# TOWARD A GENERAL THEORY OF ERROR CYCLES

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One of Ludwig von Mises's most important contributions to economic science was the business cycle theory that he first presented in his *Theory of Money and Credit* (1981, ch. 19, esp. pp. 338ff.). This theory has been elaborated by Mises himself and received important additions through the hands of Friedrich A. Hayek and Murray N. Rothbard.[1] Yet in its foundations it remains unshaken as from the day of its first publication.

The purpose of this article is threefold. First, we challenge Mises's theory by arguing that it is not generally and apodictically valid. Therefore, it cannot be part of economic theory which, as Mises himself stated, is a purely logical science of action. Second, we give the outlines of a truly praxeological (and therefore general) theory of error cycles that withstands this specific criticism. And third, Mises's business cycle theory will be restated in the light of the new approach, that is, it will be interpreted as an instance of a more general theory and thus put on more solid grounds.

## A CRITIQUE OF AUSTRIAN BUSINESS CYCLE THEORY

### *Error and Business Cycles*

Any business cycle theory is essentially a theory of error. Its aim is to explain the recurrence of the phenomenon that we call crisis; that is, a situation in which the simultaneous economic failure of many people becomes obvious. Thus, business cycle theory not only has to explain the occurrence of error but the *recurrence* of a cluster of errors as well. This reminder is especially useful since many economists tend to interpret the business cycle as an equilibrium phenomenon.[2] Let us spell out what that means in terms ordinary people use. It means that these writers contend that bankruptcies are planned, that the loss of big and small

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[1]See in particular Mises (1928; 1998, pp. 550ff.); Hayek (1929; 1931); and Rothbard (1993, pp. 854ff; 1983, pt. 1).

[2]See in particular Lucas (1987); Schultz (1975); and also Shmanske (1994).

fortunes was intended from the outset, and that people could conceive of no better employment for their labor and money than throwing it out the window.

It is to the great merit of the Austrian business cycle theory that it explains recurrent errors in investment decisions by a common cause, namely, the monetary organization that prevails in western civilization. The main features of this system are fractional reserve banks and a central bank operating as a lender of last resort. Under these circumstances commercial banks can unexpectedly increase the quantity of money substitutes (today mainly demand deposits) and, by lending this new money out, push the market interest rates below the level they would have otherwise reached. Thus, with the given production capacities more investment projects are begun than can ultimately be sustained. A systematic error has occurred. It is impossible that all projects are successfully carried out, and this must sooner or later be discovered. When this discovery gains widespread attention, the business cycle has reached the crisis phase. The supposedly least profitable projects are now abandoned and production continues on a more solid base. However, the source that brought about the systematic error is still operating. Still, commercial banks can increase the quantity of their money holdings beyond the quantity of money they may dispose of. And still the central bank helps them in cases of "liquidity crises." Therefore, systematic error is likely to occur again.

Error or failure is a permanent condition of human endeavor. It consists of choosing an alternative for action that is less important (less preferred) than another one that could have been executed instead. Austrian business cycle theory does not have to assume that, were it not for inflation, the market participants would not err at all. It can rely entirely on the idea that inflation causes additional errors; that is, more errors than otherwise would have occurred: "Credit expansion in the midst of unemployment will create *more* distortions and malinvestments, *delay* recovery from the preceding boom, and make a *more* grueling recovery necessary in the future" (Rothbard 1983, p. 34).[3] Thus, the Austrian approach gives a realistic account of the trade cycle and provides the only solution that exists to the theoretical problems raised by any business cycle theory.[4]

*General Refutation of the Consequentialist Analysis of Error*

However, even the present Austrian solution is defective because it relies on a fallacious analysis of error. Ultimately, the traditional Austrian approach consists of giving an explanation of *how error comes about*. It is what could be called a consequentialist explanation. Error is conceived as the consequence of a preceding event; namely, of a change in the conditions of action.[5] Thus, Austrian business cycle theory explains clusters of errors by changes in the quantity of money. It claims that market participants err because the quantity of money is increased by

[3]Emphasis added. See also Mises (1998, pp. 584f.) and Garrison (1991, p. 95).

[4]For a brilliant critique of other approaches see Rothbard (1983, pp. 39ff.); see also Mises (1998, pp. 559f., 580ff.); Hoppe (1983, pp. 64ff.); Garrison (1989; 1991).

[5]This explanation is manifest in the use of the imaginary construction of the evenly rotating economy for the explicit purpose of analyzing "the problems of entrepreneurship and of profit and loss" (Mises 1998, p. 248). It is also evident in statements like "[changes in valuations] are the source from which entrepreneurial profits and losses stem" (ibid., p. 534) or "new data emerge again and again and divert the trend of prices from the previous goal of their movement toward a different final state" (ibid., p. 547).

the banking system. Their error is manifest in an interest rate that is too low in respect to the prevailing social time-preference.

Before we come to a refutation of this theory, we should note a crucial but hitherto neglected fact. That is, the problem raised by the analysis of error exceeds the limits of business cycle theory. It is a fairly general problem, and it calls for a general solution. For whatever the explanation of error might be, it would have to hold not only for error clusters but also for individual errors. The theory that changes cause error *is* a general solution, even if we can demonstrate it to be wrong. And if we venture to propose a better theory it must necessarily be a general solution as well. In other terms, business cycle theory must be grounded in a general theory of the recurrence of clusters of errors.

According to the consequentialist approach, error is impossible and equilibrium must prevail if conditions do not change any more. Error can only occur if conditions change. However, the crucial problem is that obviously not all changes *necessarily* lead to error. For example, the fact that, for the payment of wages, one needs more cash at the beginning of a month does not surprise the businessman. Or, even if more legs were broken in 1999 than in 1998 this would probably not cause the bankruptcy of health insurance companies. How can these undeniable facts be reconciled with the consequentialist approach? One could claim these changes are part of a larger class of events which, as a class, do not vary in the course of time. Dealing with single elements of a class implies a certain risk, but it does not lead to error. Only if the behavior of the entire class varied would error ensue. Error could thus be conceived of as the consequence of singular changes of class behavior. Similarly, other singular events like the discovery of a law of nature or the invention of an unheard-of product bring about error, too. It is this error-inducing singularity that, according to consequentialism, constitutes what is called uncertainty.[6] However, the existence of singular events could only serve as a basis for a consequentialist explanation of error, if they *implied* error. Otherwise, a mere change of conditions, and even a singular one, could never be a sufficient explanation of error. Does the occurrence of singular events necessarily lead to error? This is the decisive question. Only if this was the case could there ever be a consequentialist business cycle theory. Yet it is definitely not the case. Error cannot be explained by singular changes of conditions because even such changes *can* be anticipated. Anticipation does not, of course, mean that one *knows* what will happen in the future. This could never be the case. Rather it means that one *judges* correctly what the future conditions will be (Hülsmann 1997). We may admit that the conditions of action change every instant, but this does not prevent us from anticipating them.

