improved by fomenting armed hostilities. It is clear that this burden has not been upheld, indeed, nor can it be.

### **Governmental Growth Enhancement**

Hayek (1933, p. 191) also speaks about the "utilization of new inventions and the realization of new combinations." He claims that they would be made more difficult in the absence of cyclical fluctuations, and that the psychological incentive towards progress would

<sup>11</sup>We assume, if only for the sake of argument, that Hayek is correct in his contention that there is a tradeoff. That is, that one can indeed gain more by destabilizing the economy in the form of new and better inventions than by allowing it to proceed freely and (relatively) steadily. Unfortunately, Hayek gives us no good reasons to suppose that this form of government intervention will promote innovativeness.

be retarded.<sup>12</sup> But the very opposite is true. Namely, each year many businesses are not launched simply because of fear of crisis. Capitalists would be more inclined to utilize venture funds if relatively constant growth became an expected reality, for potential investors would not have to continually fear a business-crippling recession.<sup>13</sup>

More radically, Hayek's conception of an increased technological or commercial rate of progress is flawed in and of itself. By offering credit to those not deemed worthy of it by the market (Hazlitt 1946, pp. 30–40), we push ourselves beyond the scale of development for which the economy is ready. There is an optimal amount of forward movement that any economy can accommodate. To overshoot that appropriate level is to attempt to advance to a degree unmanageable by society and ultimately by the individual. There exists a natural order for the structure of production, whether in the realm of physical output or of scientific and technical ideas. If so, any compulsory attempt to exceed it is logically doomed to failure. At present, lending institutions are permitted to alter the path of growth through extension of credit. This not only gives impetus to the business cycle, it also cannot succeed in its self-avowed goal of increasing the rate of technical progress.

Kirzner speaks of this phenomenon in terms of:

an intertemporal equilibrium. Plans made today must fit not only with plans made by others today [intra-temporal equilibrium], but also with plans made in the past and other plans to be made in the future. A state of equilibrium will not exist wherever any plan being made at any date fails to dovetail with other relevant plans of whatever date in the entire system being considered. A man who erects a shoe factory and who discovers in later periods that shoe leather is unobtainable, or that consumers no longer wish to buy shoes, made his decision in ignorance of the plans of others on which his own depended. A man who educates himself in a profession for which later demand is lacking has made a plan based upon incorrectly anticipated plans of others. (Kirzner 1979, p. 112)

<sup>12</sup>Even if true, this does not satisfy the burden of proof incumbent on Hayek. For that to be achieved he would have to assert not only that booms and busts enhance economic innovativeness, but that it does so in a manner that *more than offsets* the attendant economic losses.

<sup>13</sup>We are of course in effect making the usual assumption about risk-avoiding preferences.

As Kirzner points out, it is indeed possible for entrepreneurs to act incompatibly with intertemporal equilibrium. When they do so in a market context, of course, they suffer the consequences, and, as a result, this sort of misallocation tends to be minimized.

However, as Hayek does not seem to appreciate, governments, too, can engage in intertemporal misallocation, and a paradigm case in point is an attempt on the part of the state to promote overoptimal economic and scientific development. At the outset, this sounds like a contradiction in terms. How, after all, is it possible to have *too much* economic growth? One possibility, furnished by Hayek himself, is governmental monetary policy which results in a below market rate of interest, which leads to basic investments which cannot be completed, e.g., the classical Austrian business cycle time misallocation of the structure of production (Rothbard 1975; Mises 1963; Hayek 1931).

Another example might well be President Nixon's "moon shot" of several decades ago. This was a "success" in that several taxpayers were indeed launched up to this celestial body, and made it back home all in one piece. But it is unlikely that this was an impetus to the overall goal of space exploration; it is more probable that it came too soon, before the complementary factors of production were in place. The point is, had the billions of dollars spent been used instead for research and development in fuels, rocketry, life support systems, human (scientific) capital, etc., it is entirely possible that the human race would have been, by now, far ahead of where it actually is in this regard.

It is thus not a matter of weighing additional economic growth against the ravages of the business cycle. The latter is, of course, deleterious—not only to "children and other living things"—but to the entire economy. The former, however, is *also* a denigration of economic welfare, and cannot, therefore, be considered as a positive offset to the admittedly harmful boom and bust cycle.

There is another way to make this point. The Hayek I who supports fractional reserve banking and government interference with the market in order to spur "growth" is an economist who is in effect calling upon the central banking system to determine the evenly rotating economy's interest rate. That this cannot be done is not due merely to a lack of knowledge, a continual refrain in the Hayekian *oeuvre* (Salerno 1993). The problem is, fractional reserve banking must necessarily blunder into continual bouts of

excessive money creation, and other forms of instability. To be sure, it is possible to expand credit beyond 100 percent of the gold stock, but this cannot be done for the goods and services in the economy at any given time. The attempt to do so is like trying to push down the water level in the bathtub: some of the water necessarily seeps out.

