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# THE AUSTRIAN THEORY OF THE BUSINESS CYCLE: REFLECTIONS ON SOME SOCIO-ECONOMIC EFFECTS ☆

Walter E. Grinder and John Hagel, III

## PREFACE

Of all the various interventions into the market economy, which have been invented and implemented by man and state, those that historically have caused the gravest consequences in the advanced industrialized economies surely are the inflationist policies, which lead inexorably to the business cycle in all of its various aspects and manifestations. In this paper, we shall attempt to trace through a number of socio-economic consequences and implications of the business cycle. We are convinced that ultimately the business cycle has political implications, which are just as far reaching and grave as its numerous economic consequences.

We believe that the monetary interventions leading to the business cycle are the most important in the whole panoply of government interventions

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into the market, all of which are rapidly transforming the market mechanism of exchange and resource allocation into a centrally and arbitrarily controlled economic system. However we are also convinced that along the path from the free market to the controlled economy, other sinister results of the business cycle are encountered as well.

The inflationist policies not only cause purely economic dislocations, they also cause deep sociological divisions within society in general and within the business community in particular. Perhaps the fundamental fact that must be realized about inflation and the business cycle is that all members of the socio-economy are not affected equally, neither at the same time nor in the same manner. There is a process of wealth redistribution and class entrenchment, which takes place such that some in the economic community reap substantial gains at the expense of others. In terms of actual political-economic power relationships, the business cycle tends overwhelmingly to aid the financial sector of the economy at the expense of the non-financial sectors, and the banking institutions attain an increasingly powerful hegemony especially over the more capital intensive corporations.

Monetary interventions into the market set group against group and sector against sector. Ultimately, these and other such interventions lead to the creation of classes, pitting aspiring classes against a further entrenched class in a never ending grasping for rationalization and control of an increasingly impossible situation.

For the purposes of procedural simplicity we shall assume for our analysis a beginning state of an unhampered market economy, which has reached a state of general equilibrium.[1] We shall furthermore assume that such an unhampered market is a "natural" social economy and that the socio-economic and political relationships, which are obtained under such a regime are what we will call in the aggregate, a *social economy*.[2]

We shall then introduce into this fully coordinated social economy the monetary interventions which necessarily led to a number of discoordinations and malinvestments all of which will bias the productive structure in favor of the capital goods' industries (the monetary-over-investments theory of the business cycle). We shall first follow these interventions through the economic structure tracing their purely economic consequences. We shall then attempt to sketch out the wider sociological and political implications of such interventions.

We shall call the pattern of socio-economic relationships, which have thus deviated away from those of the social economy a system of *political economy*. There are, of course, numerous varieties of the political economy, ranging from simple and singular interventions to the more systematic

interventions of "political capitalism" and finally to the total interventionism of *Zwangswirtschaft* and socialism. At each stage in this process the "natural" social economy relationships become more and more "politicized" and the incipient class relationships harden until finally only the political relationships remain and the social economy has become completely overwhelmed by an atavistic and feudal caste order.

It is the business cycle in all of its ramifications, which we contend is the unintended but key element in this process which, if allowed to proceed, surely will lead to the demise of the market mechanism as the world has known it for the past 200 years. We do not claim to trace and explain all or even most of the socio-political effects of the business cycle. That would, of course, be both presumptuous and impossible. We do, however, hope that what follows will lead to a somewhat clearer understanding of the heavily hampered market system in which we shall be living in the years and decades ahead.

## 1. A POSITIVE STATEMENT OF AUSTRIAN BUSINESS CYCLE THEORY

### *1.1. Central Banking as the Fundamental Intervention*

There is nothing in general economic theory (micro-economics) that would lead us to believe that the free market system would sequentially and recurrently waver back and forth between strong upswings and sudden downturns in economic activity. On the contrary, economic theory tells us that the widespread macro-discoordinations such as sudden accelerations of price rise in general, periodic swings in production, and periods of massive idle resources would be virtually impossible on the unhampered market.

Entrepreneurial decisions are made in the face of an uncertain future and since men are not omniscient, some – perhaps many – entrepreneurs will make mistakes in anticipating future configurations of events. Nevertheless, it remains clear that these kinds of mistakes and the consequent malinvestments arising from them would not lead to periodic, sequential booms and busts of productive activity. There is no reason to believe that such mistakes would be distributed in anyway other than randomly. Furthermore, economic theory tells us that in spite of the disequilibrium forces of unanticipated change, the entrepreneurial forces of convergence always *tend* to lead the various markets toward equilibrium. There is no reason to believe that

what is true in the individual cases is not also true in the aggregate. While there will surely be many instances of misinterpretation of market signals and consequent misinvestments, there is every reason to believe that the effect of such mistaken interpretations of market data will be isolated and minimized by other equilibrating forces in the market. In any case, we have every reason to believe that these misinvestments will be isolated and random, not pervasive and systematic.

Since there is nothing inherent in the unhampered market, which would lead to the booms and busts of the business cycle, then, of course, the cause must be an exogenous one. The Austrian theory of the cycle as developed by Mises and Hayek[3] explains industrial fluctuations as a result of the infusions of bank credit into the producers' loan market. The Austrians then trace the effects of such monetary influences on the real structure of production. It is here that we find the ultimate cause of *systematic* distortion in the market system, which leads to the periodic boom-bust cycle.

But how does such monetary meddling come about in the first place and why does it (seemingly inevitably) continue to plague all advanced industrialized market economies?

Money is an institution.[4] That is to say, money is the result of an evolutionary process of exchange. Historically, out of exchange one or more *commodities*[5] have been chosen by the market participants as a medium of exchange and a common denominator used for price calculation.

Again, historically, along with the development of the institution of money has come the *development* of another important institution, that of banks and banking. Banks served first as warehouses for the storage of commodity money. In a short time, warehouse receipts began to circulate as money substitutes.