Another way of attacking consequentialism would be to claim that there can be no singular events in human history. However, this criticism would be unjustified. He who denies the existence of singularity would have to claim that all possible events could be classified in advance. He would also have to make this claim for future states of knowledge. Yet such a claim would be self-contradictory because once people know this general classification they will behave differently, upsetting the pattern

[6]For the distinction between risk and uncertainty see Knight (1921). Mises improved upon Knight's argument by introducing the distinction between class probability and case probability (see Mises 1998, pp.105ff.).

that, before, explained their actions (Hoppe 1983; 1997). Thus, human choice and creativity account for the singular events that defy all-encompassing classifications.

Rejecting the consequentialist approach to the explanation of error, we side with common sense. For, if error was the necessary consequence of some preceding event then we would have to deny the notion of choice altogether. Freedom of choice does not, to be sure, mean that one can choose any end that one would like to attain. It is not the realm of our fancies. In each choice we can choose the *most important* among the available alternatives, and we can choose a just action rather than committing a crime. We always have the power to do this. The claim that a previous event determines the success of our action corresponds exactly to the dubious statement that one had to murder one's grandmother because one was born poor.

*Refutation of the Consequentialist Approach to Business Cycle Theory*

How does the preceding discussion translate into the realm of business cycle theory? The consequentialist approach implied in the traditional Austrian theory states that clusters of errors on the market are the consequence of increases in the quantity of money. Yet, such increases can be anticipated. The mere fact that the quantity of money changes does not prevent the entrepreneurs from judging correctly what influence it will exercise on market prices. Therefore, an increased quantity of money does not imply that too low of an interest rate be established. This point has been conceded by Mises:

> It may be that business men will in the future react to credit expansion in another manner than they did in the past. It may be that they will avoid using for an expansion of their operations the easy money available, because they will keep in mind the inevitable end of the boom. (Mises 1940, pp. 696f.)[7]

One critical remark needs to be added to this statement. It concerns the question of precisely how the correct interest rate would be established in spite of an ongoing inflation. Mises claims that a more prudent attitude toward the "easy money available" would avoid the business cycle. Such an attitude among the owners of the most profitable businesses would merely drive the interest rate down and thus strengthen their competitors. Rather, the correct interest rate would be established by credit-taking entrepreneurs, who anticipate that the increased quantity of money will permit higher selling prices in the future. These entrepreneurs would bid for higher interest rates; that is, they would create a higher price premium on the gross market rate of interest. From this it follows that inflation is never favorable to the prudent. It changes the conditions of economic success in favor of the gamblers and rent-seekers (Hülsmann 1996b, pp. 197ff.).

In Mises's view, a business cycle is unavoidable whenever the entrepreneurs do not refrain from using additional fiduciary media. He said: "Issuance of fiduciary media, no matter what its quantity may be, always sets in motion those changes in the price structure the description of which is the task of the trade cycle" (Mises 1998, p. 442, n. 17). Therefore, all that could be done was to restrict credit as soon as the symptoms of the business cycle appear. Then "the boom comes to an early end; a

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[7] The quoted passage is translated in Mises (1943, p. 251).

recession starts" (ibid., p. 798). In this context, Mises explicitly denies the validity of the above argument that error could be avoided by entrepreneurs establishing a higher price premium on interest rates in advance of the future effects of inflation. He claims that the "price premium always lags behind the changes in purchasing power because what generates it is not the change in the supply of money (in the broader sense), but the—necessarily later-occurring—effects of these changes upon the price structure" (ibid., p. 545).[8] Thus, Mises holds that the causation at work necessarily proceeds in two steps. At first, the inflation creates higher prices for the factors of production while interest rates remain unaffected or are even lowered (which is what constitutes the error). Then this price increase is incorporated into expectations and brings about a higher price premium on interest rates.[9]

However, this reasoning is defective on several grounds. First of all, Mises gives no argument why the actors *could not* "compute in advance the date and the extent of [the price changes generated by the alteration in the money relation] with regard to all commodities and services which directly or indirectly count for their own state of satisfaction" (Mises 1998, p. 544). He merely contends that "such computations cannot be established because their performance would require a perfect knowledge of future conditions and valuations" (ibid.). Of course, we do not have to quarrel about whether human beings enjoy perfect foresight or not. This is not the question at stake. The question is not whether people are *likely* never to fail but whether it is *conceivable* that they do not err in their undertakings. The answer to this latter question is unambiguous: people definitely *can* anticipate future events. This is a serious problem for Mises's business cycle theory, which relies on the proposition that inflation implies error. Indeed, the concept of implication in its strong praxeological sense permits no conceivable exceptions. If it is possible that the effects of inflation are correctly anticipated then inflation does not necessarily lead to error. A theory stressing an inflation-induced error cycle then must fall to the ground. But let us concede Mises's point for the sake of argument. Let us admit that it is impossible that all market participants anticipate the effects of inflation on all commodities. The question remains, then, whether this is really required for a price premium to be established in advance of future events. And this question has to be answered in the negative. As we have stated above, business cycle theory does not have to rely on the assumption that there was no error at all before the cause of the business cycle set in.[10] It is sufficient to explain why *more* errors then occur. Similarly, for a price premium to be established in advance, it is not necessary to stipulate that all market participants anticipate the effects of inflation. We merely assume that anticipating the

[8]See also the analogous argument (Mises 1943, p. 547f.).

[9]Hayek has further elaborated this kind of reasoning in terms of a mechanistic relationship between prices. See in particular Hayek (1939).

[10]One could argue that, from Mises's methodological point of view, business cycle theory has to rely precisely on this assumption. For, according to Mises, error and its offspring—profit and loss—has to be analyzed by a comparison to the evenly rotating economy (ERE); that is, to a state of affairs in which no error occurs (Mises 1998, p. 248). In this case, it is true; a "business cycle" would result even if only *some* market participants did not anticipate all effects of an ongoing inflation. For even some few errors represent a "cluster" in comparison to a situation of no error at all. However, as the market participants in the ERE are admittedly not acting human beings, but reacting automatons, this construction is even more questionable than the assumption that *all* market participants anticipate *all* the effects of inflation—which is at least logically conceivable.

effects of inflation is not more difficult than anticipating the effects of other changes. If this is the case, then, there will be no cluster of errors in consequence of inflation; that is, there will be no business cycle.

Before dealing with the important issue of whether or not reckoning with inflation is more difficult than anticipating other changes, let us briefly discuss two other problems in Mises's argument. The first refers to his account of the price premium in the final state of a ceaseless inflation. Here, Mises claims, "things become different. The panic of the currency catastrophe, the crack-up boom, is not only characterized by a tendency for prices to rise beyond all measure, but also by a rise beyond all measure of the positive price premium" (1998, p. 545). Now, this clearly contradicts his claim that price premiums always lag behind the changes in purchasing power. For if they did they would have to do so in hyperinflations, as well. Mises could, therefore, give no explanation of the enormous price premiums in hyperinflation. If, by contrast, price premiums did not always lag behind changes in purchasing power then error would *not* necessarily follow from inflation. Mises's trade cycle theory would thus again be contradicted. A further problem concerns a contradiction between his consequentialist approach to business cycle theory and his more general explanation of profits and losses. Mises's central tenet in the latter is that the

> only source from which an entrepreneur's profits stem is his ability to anticipate better than other people the future demand of the consumers . . . the real entrepreneur is a speculator, a man eager to utilize his opinion about the future structure of the market for business operations promising profits. This specific anticipative understanding of the conditions of the uncertain future defies any rules and systematization. (Mises 1998, pp. 290, 585)[11]

In other words, it is not a specific event that causes error and thereby profits and losses. Rather, it is entrepreneurial ability alone; that is, entrepreneurial choice that manifests errors on the one hand and correct expectations on the other hand.