### **One-Hundred-Percent Money**

Hayek's allegiance to the present fiduciary system is evident when he states that in holding deposits stable, banks would be reduced to "the role of brokers, trading in savings" (1933, p. 190). Rothbard (1991) offers in a slightly different context what is, in effect, a blunt rebuff to Hayek's support of the banks. In speaking hypothetically concerning the possibility of 100-percent reserve requirements, he argues that savings and deposit institutions could remain profitably in business simply by charging their customers for their services, for if they provide a useful product they would be paid for it just as consumers pay for traveler's checks. Rothbard adds:

If they [the public] are not willing to pay the costs of the banking business as they pay the costs of other industries useful to them, then that would demonstrate the advantages of banking to have been highly overrated . . . there is no reason why banking should not take its chance in the free market with every other industry. (1991, p. 27)

Hayek labels the concept of 100-percent reserve requirements as utopian in that not only will our economic progress made stagnate because of them, but bank money and notes would be eliminated and all deposits would remain fettered in savings accounts. Rothbard contends that with the elimination of fractional reserves, there will be a drop in the money supply, thus shortening credit, but that the banking industry would adjust and hold debentures of various lengths to offer as credit instead of demand deposits (1991, p. 23). In this manner, credit is potentially extended only to those who are deemed worthy of it at the market rate of interest. Since loans extended at an artificially low rate lead to an inevitable disruption of the growth process, the elimination<sup>14</sup> of fluctuations requires the abolition of this practice.

<sup>14</sup>More precisely, we should rather speak of a radical reduction, in the sense that government would no longer destabilize the market process in this manner.

As Rothbard suggests, the banking industry as we know it would be altered dramatically in the event 100-percent reserves were required. However, its ability to grant credit will not be entirely curtailed. Only demand deposits, not time deposits, will be subjected to such requirements. More importantly, many banks have diversified into other markets such as corporate finance and various sales and trading functions. In fact, under the proposed system, the trading of debenture packaged securities could become quite profitable, similar to the field of mortgage-backed securities today.

In Rothbard's view of fractional reserve banking (1991, p. 21):

issuing promises to pay on demand in excess of the amount on hand is simply fraud, and should be so considered by the legal system. For this means that a bank issues "fake" warehouse receipts—warehouse receipts, for example, for ounces of gold that do not actually exist in the vaults. This is legalized counterfeiting; this is the creation of money without the necessity for production, to compete for resources against those who have produced. . . . I believe that fractional reserve banking is disastrous both for the morality and for the fundamental bases and institutions of the market economy.

An objection that has been used against this perspective cites the "fractional reserve parking lot."<sup>15</sup> Here, an entrepreneur sells not the right to a parking space, as occurs in the ordinary situation, but only the right to a parking space subject to the condition that there is room in the lot for an additional automobile. The firm, then, is selling not a parking space, but in effect a lottery ticket for a parking space, where the probability of a "win" is the number of actual spaces on the premises divided by the number of such "rights" sold to the public. For example, if there are 100 parking stalls available, and the garage has sold 400 tickets, then, *ceteris paribus*, the buyer has a 25-percent chance of being accommodated when he wishes to avail himself of this service.

Now this sort of commercial arrangement, if it is conducted in an open and honest manner, is not fraudulent. It should therefore be legal. However, there is a disanalogy between this

<sup>15</sup>It would be nice to be able to cite a published claim to this effect. Unfortunately, to the knowledge of the present authors, such arguments only exist so far in the "oral tradition."

scheme and the fractional reserve system for money as currently practiced. At present, money placed in a bank is called a "demand" deposit, logically implying that it would be available, in full, whenever demanded, with a probability of certainty. If the "fractional reserve parking lot" were to be an accurate analogy to monetary practice, instead of being called a "demand" deposit, it should be called "purchasing a lottery ticket for money," or some such. Further, in every other way—publicity, explicit contracts, etc.—banking procedures would have to be brought into line with parking lot practice. Then, and only then, could the charge of fraud be dropped. Under such conditions, there would still be the empirical question of whether or not anyone would purchase a "lottery ticket money deposit."

This discussion should by now have made it clear that we are now very far removed from the system defended by Hayek. Yes, under certain hypothetical and narrowly stipulated conditions, something vaguely resembling the fractional reserve system defended by Hayek could be constructed so as to avoid the charge of fraud. It is certainly logically possible that someone, somewhere, might actually purchase such a ticket. But these implausible scenarios can by no means serve to justify the Hayekian analysis.

Like death and taxes, the business cycle has become invested with inevitability. With the advent of inflationary recession, something inconceivable under the Keynesian dispensation, the leaders of the economics profession are no longer so confident they can flatten out the peaks and the troughs.<sup>16</sup> In our view, however, the former level of optimism is (potentially) justified, at least under the (admittedly politically unrealistic) assumption that government no longer generates the cycle through its destabilizing monetary policy. Under these conditions private malinvestment would undoubtedly occur, but it would result from poor entrepreneurial judgment, not centrally driven excess credit. Nor is there any reason to assume that these errors would "cluster" (Rothbard 1962), magnifying the errors of a few individuals. On the contrary, misallocation of funds, on the free market, would be dealt with in the same manner as all entrepreneurial error: with bankruptcy. But it is only with the initiation of 100-percent

<sup>16</sup>In the late 1960s, when the Keynesians were riding high, there was brave talk about ironing out the business cycle. Samuelson (1970, p. 330) even went so far as to title his chapter on the subject "Fiscal Policy and Full Employment without Inflation."

reserve requirements, and the overall separation of state and monetary institutions, that there is any hope of stamping out the business cycle.

Rothbard contends that:

someone must propagate the truth in society, as opposed to what is politically expedient. If scholars and intellectuals fail to do so . . . all hope of social progress would then be gone, for no new ideas would ever be advanced nor effort expended to convince others of their validity. (1991, p. 43)

Hayek's initial (1931) efforts to clarify the causal connections of the business cycle were exemplary. But as we have seen, his (1933) publication—also part of Hayek I—was highly problematic. Here, then, is another bit of evidence showing not only the superiority of the Misesian over the Hayekian vision, but also indicating that although the Misesian Hayek I is preferable to the Popperian Hayek II, the former was by no means without fault.

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