It would seem that a "natural" social economy[6] would remain such only if the circulating money substitutes are equal to the amount of commodity money extant, i.e. 100% reserve money.[7] Any increase in unbacked substitutes (fiduciary media) introduces "unnatural" forces into the exchange nexus, forces, which will lead inevitably to discoordination and *systematic* economic and social dislocation.

But even assuming that the creation of fiduciary media were not treated as fraudulent accretion of assets, a regime of free banking would and historically has put a severe check on the issuance of unbacked money substitutes. Everyone admits that there is an inherent temptation on the part of bankers to expand the supply of money substitutes beyond their commodity reserved (i.e. to engage in fractional reserve banking). On a free market, however, attempts to pursue such a policy are thwarted by competition and the

interbank clearing house function. Non-inflating banks will demand payment in specie for another bank's notes or checks, and there will therefore always be an inherent check on widespread inflation as long as competitive banking exists.

It seems clear that there could not be systematic macro-dislocations under a regime of 100% reserve money. It is also clear that free competitive banking would tend to minimize such dislocations even where there are attempts to pursue fractional reserve banking policies under conditions of competitive banking.

The other alternative is for all banks to work in concert, which means to form a cartel. The reasons why voluntary cartels tend to break down in the face of free market competition are too numerous to mention,[8] but historically none has lasted for long. Since voluntary cartels do not work, bankers in one western capitalist nation after another have resorted to forced cartelization in partnership with or under the control of their respective governments.

It is under a regime of central banking that the large scale increases in fiduciary media can be pumped into the economy, increases in notes, but mostly increases in demand deposits. It is furthermore the case under such a regime that systematic dislocations of the business cycle are most pronounced and wreck the greatest havoc.

### *1.2. Time and the Structure of Production*

There are three crucial real economic effects of systematic monetary intervention into the market system. First, there is the periodic recurrent nature of the cycle. Second, there is the cluster of entrepreneurial error phenomenon. Third, the capital goods section is affected more both on the upswing and the downturn than is the consumer goods section. That these three phenomena happen is a fact; why they happen has to be explained.

In the first half of the 19th Century, the Ricardians and the Currency School of English economists[9] explained the problem of periodicity in terms of the quantity theory of money. As the money supply increased (increases in fiduciary media) business activity picked up, a euphoria pervaded the business world, business debt increased, higher risk investments were undertaken, the ratio of commodity money to money substitutes declined, the domestic price level increased, imports increased, exports lagged, the reserve ration declined even further, call loans were called and the overextended financial house of cards began to collapse, a decline in production

accelerated, deflation ensued, the reserve ratio returned to a more healthy state, prices fell (including wages), exports increased, reserve ratios and economic activity returned to normal. Hence, the periodic boom and bust.

The big failing of the Currency School's explanation was that in focusing on the price level they overlooked the changes in the compositions of the structure of production that took place during the cycle. It was not until the last days of the 19th Century that the Swedish economist, Knut Wicksell began to see clearly that increases in the money supply led to a deviation of the market rate of interest away from the natural rate, a rate, which was based on the outgrowth of voluntary intertemporal exchange due to differences in time-preference. Wicksell, too, however, focused his attention mainly on the price level and hence did not see the full effects on the structure of production that such a deviation from the natural rate would bring about.

Ludwig von Mises took the Wicksellian insight and began to build what is now known as the monetary-overinvestment theory of the cycle. It was in Mises and in the work of his most famous follower, F.A. Hayek that the answers to questions two and three are to be found.

In an evenly rotating economy where every tomorrow is like every today, the structure of production would be in perfect equilibrium (see Fig. 1). The crucial concept of Austrian capital and production theory, which applies here, is the concept of *complementarity*. Everything "fits together." Each factor of production complements each associated factor of production. The value of all factors of production is imputed to the structure of production. Products flow down the structure of production. Production itself is a series of exchanges through time between the various orders or stages of production. The very highest orders of production are furthermost removed in terms of *time* from the ultimate consumer. The further down the structure of production, the closer the ultimate product is getting to the ultimate consumer in terms of *time*.

Time and complementarity are, then, the two key and ubiquitous elements in the structure of production. In equilibrium, as the product flows down through the structure of production from stage to stage, it can be seen that just the correct amount of demand will be there to purchase the product, and just the right amount of product will be produced to supply each stage. All of this intricate structure is held together by prices, which in equilibrium sends just the right amount of coordinative information throughout the structure. Perhaps the most important of these prices is the structure of interest rates holding together intertemporal exchanges, which in the production process are the only kinds of exchanges, which take

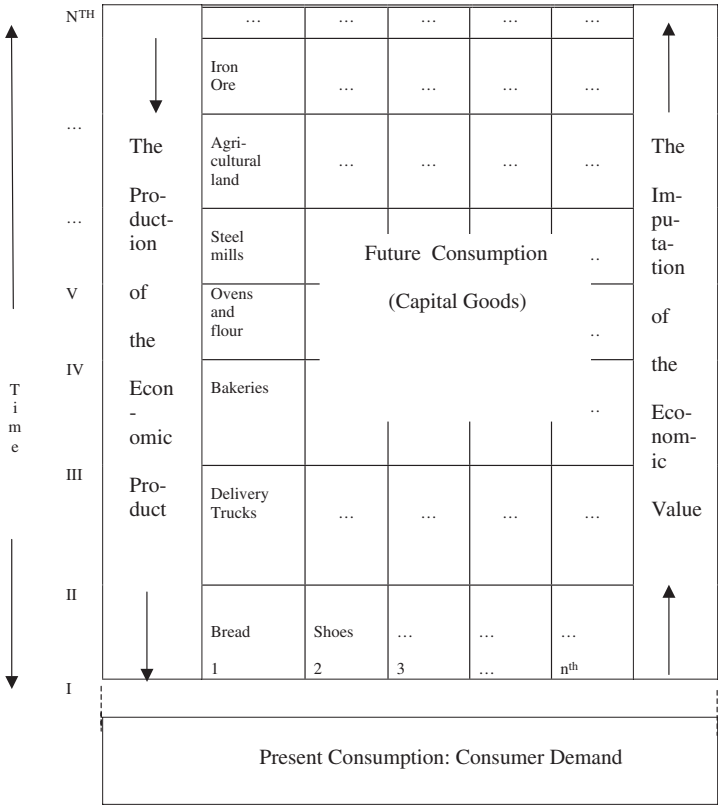



*Fig. 1.* The Structure of Production.