Mises neither explains why inflation *always* leads to error nor why the market participants *cannot* anticipate its effects. He therefore fails to prove that inflation implies error. It would also not be a sufficient solution to claim that credit expansions "distort" prices and calculations. This would require an explanation of the difference between distortions and normal modifications of the price structure. Indeed, all ongoing events exert some influence on prices and calculations. All of them could therefore be said to distort prices. Murray Rothbard has attempted to solve this problem in the following way:

> Bank credit expansion *distorts* the market's reflection of the pattern of voluntary time preferences; the gold inflow *embodies changes* in the structure of voluntary time preferences . . . time preferences may temporarily fall during the transition period before the effect of increased gold on the price system is completed . . . The fall will cause a temporary increase in saved funds, an increase that will disappear once the effects of the new money on prices are completed. (Rothbard 1983, p. 38)

Of course, time preferences *may* fall during the transition period as well as rise. The question, however, is not what *may* happen to time preferences but whether

[11] See also Mises (1980b).

they have to fall (or rise) as a consequence of increased gold. Is a lower time preference implied in an increase of money? This would be irreconcilable with the theory of value to which Rothbard adheres. Consumers' preferences are not already implied in some quantities of commodities. Therefore, time preference, which is but the temporal aspect of consumer's choices, cannot be determined by the quantity of gold. But, even if we admit Rothbard's point for the sake of argument, it would be impossible to arrive at his conclusion. For why, one would have to ask, does this point apply only to gold? Why does an increase of fiat money not lead to falling time preferences as well? Here, Rothbard fails to establish a viable distinction. He merely *asserts* that bank credit distorts whereas a gold inflow embodies real changes.

Now, let us come back to the question of whether reckoning with inflation is *more difficult* than, say, reckoning with a change in consumer demand from one product to another or in the savings-consumption schedules. This argument has also been advanced by Rothbard. He states:

> [entrepreneurs] could not forecast the results of a credit expansion, because the credit expansion tampered with all their moorings, and distorted interest rates and calculations of capital. No such tampering takes place when gold flows into the economy, and the normal forecasting ability of the entrepreneurs is allowed full sway. (Rothbard 1983, p. 38)[12]

Strictly speaking, Rothbard's statement reduces to the claim that it is more difficult to forecast credit expansions because it is more difficult to forecast them. He uses different words to distinguish the influence of credit expansions from those of other changes like changes in consumer demand, when he says that credit expansions "distort" prices and calculation. As we have seen above, this chain of reasoning begs the question. However, a somewhat different argument seems to be implied in the expression "tampering" insofar as this is meant to suggest an influence that is hidden from the rest of the market participants. According to this argument, it would not be increases in the quantity of money *as such* that lead to error. Rather, clusters of error would result only if these increases were veiled. Moreover, and most importantly, Rothbard suggests that tampering is more likely to occur under government interventions than on the free market. Thus, the emphasis of the argument is shifted to completely different grounds. Clusters of errors are no longer explained in the narrow terms of monetary changes but in the wider ones of government activities. This new emphasis will indeed play an important role in the present article.

To complete our critique of the traditional Austrian business cycle theory, let us restate our main tenet, namely, that taking account of inflation is not a problem distinct from other problems of anticipation. The effects of inflation can be anticipated. Therefore, inflation does not imply error. The significance of this conclusion for economic theory can hardly be overemphasized. For, it means that the inflation-induced business cycle is, at least in light of the traditional theory, not a matter of logical necessity but of historical contingency. Whereas this fact has been clearly recognized

[12] See also Rothbard (1990, p. 60). A variant is Mises's claim that a slight and continuous increase of money and money substitutes can be handled by entrepreneurs (see Mises 1998, p. 574). Of course, this represents merely an additional problem for his consequentialist explanation of error. For now one has to explain why constant inflation does not or even cannot lead to errors while one still has not explained why irregular inflation *must* lead to error.

(Lachmann 1943, pp. 108ff.; Selgin 1990, p. 53 n.; Salerno 1995 pp. 307ff.) it seems as if its full importance for business cycle theory has been ignored. If error is not necessarily related to inflation, then there is no Austrian account of the *recurrence* of error. If an increase in the quantity of money can cause widespread error today and no error at all tomorrow, then clusters of business errors can hardly be deduced from inflation alone. Rather one would now have to explain under which conditions inflation leads to error and under which conditions it does not. This additional explanation would then be the business cycle theory. As long as this explanation does not exist–and it does not exist–we cannot avoid the conclusion that, at present, there is no Austrian business cycle theory at all.

In a certain sense, we are back to zero. If change *as such* cannot be the cause of error, then a business cycle theory seems to be impossible. This, however, is but a manifestation of the fundamental defect of all consequentialist approaches to the explanation of error. All attempts to conceive of error as the consequence of some preceding event must fail. As long as human beings choose, that is, as long as they are beings with free will, the correctness of choice must in principle be unrelated to preceding events and choices. Instances of error cannot lend themselves to a consequentialist explanation.

What are, then, the theoretical options that we face–apart from abandoning the idea of a business cycle theory altogether?[13] In what follows we shall argue that there is not only a case for Austrian business cycle theory, but that it can be derived from the framework of a general theory of error cycles. However, in contrast to the traditional consequentialist approach we shall explain the recurrence of clusters of errors along essentialist lines.

## An Essentialist Approach to the Analysis of Error Cycles

### *The Error Cycle*

The essentialist approach to the analysis of error does not attempt to deduce error from preceding events. Rather, it takes error as an ultimate given, submitting it to a purely logical investigation. It completely abandons the question, How does error come about?, in favor of the question, What are the implications of error?

The theory of error cycles starts from the fact that error is committed at the moment of choice but only revealed in the future (Menger 1976, pp. 67–71). There is always a time lag between a wrong choice and the discovery that it was a wrong choice, and at the moment of choice, one is never *aware* of one's errors–otherwise one would not engage in this action at all. The necessary time lag between an error and its discovery implies an error cycle, with all the familiar features of the business cycle theory. Fundamentally, two stages can be distinguished. At the beginning of the first stage the error is committed. During this error phase, acting man believes he attains more important ends than he actually is able to attain (in business cycle theory this phase is somewhat misleadingly called "boom"). The longer the error stage, the more investment decisions will be made on the grounds of the erroneous assumption.[14] The "crisis" marks the point of time

[13]For the view that business cycle theory has to be abandoned, see for example Eucken (1989, p. 180). Eucken claims that each business cycle requires an individual historical account.