place. The structure of production is like a delicate latticework[10] held together at each of its points of convergence by intertemporal exchange rates. Although there would be nothing in the real world approximating the perfect complementarity assumed under conditions of equilibrium, there is nevertheless a tendency in a free-market, social economy, toward such complementarity. One of the most important entrepreneurial functions in the real world is to take what is discoordinate (past mistakes), and "fit them in," consequently achieving a continually greater measure of complementarity.

It is imperative to recognize that at any given time, the structure of production of the social economy embodies and reflects the intertemporal preferences of the market participants in the aggregate. The proportion of

future goods (capital goods) vis-à-vis present goods (consumer goods) will be a direct reflection of the economic community's social rate of discount or time preference. If there are relatively more producers' goods, that would indicate a low time preference and a higher demand for future goods. If there are relatively more consumers' goods, it would reflect a higher time preference and consequently a lesser concern for the future. In any case, the structure of production will reflect the voluntary savings-consumption pattern; it will embody the community's demonstrated intertemporal preference.

It is this delicately interwoven structure of complementarity into which bursts the infusions of bank credit which wreck confusion and dislocation. It is to these infusions of bank credit that we must look if we are to explain (1) the cluster of entrepreneurial error and (2) over-investment in the higher orders of production and under-investment in the lower orders.

A concerted increase in the money supply distorts the flow of information of the market economy, the price system. Since the changes in the money supply occur *through* time and space and do not mean the same thing to all people in all sectors, such a change will affect different orders of the structure of production differently.[11]

What the cruder from of the quantity theory of money essentially focused its attention on was the effects of the depreciation of value of the supply of money that followed each infusion of new money, i.e. changes in the price level. What the more sophisticated (Misesian) theory of money focuses its attention on is that increases in the supply of money distorts the structure of interest rates away from the natural rate. It is after all this "natural" constellation of interest rates, which reflects the market participants' real time preferences, their real consumption/savings pattern. By tampering with the natural structure of rates there begins a systematic movement of the structure of production away from the true wishes of market participants as they have demonstrated in their consumption/savings decisions.

To counter this insight with the naïve assumption that deviations by the "nominal" interest rate away from the "real" rate will be foreseen and automatically adjusted to, is but to show a misunderstanding of the whole problem. This misunderstanding is a natural result of focusing on the price level rather than on relative prices. The crucial insight of Austrian cycle theory is that not all sectors of the productive structure are affected in the same manner and at the same time by a change in the money supply, and therefore cannot be correctly anticipated. Furthermore, this insight is not merely the important but rather simplistic knowledge that debtors gain and creditors lose during inflation. This latter is simply another way of focusing

on the price level at the expense of overlooking the far more important and deeper consequences within the structure of production.

As the supply of bank credit increases, interest rates decline, which is the same thing as saying that the cost of money capital declines. Since the cost of money capital is characteristically the most important cost consideration for future capital expansion projects, as this cost declines, major new capital investment is undertaken which previously was deemed to be economically unattractive. Thus, the projects which were previously seen as unprofitable (and therefore from the point of view of the social economy, socially undesirable at that time) suddenly become profitable.

It must be stressed that this change in profitability has come about solely as a result of monetary expansion and not because of a change in "real" conditions. This artificial lowering of the interest rates is the key distortion in the transmission of information through the price mechanism, and it is caused solely by the expansion of bank credit of a fiduciary nature. The lowering of the interest rates creates the impression that there has been an increase in real savings, that there has been a general lowering of time-preferences among market participants, and that there is more capital available to embark upon more time-consuming production processes. Of course, what there is more of is money, and this critical price distortion soon begins to take its toll. This explains why there is a sudden cluster of entrepreneurial error. It is because they are flooded with a cluster of misinformation, unnatural information, if you will. Yet, this only partially and therefore inadequately explains just why investment funds begin flowing in proportionately greater amounts into the capital goods sector at the expense of the lower orders.

No one has ever put the answer to question number three more succinctly and clearly than Lionel Robbins. Robbins says:

> The fundamental fact on which we must concentrate our attention is that borrowing is cheaper. This means the profitability of all forms of production which involve making things which only yield services at a later date, or over a long period of time, is increased … . The longer lived the capital instrument or the greater its distance from consumption, the more its value is affected by a change in the rate of interest. The shorter-lived it is, or the less its distance from consumption, the less is it affected. The value of flour in the baker's shop is hardly affected at all by a cheapening of the cost of borrowing. The value of mines, forests, houses and heavy factory equipment is enormously affected.[12]

Not only, then, does the cost of money capital decline as interest rates fall, but another aspect of the same phenomenon is that as the interest rate declines, present capital values increase. In Fig. 2 we see that an asset which will produce $10,000 in the present and whose durability ends upon producing the

| Year | 10% | 7% | 5% |
|---|---|---|---|
| 0 | $10,000 | $10,000 | $10,000 |
| 1 | 9,090 | 9,350 | 9,520 |
| 2 | 8,260 | 8,730 | 9,070 |
| 3 | 7,510 | 8,160 | 8,640 |
| 4 | 6,830 | 7,630 | 8,230 |
| 5 | 6,200 | 7,130 | 7,840 |
| 6 | 5,640 | 6,660 | 7,460 |
| 7 | 5,130 | 6,230 | 7,110 |
| 8 | 4,660 | 5,820 | 6,770 |
| 9 | 4,240 | 5,440 | 6,450 |
| 10 | 3,850 | 5,080 | 6,140 |