[14]On the psychological aspects of the error phase, and to what extent it goes hand-in-hand with mass irrationality and even insanity, see Cantor's (1994) brilliant study.

when the error is discovered. Then begins the second stage, a phase of reestablished sobriety. In the crisis, acting man discovers the extent of the damage done in the past. He gains a sober insight into the real options that he now faces. His actions are put again on a sound basis—until the next error occurs.

Thus, the general theory of error cycles departs from an analysis of individual errors. Any crisis can be described in terms of an individual error cycle. However, our aim is not to explain the particular errors that invariably occur as long as there is human life. We have to explain the recurrence of clusters of errors, that is, the repetitive occurrence of more or less synchronous errors of many persons by deducing them from a common cause. Therefore, a program for the essentialist explanation of recurrent clusters of errors has to identify more or less permanent patterns of action (institutions) in which the error of many persons is *inherent*. Instances of crises are then explained as situations in which many acting persons *become aware* of their errors or of the consequences of their errors.

*The Use of Government as an Illusion*

There are many institutions involving many people. In light of the consequentialist approach to the explanation of error, all lend themselves to the explanation of clusters of errors. The only problem left would be to explain the recurrence of those clusters. However, if we think along essentialist lines, then the main problem is to find institutions in which some kind of error is inherent. This is a serious problem because institutions should be expected to *serve* the endeavors of acting man rather than to obstruct them. And even if one can conceive of erroneous institutions, it seems to be somewhat difficult to prove that they are inherently erroneous. It is, for example, a common phenomenon that an institution *becomes* superfluous when conditions change. But this implies that it has served at least for a while beforehand. Rather than being inherently erroneous it simply failed as the conditions of action changed.[15] By contrast, how is it conceivable that an institution is erroneous irrespective of all other conditions of action? We must look for a kind of error that is independent of time and place. Only an institution built upon such an error is an inherently erroneous institution. Such an error, which is independent of time and place, we call illusion.

Now, there is a kind of widespread institution in which illusion is inherent. This institution is government; that is, a person or a group of persons who permanently violate property rights of other people (the subjects of government).[16] To what extent does the existence of government represent a general illusion on the side of its subjects? Let us, first, observe that each society is based on a private-property régime as its nucleus of civilization. There can be no society where there is no peaceful appropriation based on self-ownership. For we can only meaningfully speak of society if one has the right to appropriate yet unowned goods, to

[15]A discussion of this change in the character of institutions can be found in Wieser (1924). Wieser's analysis of the rise and fall of institutions used Menger (1985, pt. 2) as a foundation.

[16]For the nature of government as being able to violate private property, see, for example, Rothbard (1998). Even though it is a very important question as to how such an institution could ever emerge, this topic need not be addressed here. Our purpose is more limited, thus we can take the existence of government as an ultimate given and confine ourselves to analyzing its implications. Moreover, there are already excellent investigations into the emergence of government. See especially Oppenheimer (1990); de Jouvenel (1972); Nock (1994); Krippendorf (1985); Higgs (1987).

transform them through the expense of one's labor, and to exchange them against other goods on the market. Any appropriation inconsistent with these three ways would mean that the appropriator claims a right that he denies to his fellow; that is, ultimately, the right to self-ownership. As far as such aggressive acts occur there is no society but civil war, be it open or suppressed. Non-aggressive actions are a necessary feature of human life and of civilization. Violations of property represent partial obstructions of life in society. This does not mean that, in reality, there *are* no aggressive acts. There will be aggression as long as there are remnants of the human race. However, the crucial point is that aggressive actions do not constitute a society; they rather destroy its achievements. Thus, they represent additional problems for those eager to profit from the division of labor. They are *additional* problems because any act of violence presupposes that the goods that are violently appropriated or modified have been rightfully possessed beforehand. A purely private-property régime is logically prior to violent interventions.[17] Hence, the problems created by the latter must be added to the problems confronting any civilization.

The illusion in the context of aggression is only implied in the deliberate institution of violence; that is, in government. It does not refer to aggression as such. The victim of ordinary "private" violence is very conscious of what is going on. But most victims of governmental violence believe that this aggression is necessary for life in society. No one has expressed this more brilliantly and concisely than Bastiat (1986, p. 252), who defined government as "the great fiction by the help of which everybody tries to live at the expenses of all other people."[18] This fiction or illusion is precisely what distinguishes governments from ordinary aggressors. The existence of a government presupposes that a majority of the population (or, in any case, *many* persons) support it. Each government needs the consent of the majority in order to establish its rule.[19] This, in turn, presupposes that these people believe aggression to be useful in respect to purposes different from those of mere exploitation. People believe that aggression is necessary to produce certain goods like protection, insurance, education, judicial advice, etc. This, however, is a blatant error. Any good can be produced on the market if consumers are willing to give enough of their property in exchange for it. If a good cannot be produced profitably, this means that the market participants do conceive of more important uses of their property. Employing aggression to produce the good does not change this fact. It merely takes away the factors of production from enterprises which would have used them in a way that, according to the valuations of property owners, is more important.

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[17]See on this point, among earlier authors, Bastiat (1983, pp. 148ff.; 1986, pp. 227ff.); de Molinari (1849); Spencer (1995, pp.175ff.; 1981, pp. 149ff.). Among later authors, see in particular Rothbard (1978; 1982); Hoppe (1987; 1989; 1993a).

[18]Recently, another French author has forcefully captured this aspect of aggression in his analysis of communism: "The origin of communism is not situated in history, not in the concrete, not in the 'praxis,' but, quite to the contrary, in the human capacity to ignore it" (Revel 1992, p. 262). Revel also gives a splendid quote from Saint Augustine, *Confessions*, X, 34: "So much is truth beloved that whoever loves something else wishes it to be the truth." See also Hoppe (1987; 1989; 1993b, ch. 4, esp. pp. 102ff.); Baader (1997). In this context one is also reminded of the Emperor's new clothes, or of Plato's tale of the ring of Gyges.

[19]See de La Boétie (1993); Hume (1987b, pp. 32ff.); see also Wieser (1926, pp. 5ff.); and Mises (1998, pp. 188ff.).

Before we enter into further discussion, note that all the formal conditions for a general theory of recurrent clusters of errors are fulfilled in this new approach: because government is an institution, it can account for the *recurrence* of error in the course of time. Because it is an institution involving many people, it can account for clusters of error. Furthermore, there can be no government without an illusion (that government is a part of, and necessary for, life in society) being widespread. Therefore, government and recurrent clusters of error always go hand-in-hand. They coexist. No consequentialist argument is needed to establish this connection.