*Fig. 2*. Impact of Interest Rates on Present Capital Values.

present product will also have a present value of $ 10,000. If that asset yields its product one year hence, its present value at a 10% discount rate will be $9,090; five years hence, $6,200; and 10 years hence, $3850. We see that in the one year case a decline in the interest rate to 7% will bring a net gain in present value of $260; in the five year case the present gain would be $930; in the case of 10 years, the gain in present value would be $1,230. If the increase in the money supply were sufficient to drive the interest rate from 10% to 5% the gain in present value of an asset which would pay off after one year would be $430, after five years $1,640, and after 10 years, a very substantial $2,290. The change of $430 in the one year case would be significant but a mere 4.7% gain. The asset which yields the income only after 10 years, would bring about a change of $2,290 in present value, a gain of almost 60%.

The present value of $10,000 income at future dates and at different rates of interest is shown in Fig. 2.

A businessman-borrower in the producers' loan market need not be endowed with any super intellectual powers to see that investments of longer duration are far more lucrative than projects that will reach fruition in the near future. It would seem clear, then, why the preponderant majority of new bank credit will always tend to flow into the higher orders and thus create a greater boom in those higher orders as economic activity begins picking up steam.

### *1.3. The Anatomy of the Cycle*[13]

For purposes of presentation, it is simplest to assume an economy in which there is no problem of idle resources and in which something approximating

equilibrium has been achieved.[14] It is into this idyllic setting that the infusions of bank credit stream.

Entrepreneurs will borrow new funds and enter the resource markets, bidding away the factors of production from more socially useful (as determined by the operation of the social economy) projects in the lower orders of production. It is these factors, which are producing lower order capital goods and consumers' goods; hence there will be fewer more nearly present goods being produced than otherwise would have been the case. There follows a misdirection of social capital and a consequent decline in the general economic welfare.

Production processes that are more time consuming will take place at the expense of less time consuming processes. Resources will be bid away from the lower orders into the higher orders. The new money via the entrepreneurs will bid prices up throughout the higher orders. The process leads to a hyper-active boom atmosphere in the higher order capital-intensive industries in general and in the construction industry, raw materials, machine tools, etc., industries in particular.

Since the cost of capital has declined and since the demand pressures of new money begin to bid up the nominal wages, real wages will increase. Given this situation and given a measure of substitutability, entrepreneurs will begin to shift, insofar as it is possible, away from labor-oriented methods into more capital-intensive methods of production. This is what is conventionally known as the Ricardo effect.

It should be clear that there is one other major difference between the switch that takes place in the structure of production caused by a change in time preference, on the one hand, and a change caused by monetary tampering on the other. In the situation of natural change there is a voluntary reduction of current consumption and consequent diversion of factor compensations from the lower orders to the higher orders, the former declining and the latter rising. There is, however, *no increase* in factor incomes in the aggregate. In this situation of monetary-induced change there is no voluntary reduction in consumption and there is actually an *increase* in factor compensations and hence total incomes.

Since there is no reason to believe that resource owners have altered their previous consumption/savings preferences, when these factor owners in the higher orders receive their additional incomes we can assume that they will allocate their incomes on the basis of their previous consumption/savings pattern. Because fewer factors of production in the lower orders result in a lower supply of consumers' goods, the new money thus coming into the consumption market from the increased incomes of the factors of production

in the higher orders puts additional demand pressure on a proportionately reduced output of consumer's goods and thereby generates price rises in the very lowest orders of production. Hence, the problem of price inflation begins.

If there are no further increases in the money supply, increases which would have the continued effect of holding (at least in the intermediate run) interest rates below their natural level, then as the resource owners begin to reassert their old consumption/savings pattern with their new and *increased* incomes. Prices, again, will begin to shoot up rapidly in the lower orders. This is truly the pivotal stage in the business cycle, for it is at this point that the investments based on previously distorted price information begin to become apparent.

As prices rise rapidly in the lower orders, the rate of return of investment also rises substantially. In the meantime, demand for the output of production processes in the higher orders fails to materialize. The false or unnaturally induced structure of production and flow of products is rendered *unsustainable*. The monetary authorities either will begin a process of reinflation to attempt to sustain the false structure, or they must allow the prices of resources to readjust. The structure of production must once again move to conform to the demands of the social economy. It must again achieve a high measure of *natural complimentarity*, a structure that can and will be sustained by natural consumption/savings investment decisions.

It is important to underscore just why the anticipated cost/yield relationship upon which the initial entrepreneurial decision was made turns out to be mistaken. As the new money goes from the entrepreneurs to the factor owners, the prices of the factors are bid up higher than was anticipated at the point of the decision. On the other hand, the anticipated demand for the flow of product fails to materialize in the planned time sequence. So there is a double edged assault on the anticipated return: costs rise and yields decline or even fail to materialize altogether. Projects undertaken on the basis of the anticipated cost/yield ratio simply cannot be sustained under the unprofitable real conditions.

If left to happen by itself, the period of price adjustment will tend to move rather rapidly. Higher prices and thus higher returns in the lower orders combined with the failure of anticipated cost/yield relationships in the higher orders will lead to a rapid flow of liquid capital from the higher orders to the lower orders. Unsustainable fixed capital projects will have to be liquidated. They will have to go into receivership and be reorganized in such a manner as to fit back into the natural structure of production, i.e. true complementarity will have to be restored.

The major thing that must happen during the adjustment period is that those prices of factors that were distorted (bid up too high) on the upswing will have to fall back down to where they fit back into the structure of production profitably. Interest rates, now no longer held artificially down, must rise to reflect the true time-preference relationships.