*Government and Error Cycles*

Like any other institutionalized large activity, government has a profound impact on society. It shapes society's capital and knowledge structure, and its structure of character types. For example, consider the case of government subsidies for aircraft production. They keep the subsidized enterprises in business longer than they would be otherwise. Capital is replaced in aircraft production rather than being invested elsewhere. Certain quantities of steel, electricity, land, workers, etc. are bound up in the production of airplanes rather than, say, in the production of trains or the printing of books. As a consequence, people continue to learn all of the things needed for aircraft production rather than learning about how to make better trains or books. Some people now even begin to learn things needed for the acquisition of government funds. They learn how to lobby, how to bribe, how to recognize the best moment for asking for more funds, how to smear and threaten any opposition. These are the effects not only of subsidies but of any government intervention. Without it, these sorts of capital goods and knowledge and character would be valueless. In today's industrialized nations there are many industries and professions that depend entirely on the existence of government. Just think of the farmers, Europe's steel and coal industries, operas and orchestras, teachers and professors at public schools and universities, and of course public utilities and other government agencies like the IRS, the Supreme Court, the Department of Justice, etc. What would all these organizations and persons do without government intervention on their behalf? They would not survive for a minute. The organizations would go bankrupt and the persons would have to start from scratch, rebuilding their human capital. Yet why should a government ever cease all or part of its interventions, thus inducing a crisis? This is the question our essentialist error cycle theory has to answer.

One general answer is, because government interventions *do* harm some people to the profit of other people, and because some of these persons do not fall prey to the illusion that government is necessary or beneficial. They will try to enlighten their fellows about the true nature of government. Whenever they succeed in doing so government is doomed and with it the human capital and other capital that depends on it. This is the illusion cycle of government in its most general form. Let us observe that we do not have to make any assumptions about when the attempts to abolish government succeed. We merely have to state that a government can be abolished and that, if it is abolished, the illusion is brought to an end. However, our main interest is not in single illusion cycles but in explaining recurrent general crises. Thus, the decisive question is whether government intervention as such, or at least some kind of government intervention, must necessarily lead to breakdowns that make the general error evident without yet being necessarily accompanied by an abolition of government. In this case, a

future repetition of the intervention would be possible and lead to further breakdowns and cycles. This would be an explanation for the recurrence of general crises.

Thus, let us first analyze a kind of government intervention that accounts for recurrent crises. Government activity must lead to recurrent general breakdowns whenever it implies fraud. The victim of fraudulent behavior is not aware of his situation and thus behaves as if everything was still in order. He thinks that he still can realize all the projects he had planned. He does not know that the quantity of his means has been diminished. Therefore, he will not adjust the structure of his property to the new circumstances. He is likely to leave for holidays in cases where he should rather begin to save and live from hand to mouth. If fraud occurs on a large scale, society's capital structure will be distorted in an exactly analogous way. People do not apprehend that the capital stock has been diminished by the embezzler and needs to be refilled through savings. Sooner or later they will discover this error. This is when the crisis sets in. Now, it is true that fraud could occur even if no government existed. Even a free society could be partially obstructed by more or less large-scale fraud. However, the crucial fact is that these partial obstructions of the market could never account for the *recurrence* of crises. In a free society, no embezzler could continue his business and quietly prepare the next fraud. This is a privilege of governments, insofar as they operate under the general illusion that they are necessary for the working of society. In many cases governments can commit fraud without that fraud being recognized as such (this is especially the case with money, which we will discuss in the next section). Even if government's fraud is recognized as being fraud this does not lead to government's abolition as long as the general public is deluded about its nature. The king might abdicate or the members of parliament might change, but not the institution of government itself. Thus, fraud will be tried again and subsequently provoke the next crisis. In this account we do not have to stipulate that all of government's attempts to commit fraud succeed (whereas, for example, the consequentialist approach to business cycle theory has to stipulate a necessary relationship between increases of the quantity of money and error). We merely have to point out that a government *can* commit fraud and that, *if* it commits fraud, this does not lead to its abolition.

Now let us deal with the question of whether all kinds of government intervention must, in the long run, lead to breakdown. We think the answer is in the affirmative, and it is based on Mises's famous calculation argument. The more intervention increases the less it can work, because it impedes economic calculation. The more private property is violated the more the price system, and thus the basis for a rational allocation of resources, is distorted.[20] Increased intervention brings about reduced efficiency in capital investments. Small interventions might not render calculation impossible, but interventions might not remain small because of competition on the political level and because there is no natural limit for government growth outside the exploitable stock of property.[21] One thing is sure—individuals and groups competing for government power will never be satisfied with the present level of interventionism. Warmongers long for bigger

[20]See Mises (1998, ch. 26) and Rothbard (1993). On Mises's calculation argument see the important contributions of Salerno (1990; 1993). See also Hoppe (1996) and Hülsmann (1997).

[21]See on this important point the pioneering work of Rothbard (1993, pp. 542ff., 825ff., 830ff.) and Klein (1997).

armies, statist teachers want to keep the children longer in school, some political entrepreneurs ask for export guaranties, others want to prevent unfair competition on the domestic market, etc. The only question is whether they get their way. Because government rests entirely on an illusion, its further growth requires the present level of illusion to be extended. In order to grow, government must, by whatever device, make its subjects believe that they profit from its new actions. Here it enjoys two big advantages. On the one hand, the subjects already believe government to be necessary, if only within certain limits. Therefore, new encroachments of government do not differ in principle but only in degree from its earlier activities. The existence of government implies that *some* aggression is held to be necessary. As the distinction between peaceful action and aggression is permanently blurred, the promotion of more far-reaching illusions is facilitated. On the other hand, the negative impact of interventionism on prosperity can only be established by sound reasoning and never just by reference to observations. If people begin to starve, the statists claim that this is not because of, but in spite of, interventionism. Rather than being reduced, government needs more power to bring the cure.

The outcome of the ideological struggle for and against government is an empirical question.[22] Either the statists and the friends of liberty might prevail when Armageddon comes. But this indeterminacy poses no problem for our theory. All that counts for our purposes is that the statists *can* win the struggle. In this case there will be a general economic downturn because no developed structure of capital can be maintained or extended without the possibility of economic calculation. Government will consume more and more property until nothing is left that still could be consumed. Total confidence in government leads to total government; that is, to all-encompassing socialism and to all-encompassing capital consumption. The end-state of really-existing socialism, for example, bore all the characteristics of a long illusion cycle.

> At the moment when a country is forced to abandon communism, it does not find itself on the level that was reached at the beginning of the communist phase but at a very much lower one, virtually nowhere. This is so not only with regard to the economy, but equally with regard to the political institutions, to social relationships, to cultural life. (Revel 1992, pp. 219f.)

If, then, government is not abandoned, the next cycle will be already on the way.

*General and Specific Cycle Theories*

We have outlined a general theory that allows us to deduce recurrent clusters of error from the very existence of government. It might be useful to add an observation on the application of our theory to more concrete cases. Government activity and widespread errors necessarily go in hand. This is the central tenet of our theory. However, the fact that the existence of government is a manifestation of error is entirely independent of the question of where government is manifested

[22] In other words, we deny that there is a kind of *inescapable* escalation mechanism of government interventions, with one intervention leading *necessarily* to the next one. For different approaches to explain interventions as the consequence of other interventions, see Condillac (1795, pp. 316ff.); Spencer (1981, pp. 45f, 79ff.); Mises (1977, pp. 150–51); Grinder and Hagel (1977, pp. 69ff.).