It will be remembered that on the upswing, there was a substitution of capital for labor wherever possible because of the rising real wage rates. As prices in the lower orders begin to rise back to normal levels, *real wages fall*. There will be, therefore, a substitution of labor for capital wherever and to whatever extent possible. This is what Schumpeter rightly calls the Hayek effect. It is obvious that the more intensive the upswing, the more extreme the downturn will have to be. Just as the shift to more capital-intensive methods during the upswing had a very stimulative effect on the higher orders, the substitution of labor for capital during the downturn has a very depressive effect on those same higher orders. It should be noted that any policy which frustrates the period of price readjustment or attempts to stimulate consumption will merely exacerbate the situation and lengthen the period of readjustment, the recession. What is needed to salvage some of the misinvestment is greater savings, not more consumption. But even if there were a great increase in savings, there would nevertheless remain numerous instances of time-consuming projects, which could not be saved until there was a tremendous drop in their market values.

Therefore the recession is a process of extensive liquidation of malinvestments. This means widespread increases in idle resources as well as the temporary abandonment of, in many cases, half-completed projects. While these instances of bankruptcy, liquidation, and idle resources are undoubtedly the most dramatic aspect of the whole business cycle, it should remain clear that the most important aspect of this period is in fact the process of price readjustment during which factor prices fall relative to product prices. These price declines must continue until the spread between factor prices and product prices at *all* stages in the product process once again begin to reflect the prevailing true social rate of discount or time-preference of the market participants.

It is important to repeat that the problem troubling the economic system during the business cycle is a problem of large-scale discoordination of relative prices. It is a problem of *discomplementarity* of the various orders of production. Only when there is a full adjustment of factor prices and product prices at *each* stage of production will the idle factors of production be returned to productive activity.

It should be emphasized that there has been no mention of the general price level because that is not where the problem lies. Nor does the problem lie in the relationships between macro-aggregates, aggregates that are generally ill founded and meaningless concepts anyhow.[15] Although the recession is known as a period of falling prices, it is necessary to stress that this period will not necessarily be characterized by a decline in prices generally (deflation). Once again, the crucial consideration is not aggregate price levels but rather relative price relationships. It is only the misdirected investments, which must be liquidated and redirected into the true scheme of the productive apparatus.

It is the boom period during which the waste of social capital takes place. It is therefore the boom period, which is the antisocial phase of the cycle. The recession is indeed the pro-social period of healthy purgation. Once the point where the Hayek effect begins to take place is reached, the only thing that can postpone the necessary and cleansing phase of the cycle from taking place is further increases in the money supply. The old rate of increase will, however, now prove to be too little to achieve the same level of investment (misinvestment). It is therefore necessary to expand money and credit at an ever-accelerating rate.

Just how long this can go on seems to be a matter of conjecture. Generally, financial disturbances have historically caused slow downs in the money expansion before the currency reaches such a rapid depreciation that it no longer serves its function as a tool of intertemporal price calculation, although we are all aware of the post World War I Germany and post World War II Hungary and China. Nevertheless, whenever the inflation of the currency does stop *or slow down*, the Hayek effect becomes operative and the downturn must begin. As we said before, the longer and more intensive the upswing, the more calamitous the downturn. There is simply no way to put off the recession forever.

## 2. SOCIO-ECONOMIC IMPLICATIONS OF THE BUSINESS CYCLE

### *2.1. Central Banking and the Political Economy*

In Section 1, we outlined the Austrian theory of the business cycle. Section 1 also serves as the necessary groundwork for much of what we will cover in the remainder of the paper.

Here, we will attempt to trace some of the major sociological and political effects of this business cycle. Here we are treading on what we think is often new territory, but also an area which is of extraordinary importance. Because it is often new application of business cycle theory, we shall only be able to speculatively sketch the areas that we deem important. We hope in later papers to go into some of these areas in more empirical detail. We furthermore hope that we will have induced others to do likewise.

The analysis here also depends for its support on work that we have done previously.[16] This is especially true of our assumption that the capital markets and the financial institutions play an increasingly important ultimate decision-making (entrepreneurial) role in and advancing, industrialized *social economy*. That which is true but innocuous under a regime of social economy assumes a deleterious and even sinister character under a regime of *political economy* where central banking becomes an integral element in the socio-economic infrastructure. Not only does ultimate economic decision-making become more centralized and more entrenched, but as more and more economic relationships become "politicized" or "statized," ultimate political decision-making tends also to become more concentrated and consolidated. This in turn tends to exacerbate the concentration and circumscription of ultimate economic decision-making powers which, of course, leads to a diminuation of competition, an enervation of the market process, a decline in general economic welfare, and ultimately to an aggrandizement of the *political economy* at the expense of the *social economy*.

### *2.2. Spatio-Temporal Aspects of the Business Cycle*

It cannot be emphasized too much that with every intervention into the economy there will be those who will gain from the intervention and there will be those who will lose because of the intervention. It is usually pointed out that debtors gain at creditors' expense as a result of inflationary policies. That is, of course, true but would be misleading if one concentrated his attention solely on this aspect of the gain-loss relationship. One of the key insights of the Austrian theory of money and of the business cycle is that new money does *not* affect all people and all sectors of the economy equally. New money moves through the economy both in temporal and spatial sequences, the results of which are often difficult to discern and follow.[17]

The temporal aspect is of great importance. On their most fundamental level, the inflationary policies made possible by state intervention in the banking sector constitute a mechanism for the redistribution of economic

wealth. It is a redistribution of wealth to those who receive the additional increments of fiduciary media first at the expense of those who receive the money only at a *later time*. The spatial element in this temporal relationship adds a great deal of help in understanding where to look for the gainers and the losers. Those closest to the origin of the new money tend to gain at the expense of those furthermost removed from the origin of expansion.

It would take a very sophisticated ongoing empirical study to determine just who are the net gainers and who are the net losers, the latter really being the most difficult to ascertain, with anything even approaching precision. Theory, however, can give us a good idea of where to look for the gainers. The state always gains by its ability to inflate and take advantage of inflation first. In Fig. 3, we can see a rather crude representation of this redistribution process. The center circle represents the state with all effects of inflation spreading outward from the middle in a ''ripple effect'' through time and space. In the real world of political economy, it is practically impossible to separate the commercial banking system from the state, but for purposes of presentation we shall assume that the banks receive and therefore benefit next from new infusions of money. The banking system is represented by the circle numbered two. Another very difficult real world problem is to separate the state from its contractors and suppliers, although it is not nearly as difficult as is the separation of the state from the state-cartelized banking system. The recipients of the government contracts are represented by the circle numbered three, even though the banks also benefit greatly from government purchases. When the state buys from a ''private'' contractor, the payment is in the form of an accounting entry in the contractor's *bank* account. Both the contractor and the bank have gained: the contractor, because he can pay for resources before their prices rise, and the bank, because its reserves and therefore its loanable funds (assets) have been expanded. In the initial stages of inflation, it would appear, the state, the banks and the government contractors have a vested interest in inflationary policies.

The circle numbered four is particularly interesting because it represents firms and industries in the higher orders of production. It is these businesses, which seemingly benefit from increases in the money supply because the interest rates are driven down, the cost of capital decreases and present capital values climb. They can borrow in money terms that will likely benefit them at the point of repayment, paying back with a depreciated currency and hence lower real cost.

In the debtor–creditor relationship, debtors, of course, do gain, but the biggest debtors are almost surely to be found in the higher order

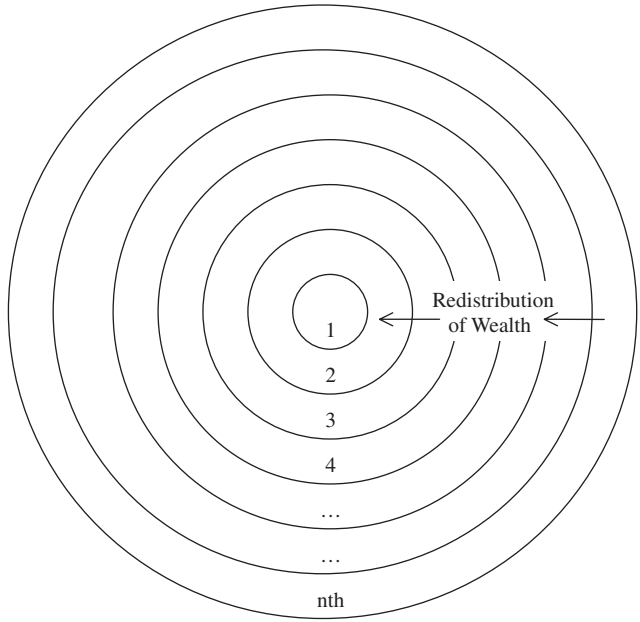



*Fig. 3*. Inflation, the "Ripple Effect," and the Redistribution of Wealth. The Effects of the Increase of the Money Supply Flow from the Center Circle Outward. The Redistribution of Wealth Moves in Just the Opposite Direction.

corporations, the banks and the state itself, and not among the very poorest citizens as is so commonly assumed by the average layman. The creditors are not the very rich, but rather the middle-income person who is trying to save a little each week at his local Savings Bank or Savings and Loan Association. The middle class, then, not only loses proportionately through direct taxation, but its income and wealth is expropriated by the indirect tax of inflation. Once again, as we can clearly see in Fig. 3, there is a redistribution of wealth from the outer circles to the inner circles, from those who receive increases in incomes last to those who receive incomes earlier.

As we get beyond circle four, it becomes increasingly difficult to trace the gains and losses with any sort of a priori precision. This is an area for numerous empirical studies. We do know that relatively few do in fact gain from increases in the money supply and that the great majority are losers in varying degrees. All we know for certain is that at some point, the "ripple effect" turns inflation recipients from net gainers into net losers as the rate of increase in consumer prices rises faster than the rate of increase in their

incomes as resource owners. It seems important to repeat that this redistributionary quality of inflationary policies stems from the fact that a change in the quantity of money will affect prices only successively through time and space. This necessarily produces a gradient in the price structure which assures that those affected later in the process will almost surely never be able to catch up with those who were affected earlier.

Another aspect of the redistributionary effect of inflation is that of "forced savings." Since the increase in the money supply pushes the structure of interest rates below the natural rate that would prevail in the social economy, scarce resources will be turned into producers' goods in the higher orders of production. This means that there will be an underinvestment in goods which market participants by their voluntary choices have demonstrated that they want, i.e., present consumers' goods. They are forced to "save" and are thus denied the full range of consumer goods which would otherwise have been produced.

### *2.3. Monetary Expansion and Class Solidification*

It is important to focus on the role that the business cycle plays in forming and solidifying the gainers and losers of interventionism into more nearly identifiable political-economic social classes.[18] All interventions into the market system of necessity lead to less than optimum market processes and to secondary consequences the sum result of which is always a further deteriorated real situation, which very probably will lead to even further interventions.[19]

All interventions slow the process of market adjustment and, in Paretian terms, slow the all important and necessary "circulation of elites." The monetary cause of the initial phase of the business cycle sends out distorted information which biases both the structure of production and the process of adjustment away from the true social economy and in favor of (1) the owners of the non-financial corporations in the higher orders of production, and more importantly, (2) the financial institutions upon which these non-financial corporations depend for both their long and short-run financing. Since the business cycle is caused by the expansion of new bank credit, and since the banks and higher order industries receive this new money *first*, then it seems clear that the net gainers (the winning class) from this all-encompassing intervention surely will be that very same state-banking network and higher order industries, at least throughout the upswing of the cycle. The "circulation of elites" will be significantly stalled to the degree

that these two important sectors are able to continue to benefit at the expense of the rest of the economic community from the continued infusions of bank credit. Insofar as the "circulation of elites" actually is slowed by the intervention, then to that same degree will "the winning class" become solidified into what must be defined only as an entrenched and parasitic political-economic class.