*in concreto*. The general theory of error cycles does not have to identify a concrete institution as being a part of government. As a theory *a priori* it leaves this problem open. Any valid business cycle theory can rely on it precisely because the general theory of error cycles does not venture to solve this problem and because its validity does not depend on such a solution. Rather it is the very task of *applications* of the general doctrine to particular conditions to provide such a solution. This means that one has to identify particular instances of government intervention and spell out where precisely the illusion is manifested. As a result, there would be various specific *error* cycle theories (the economic aspect of which would be specific *business* cycle theories).[23]

Our further discussion will nevertheless be confined to the narrow but important area of government meddling with money. The task will be to reconstruct the traditional Austrian business cycle theory as an application of the general theory of error cycles. Austrian business cycle theory has successfully stressed the role of money as an institution that is important for almost all market participants. It could elegantly explain the occurrence of clusters of errors, and the following discussion can rely entirely on this valuable insight. In accordance with the principle that widespread error cycles are an implication of government activity one has to focus on government meddling with money rather than on changes of the quantity of money *per se*. On this issue Mises and Rothbard were, of course, at least intuitively right. Rothbard (1993, pp. 850ff.) even properly discussed business cycles in his chapters dealing with government interferences in the economy.[24] However, we have seen that in essence his business cycle theory still followed the old Misesian lines. We now have to correct this remaining shortcoming by putting the old theory in our new terms.

## A Reconstruction of Business Cycle Theory

### *The Fraud Cycle*

Inflation is "the process of issuing money beyond any increase in the stock of specie" (Rothbard 1993, p. 851). Thus, either it consists of an increase in fiat money or an increase in titles of ownership and money without a corresponding increase of money in the hands of the issuing agency. The first technique is applied, for example, when government central banks print new paper money. The second technique is usually called fractional-reserve banking. In both cases, inflation is a form of aggression against the property of some market participants, and both forms of inflation can be fruitfully analyzed when we ask whether the inflation is perceived or not perceived (in the case of fraud). Our further investigation has to begin from this crucial distinction. Either inflation is perceived or it is not.[25] Let us first discuss the latter case.

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[23]See, for example, Mises's (1998, p. 586) observations on the "corn-hog cycle" or Hoppe's (1993c, ch. 3, pp. 61ff.) pioneering study on the dialectics of domestic and foreign government activity.

[24]Also see on this point also de Soto (1994, pp.157f.). Mises (1998, p. 573) asserted that business cycles could be a market phenomenon, but that "*today* credit expansion is exclusively a government practice" (ibid, p. 794, emphasis added).

[25]For an analysis of fractional-reserve banking on the basis of this distinction, see Hülsmann (1996a, pp. 213ff.; 1996, pp. 35ff.). For a critique of fractional-reserve banking see also Rothbard (1991) and de Soto (1998).

Inflation makes future selling prices higher than they otherwise would have been. If the entrepreneurs do not anticipate this they will not bid higher interest rates on the loan market into which the new money sooner or later will be poured. Therefore, the new money will be employed to finance some other additional projects. Thus, more investment projects are begun than can ultimately be completed, for the quantity of the factors of production has not increased. Merely the quantity of fiat or fiduciary money has increased without the market participants noticing it. However, sooner or later the fraud will be detected. Then those projects will be abandoned that cannot be completed and only the most important (that is, the most profitable) projects will be further pursued.

One easily recognizes that the above description of the fraud cycle is exactly what the traditional Austrian business cycle theory is about. Yet, we have to qualify the traditional account in one respect. It is not the mere increase in the quantity of money that leads to the fraud cycle, but government activity. Government meddling with money is, to be sure, not fraudulent *per se*, but as we shall see it is nevertheless the necessary condition for fraud-induced business cycles. Before we demonstrate this assertion let us briefly point out the fact that government meddling with money, at least, facilitates fraud. First, as government is the monopoly owner of the whole judicial and police apparatus there are no effective means left to control the activities of banks and fiat money producers. Second, it is the proclaimed goal of central banks to reduce unemployment through inflation. This is possible only if the rest of the market participants remain ignorant about the inflation (Mises 1980c). In order to attain their self-proclaimed ends, central banks must try to deceive the other market participants. Third, as inflation can only benefit some market participants at the expense of all others, it must be hidden from the distrusting public. The fraud cycle is therefore likely to recur as long as and insofar as government meddling with money takes place. It is the very purpose of monetary interventions to commit fraud on large numbers of the market participants.

Now, one could insist that fraud is not a feature particular to government. Even on the free market there could be counterfeiters and fraudulent bankers holding only fractional reserves for the money substitutes they issued. This is true. However, such instances could never be sufficient to establish a business cycle theory. Let us recall that any such theory has to explain why there is a cluster of errors and why this cluster of errors is likely to occur again. Pointing to the possibility of fraud on the free market does not solve these problems. At best, one can in this manner explain *clusters* of errors, but one invariably fails to explain their recurrence.

Imagine a commercial bank that has been brilliantly managed for four generations and has been able to expand its activities over a large area. Suppose further that the next heir is an utterly evil person who abuses the confidence of his customers. He commits fraud by holding only fractional reserves. Certainly this leads to a relatively general error cycle. Many market participants are affected when he eventually goes bankrupt because his fraud created a cluster of errors. We could consider an even worse case by supposing that the evil heir convinces some, or even all, of his fellow bankers to do the same thing. This would further enhance the resulting cluster of errors and make for a devastating crisis. The crucial question remains: what about the recurrence? Here the contention that the business cycle could be a free-market phenomenon invariably fails. It is inconceivable that, as long as the other market participants consider the activities of

those bankers to be criminal acts, they may continue. Other bankers will take their place, and as banking is no fraudulent business *per se* we cannot infer from this large-scale crime that it has to occur again. Only if the other members of society think, for whatever reasons, that those activities were basically unobjectionable, can embezzlers go on and set out for the next fraud.

Here, one last objection can be advanced, since we qualified our statements by saying "as long as the other market participants consider the activities of fractional-reserve bankers to be criminal acts." This statement almost forces one to ask *so what?* Everybody has the right to *think* whatever he wants. On the free market nobody is told how he should think about the conduct of other people. How, then, could one deny that such widespread error is likely to recur on the free market?

Indeed, if this were right then the business cycle could conceivably be a free-market phenomenon. Yet the argument is completely misdirected. For the difference between a free society and a society that is obstructed by government is precisely what the members of society think on issues like this one. The free market is not something that is established once and for all and independently of the beliefs that are held by the public. It is, rather, actions inspired by certain unjust beliefs that constitute governments, just as the free market is a manifestation of certain just beliefs. If fractional-reserve bankers go unpunished because the market participants believe this business to be legitimate then there is, *ipso facto*, government.[26] Fractional-reserve bankers then are persons who may permanently violate the property rights of other people. Therefore, once fractional-reserve banking becomes an institution, it *is* an instance of government.

*The Illusion Cycle I: Fractional-Reserve Banking*

The fact that unveiled inflation can be tolerated by the market participants merits further consideration. For, this will reveal that business cycle theory has a much larger scope than could be assumed by simply considering the fraud-induced business cycle that, in fact, was the subject matter of traditional business cycle theory. Unveiled inflation can take the form either of additional issues of fiat money or of fractional-reserve banking. Let us discuss the latter case first.