To achieve a clearer understanding of the class interests, which benefit from the expansionary phase of the business cycle, it is necessary to focus our attention on the capital market in general, and the overall banking sector in particular. Then we must focus on the relationship of the capital market and banking sector to the capital-intensive industries concentrated mainly in the higher orders of production.

As was mentioned earlier, banks are particularly susceptible to the temptation to engage in inflationary practices since they particularly reap the unearned benefits of a rapid and continuing expansion of the asset base. This expansion, of course, currently in U.S. banking practices happen mainly through open market operations (purchases) and borrowing by commercial banks at the Federal Reserve's rediscount window. In either case, the reserves of the banks are increased and the loanable funds (assets) are thus also increased. These then are the direct benefits, which clearly motivate bankers in their collective desire to pursue a concerted inflationary policy.

It should be noted here that as the bank's reserves are thus increased, this frees other funds to be channeled into a wide variety of other assets, both highly liquid and real. Therefore the portfolio of the bank grows disproportionately large once again because they have access to and control over the new funds *first.* This is particularly the case when they buy into real estate, which then appreciates in value as time passes. Because, however, appetite tends to get the better part of judgment, as the upswing gathers steam, banks do tend to become overextended both in real estate mortgages and their own real estate pyramiding. This later tends to become a substantial problem when the upswing reaches its end.

In Section 1 , we discussed the necessary role of state intervention in making it possible for the banks to engage in a systematic inflationary policy. Only cartelized banking can result in system-wide inflation. This intervention, however, like all interventions, creates secondary consequences, which in many cases will not be recognized as being in any way related to the intervention. In the case of cartelized banking and its consequent inflationary policy, it is important to point out that there are additional benefits for banking institutions which likely will not be entirely consciously perceived by banking executives.

In particular, Austrian cycle theory gives us every reason to believe that there is a definite correlation between the expansion of the money supply and the increase in long-term external debt of non-financial corporations, especially those corporations in the higher orders of production. This is particularly important because it tends to provide the banks with increased leverage over industrial enterprises. It therefore leads to a further concentration of entrepreneurial control, or *ultimate decision-making*, within the banking sector.[20] The economic consequences are that there will be a further movement away from the optimum dispersion of decision-making than would obtain on the social economy. This must necessarily lead to a decline in general economic welfare. The sociological and political consequences are, if anything, even more important. For this leads to a hardening of class distinctions and further insulates the financial sector from competition, which in turn further increases its growing hegemony *in ultimate political decision-making*. This obviously becomes increasingly important, as the economy becomes less one of social economy and more one of political economy.

It is important to recognize that this process of increasing control by the banks over non-financial corporations, which occurs during the expansionary phase, is achieved without any indication that industrial profitability either has been or will be adversely affected. In fact, because new money is flowing into the higher orders and because interest rate declines bring about increases in present capital values, industrial profitability *does* increase dramatically. Even a businessman well versed in Austrian cycle theory would certainly take advantage of the newly profitable situation, although he would try to "get out" before the Hayek effect became operative (whether he would succeed in this or not would not depend much on his knowledge of Austrian theory, but rather on the efficacy of his entrepreneurial judgment). The point is that all price indicators confirm that industrial managers are correct to expand more time-consuming investment by relying on newly reduced low-cost loans. This distorted set of price relationships clearly creates a real situation in which the lender–borrower relation becomes mutually beneficial to both parties and will last so long as interest rates remain artificially depressed. Yet, the fact remains that even though both the banking sector and the non-financial corporations ostensibly benefit during the upswing, the banking institutions are simultaneously consolidating their control over corporate decision-making. It is very important to see that this *extension* of banking control is, of course, unnatural and dependent solely on state intervention into the banking sector and would not be possible under conditions of the social economy.

The most capital intensive industries, generally those in the higher orders of production, are inevitably the major corporate beneficiaries of the inflationary expansion of bank credit during the upswing of the cycle. The reduction in interest rates during the inflationary period favors these corporations since the cost of money capital plays a particularly important role in their overall cost of production and because their product is so far removed in time from the ultimate consumer. The cost of capital for these industries is important both for their current operations and the plans and actions concerning decisions for capital expansion.

Another aspect of the declining rate of interest is equally important. Although all industrial enterprises enjoy a considerable flexibility in shifting the capital/labor ratio in its production processes (production-function), this degree of flexibility is, of course, not unlimited. Such flexibility is fixed by certain parameters that are determined by the current technological characteristics of the particular production processes involved. These technological parameters vary from industry to industry. It is clear that the most capital-intensive industries are the most amenable to the change in capital/labor ratios known as the Ricardo effect, which operates especially in the initial stages of the boom. It is these industries, which are able to increase the capital component of their production processes to the greatest degree. Given the altered price relationships, it is these capital-intensive industries, which will be assured of the highest *anticipated* return on capital invested. As long as the inflationary process is sustained, such expectations will be fulfilled. These expectations will eventually, of course, be frustrated as the increases in bank credit are slowed down or halted.

### *2.4. Some Other Beneficiaries of Inflationism*

It seems useful to focus on three other categories as leading beneficiaries of the inflationary policies, in addition to the banking sector and capital-intensive industries. The *first* is obvious, but it should be mentioned anyway. Resource owners of all types benefit as the borrowers of bank capital proceed to bid up prices for the limited resources available. This is not only true of raw materials, but also of all forms of labor that can be used in more time-consuming processes of production.