The effects that the fiduciary issues of fractional-reserve banks will have on the price structure *can* be anticipated. People can adjust their activities to the distribution that will occur under this inflationary influence. If the market participants take account of the forthcoming inflation, they need not anticipate every single effect it might produce. It would be entirely sufficient that, in incorporating inflation into their plans, they are no less successful than in reckoning with other influences. Insofar as this is the case, inflation brings about "only" redistributions of income. But there is no fraud-induced

[26]See Rothbard's analogous statement:

> [I]t would be empty and meaningless for [someone] to trumpet that he does not "really" own some or all of what he has produced . . . for in fact the use and *therefore* the ownership has been already his. [Everyone] in natural fact, owns his own self and the extension of this self into the material world, neither more nor less. (1982, p. 34)

The same thing holds true for Rothbard's brilliant anti-slavery argument: "[A man] cannot transfer himself, even if he wished, into another man's permanent capital good" (ibid., p. 38). Someone claiming that the interdiction of fractional-reserve banking would infringe upon man's freedom of contract would have to hold the defense of slavery to be a like infringement.

business cycle. Does this mean, however, that there is no business cycle at all? Let us recall that the existence of a business cycle requires that a widespread error occur. It does not matter *when* this error is detected. We can content ourselves with the certainty *that* sooner or later it must be detected.

What then is the widespread error in the case of fractional-reserve banking? Here two claims can be made. The first is that fractional-reserve banking is, from the outset, doomed to fail. The second is that it is a mere device for enforced redistribution. As a monetary system it has no advantages over a 100-percent coverage of money substitutes. Its only real purpose is to benefit some people at the expense of other people. As a consequence, it can never benefit the majority of the market participants. If these statements are right then it would have to be conceded that adherence to this system is based on an illusion. The illusion of the market participants would be to believe that fractional-reserve banking is something else than a part of government, that it serves something else than the exploitation of one part of the population by another part. As we have outlined in our general argument above, the conscious toleration of inflation cannot mean that the majority of market participants think that they are robbed. For, in this case, they would immediately stop it. Rather, they must think that continued inflation is, for whatever reasons, in their interest. Thus, the customers of fractional-reserve banks may think themselves benefited by this system because it permits lower interest rates on loans and interest rates on demand deposits, and because abolishing it would condemn the banks to bankruptcy. This is precisely the illusion in question. Indeed, interest rates are not generally lowered by an increased quantity of money. In the first part of this article we have shown why this is so: if the entrepreneurs anticipate the inflation, they will bid higher interest rates for the credit offered on the market. Moreover, even if inflation was not anticipated and interest rates were pushed below the level, they would otherwise have reached the conclusion that this would not benefit the bulk of the public. For, in this case, the fraud-induced business cycle that we described in the previous section would ensue. Furthermore, in respect to the interest paid on demand deposits, one has to remark that this measure can never be to the advantage of the majority. For interest on demand deposits becomes possible only by robbing some people. And interest is only a fraction of the loot, the rest goes to the fractional-reserve banks. Thus, if everyone has a demand deposit then the banks are the only market participants who profit systematically from the possibility of fiduciary issues. Finally, it is also an illusion to believe that a fractional-reserve system can live on forever. A fractional-reserve bank can increase its profits as long as it manages to issue further quantities of fiduciary money substitutes.[27] The banker knows that he may not exaggerate his issues, but he does not know where the limit is. If he does not venture to explore them then his competitors will.[28] Yet with each additional fiduciary issue the reserve ratio of the banks shrinks, and they become

[27] "Where competition enters into the problem between banks otherwise on equal footing, the bank which runs closest to the danger line in respect to the size of its metallic reserve without actually impairing public confidence will make the largest profits" (Conant 1905, pp.71f.; quoted in Skousen 1996, p. 38).

[28] Therefore, competiton between fractional-reserve banks "would . . . not hinder a slow credit expansion" (Mises 1998, p. 443). For the implications of this point see Skousen (1996, pp.136f.). While Mises championed fractional-reserve banking he did not do so here because he wanted the money supply to be flexibly adjusted to the "needs of trade." See on this point de Soto (1998).

ever more vulnerable to unforeseen events. Eventually, the slightest deviation from what has been expected will suffice to bring about a collapse of the whole banking system.

Conscious toleration of fractional-reserve banks implies that a majority of the market participants has fallen prey to an illusion. However, sooner or later they must discover their error as in the case of the fraud-induced business cycle we discussed before. Hence, what we face here is a second type of business cycle. The first type, which covers the traditional Misesian or Austrian business cycle theory, corresponds to the commonsense observation that outright fraud must eventually be detected. This second type, by contrast, suggests a conclusion that we know from the analysis of socialism, namely, that unjust institutions cannot last forever. By the very logic of action, they must either grow and thus destroy society or be abolished in a crisis-like situation. The eventual crisis of unjust institutions may therefore be interpreted as being part of a long business cycle.[29]

*The Illusion Cycle II: Central Banking and Option Clauses*

Although an embezzler cannot avoid that the nature of his activities will sooner or later be detected, he can try to keep the show going for a while by extending the illusion on which his activity is based. This endeavour is central to the development of monetary institutions for the last three centuries. It has been aptly expressed by the term progression theorem.[30] The theorem states that the problems inherent in fractional-reserve banking cannot be solved by any technical devices like the pooling of money reserves, deposit insurance, option clauses for redemption, etc. These devices merely shift those problems to another level and, at the same time, make them even worse. The only real solution would be to abandon fractional-reserve banking altogether.

This is most obvious in the case of the pooling of money reserves. As it is not the bigger money pool but the pooling itself that benefits the banks, this technique brings only temporary relief. The individual banks now are capable of meeting demands for redemption that, before, would have depleted their vaults. However, access to a bigger money pool permits the banks to further increase their issues of fiduciary money substitutes. Sooner or later a limit will be reached again where the slightest wrong speculation of any major market participant causes bankruptcy of the whole banking system. The difference is that the losses incurred by the depositors will be much higher. Deposit insurance schemes principally have the same effect. What benefits the fractional-reserve banks (and what obscures for a while their inherent bankruptcy) is *not the insurance itself but its introduction.* Again, by a technical device, the banks may increase their issues beyond those limits that were set to them before. But once the new limits are reached, the old problem reappears on a larger scale. The supposed remedy proves to be a Trojan Horse.

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[29]See again Hoppe (1993b) and the literature quoted there. This gives also an excellent account of observations like the following one made by F.A. Hayek: "The one thing which, we will admit, has surprised me about the boom of the last twenty years is how long the effectiveness of resumed expansion in restarting the boom has lasted" (1983, p. 40). In fact, the difficulty that Hayek encountered stemmed from his attempt to explain the ongoing illusion cycle during the 1970s with the help of the traditional Misesian theory.

[30]The term has been coined by Salerno (1991, p. 371). For the content of the theorem see Rothbard (1990).

Of course, the case is not different with option clauses. Here too it is not the option clause itself but its introduction that brings (temporary) relief. Yet, the advocates of fractional-reserve banking object that people might be willing to engage themselves in contracts providing for option clauses. This view, however, is entirely futile. It is absurd to call people willing to leave their money in bank accounts with option clauses "depositors." For what these people *in fact do* is *lend* their money to the banks for the time specified in the option clause. They are not depositors but lenders of money. If the option clause provides for three months then the money "deposited" is in fact a three-months credit. If the clause provides for nine months we have a nine-months credit. If no period is specified then the money on the deposit account is not credit at all but a gift to the bank. The crucial point is, however, that in either case the problem of fractional-reserve deposits remains untouched. If the market participants left their money in demand deposits covered by option clauses, then there would be no fractional-reserve banking at all. All transactions of the banks would then be pure credit transactions. But what about the money that the market participants desire to use in their current transactions? Do they have to keep it under their pillows? Or may they leave it with some banker? And, if they choose the latter, does the banker have to keep the entire amount or may he lend out parts of it? These questions still remain. Hence, considering the case for option clauses more closely one discovers that, as a matter of fact, it does not relate to fractional-reserve banking at all.

No pooling, no insurance, and no option clauses can undo the inherent bankruptcy of fractional-reserve banks. The so-called "problems" of the latter all boil down to this fact. The only way to solve these "problems of bankruptcy" is to recognize, first of all, that there *is* bankruptcy and then to liquidate the bankrupt enterprises and abolish the whole fractional-reserve system.

*The Illusion Cycle III: Fiat Money*

A final "solution" for the bankruptcy of a fractional-reserve bank is to permit it to refuse redemption of its fiduciary issues. This would be a clear violation of the property rights of its customers, to be sure, but this is not the point we have to deal with here. For our purposes the important fact is *that* a fiat currency may arise in this way. Through the breach of contract (and, by the way, *only* through the breach of contract) a money substitute may become a money. Moreover, it is evident that such an event can only happen if the members of society have fallen prey to an illusion about the real nature of this event. They must, for whatever reason (for example, because they think that government has to regulate money) believe that something else than mere aggression is at stake. We are faced with the question of whether an institution that is built on an illusion could persist on the free market, or whether sooner or later the illusion must fade away by the logic of action. The latter is indeed what reflection will show. We shall see that a fiat money sooner or later will be driven out of the market.[31]

Why is a currency driven out of the market? In general terms we might say, because the market participants discover that the employment of this currency is less useful than the employment of another currency. They do know a better

[31]The following analysis of currency competition revises in some respects the (consequentialist) argument in Hülsmann (1996b, pp. 255ff.).

alternative. The utility of a currency surely depends on the facility with which it can be handled. Therefore, those currencies that are, by virtue of their physical qualities, most proper for indirect exchange will drive all other currencies out of the market (Menger 1976; 1985).

But what are the specific qualities of paper money (or, possibly, of electronic entries in an Internet account)? Let us first compare the use of fiat money with the use of metallic currencies on a free market. Here fiat money has one decisive disadvantage; namely, that it can be used only for a limited time and only for monetary purposes—at least if we abstract from such minor and destructive uses as papering walls or heating rooms. By contrast, metallic currencies can be used almost indefinitely and they always find other employments that do not prevent them from being used again as a medium of exchange. From this it follows for the competition between, for example, gold and a paper currency that gold can never be entirely driven out of the currency market, whereas the paper currency can. For even if gold were temporarily abandoned as a currency it would still have market prices per unit that would render its reintroduction as a currency worthwhile. On the other hand, once a paper currency is driven out of the market, its low commodity value would render any use as a currency impracticable. Thus, once driven out of the market, paper can never come back as a currency, whereas gold could do so very easily. This fact makes the use of paper currencies much more precarious than using gold. As soon as people realize this specific danger of the use of paper it is immediately abandoned as a currency. The ultimate failure of fiat money on the free market can be interpreted as the last phase of a very long business cycle.

However, the currency market today is no free market but a market in which governments intervene in favor of their paper currencies. Paper is legal tender and the only currency in which taxes may be paid, and the use of precious metals as currencies is systematically obstructed. There are sales taxes on gold and income taxes on yields from gold hoards; banks are not allowed to offer gold-based accounts; no private coinage is permitted; and it is very unlikely that contracts running in terms of gold would ever be enforced by government courts and police (Sennholz 1985, pp. 22ff., 80ff.; White 1989, p. 64). These government institutions keep paper monies in circulation. However, they also create unresolvable problems, which must sooner or later end up in a crisis. In fact, if a paper currency is firmly established on a market there is an irresistible temptation to use it for the only purpose it specifically serves; namely, to finance government and to bail out bankrupt market participants. Let us focus on the latter possibility. Because the market participants know that they can be bailed out, at least the bigger firms will incur undue risks in their operations. Benefitting from zero-cost assurance, they have a systematic incentive to overstep the boundaries of sound business and reap additional profits without the risk of incurring losses. A small firm, it is true, might go bankrupt without danger for the political establishment. But the bankruptcy of a big corporation will not go without public protest and pressures for help. Thus, the very possibility to bail out some people brings about situations in which bailouts are dearly needed. Having established a paper currency, the government faces the challenge to bail out major parts, and possibly the whole, of the national economy. This challenge cannot possibly be met without leading to hyperinflation and economic breakdown. There is but one recourse left—to regulate the operations of the firms. But this intervention prevents a rational allocation of resources. The

more businesses are regulated the more it becomes impossible for the entrepreneurs to discern the most-needed, and thus most-profitable, investments. It becomes more and more impossible to maintain, or extend, the present structure of production. The economy turns down. Again, we have ultimate failure at the end of a very long business cycle.

In conclusion, let us emphasize that the use of money is an essential feature of any civilization. Monetary approaches to business cycle theory, and especially the Austrian one, have been most successful. Our analysis has stressed two major shortcomings of this approach. The first one is that the formulation of the theory is not general enough. Any business cycle theory must be grounded in a general theory of error. Second, the tacit general theory underlying the traditional business cycle theory is fallacious as it tries to explain error as a consequence of preceding events. By contrast, we have tried to show how a general theory of error cycles can be developed along essentialist lines. Recurrent clusters of errors can be deduced from the existence of government activities. This is because the latter can be interpreted as manifestations of error—which sooner or later will lead to crises. There are many specific error cycles: the monetary business cycle, the military-imperialistic cycle, the social security cycle, etc.

As a by-product, our analysis provides a clearcut answer to a question that has plagued Austrian business cycle theory for a long time. If it were true that an increase in the quantity of money *per se* would set in motion the trade cycle then this would hold true for increases of the quantity of specie as well. Thus, even on the free market there would be a built-in source of business cycles calling for some remedy—possibly through government intervention. However, we have seen that the Austrian business cycle theory does not need to rely upon such an account. It does not have to claim that recurrent clusters of error stem from monetary changes. Rather, they can be deduced entirely from a constant feature of modern societies; most importantly, the existence of governments. It is not money but government intervention that accounts for the business cycle.

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