The *second* such category includes all forms of research and development industries, or R&D aspects of industries. R&D must be treated as capital investment, although we might not wish to categorize it as capital intensive. Just as surely as a lowering of the interest rate induces more time-consuming

production processes, so too does such a reduction promote research projects whose operational results can be anticipated to be more time-consuming as well. The inflationary upswing can also be expected to result in research projects of increasingly long-term and intensive "pure" research or higher-order practical research which would not otherwise be undertaken because they would surely appear unprofitable.

The longer the upswing, the more "chronic" the overinvestment in the higher orders. This would include overinvestment in longer and more capital intensive R&D projects. Investment and the structure of production would continually be at variance with that of the social economy. Research would go toward the attainment of more and better capital-intensive processes at the expense of less time-consuming processes. (Here it seems important to remind ourselves that capital is limited at any given time, and that more time consuming processes cannot be implemented until more capital has been saved and reconstituted. The only other possibility is to take scarce capital way from other production processes. This, after all, is the very heart of the Austrian cycle theory). What we witness during the upswing of the cycle is the objectification of an idea before its time has come. Production processes, which would automatically have been chosen under conditions of the social economy are passed over in the rush to implement consistently premature and oversophisticated techniques and processes. All of this leads to even more chronic overinvestment in higher orders of production. It should be clear that the vested interests in maintaining the new regime of political economy attained because of such intervention become far more numerous the more time that passes.

In the social economy there tends to be an optimum investment in numerous and different time-structured research projects, just as there tends to be an optimum of time-structured production processes. In neither case would there ever be anything approximating perfect complementarity: neither in the structure of production, nor in the structure of research projects. There would, however, be a continual *tendency* toward just such complementary structures. Under conditions of monetary expansion, however, the tendency is to move toward a false complementarity, one that would collapse quickly if and when the Hayek effect becomes operational.

The *third* of these categories is the educational system in general and the universities and polytechnical institutes in particular. If we wish to view labor productivity as a stream from human capital, then surely the universities and institutes must be considered a higher order of production. Its essential purpose is to produce a more productive labor force in a round about way for introduction into the structure of production at a later time.

Another consequence of the inflationary expansion of the money supply is that it appears that "society" is willing to support more time-consuming methods of producing human capital. Since the costs of borrowing have fallen, it is likely that more educational plant and facility will be built and staffed. Corporations will prove increasingly willing to invest larger amounts of money in the long-term training of their labor force. And, of course, the universities also emerge as major beneficiaries of the general overextension of R&D activity since much of this activity is internalized within the universities.

All of this will presumably lead to an overinvestment in the most time-consuming areas of training. Engineers, scientists, Ph.D.'s of all sorts, teachers, etc., for whom the market would not produce and sustain long-term employment and for whom jobs would "have" to be created. Perhaps just as importantly, the universities themselves – themselves being largely a creation of inflationary expansion – would likely become incipient bastions of the interventionistic ethic. Free market ideas, the implementation of which would surely cut off much of their source of "overinvested" support, probably would be given short shift indeed. It seems highly unlikely that Austrian economics would long reign as the conventional doctrine under any such regime of political economy.

### *2.5. The Hayek Effect and the Liquidity Crisis*

The deceptively comfortable arrangement which seems to benefit both the banking institutions and the higher order capital-intensive industries is severely threatened during the latter stages of the expansionary phase of the cycle. Once the increasing money supply is slowed or halted, the Hayek effect begins. Prices in the higher orders (prices of current output, inventories, capital values, and factor prices) begin to fall relative to those in the lower orders (especially consumers' goods prices), hence real wages decline. As interest rates begin to climb back up to reflect a truer picture of the social rate of time-preference, the margin of benefit from capital invested shifts from highly capital-intensive and more time-consuming methods of production to the less capital-intensive and shorter production processes. Since real wages are falling there is a compelling incentive to replace capital with labor; and because interest rates are rising, investment will be directed to those production processes in which the "rate of turnover" (the number of times the capital is turned over per annum) is higher, i.e., to less capitalistic methods.[21]

The Hayek effect that has just been described in turn leads to a faster reduction in demand for the current and future output of the higher orders. This further hastens the price readjustment process, i.e. the decline in the prices of the higher orders relative to those in the lower orders. As the relative price rise takes place in the lower orders, what liquid capital that there is in the higher orders will flow quickly into less time-consuming investments.

The very sticky problem of fixed assets, nevertheless, remains. The expansionary phase of the cycle always results in a process of the objectification of capital in a not easily liquidatable form. This highly illiquid capital is progressively "frozen into" the higher orders of production, thus severely minimizing the flexibility of these higher order firms during periods of economic crisis.

As costs impinge upon yields and as anticipated demand fails to materialize, higher order firms suddenly and in large numbers, find themselves unable to meet their short-term obligations. They have assets, but the period of maturation of these assets has not yet been fulfilled. The assets therefore are not yet income-producing. These capital assets, therefore, do not "fit in" to the changing real structure of production as the social economy begins to reassert itself.

The liquidity crisis ensues. Corporate managers rush to borrow in an attempt to cover their short-term obligations. For a short period of time the wolves may be held at bay, but soon (in the absence of a return to monetary infusions) all borrowing avenues will have been pursued and exhausted.

If the social economy actually is permitted to fully reassert itself then the liquidity crisis quickly turns into an insolvency crisis. To the degree that a firm actually proves illiquid, then to that same degree must it be considered insolvent. Any attempt to prop it up would be simply a waste of social capital. Such an illiquid-insolvent firm must then declare bankruptcy, go into a state of receivership under the control of its creditors (usually its bondholders and bank creditors), and then be reorganized in such a fashion as to "fit back in" to the "cleansed" structure of production. This process of liquidation would, if permitted, proceed until a high degree of complementarity was again achieved.

### *2.6. Advancing Liquidity to Ward off the Downturn*

One can probably be safe in assuming, however, that not everyone will look upon the gathering liquidity crisis with the same sense of equanimity as

displayed by detached economists. Due to the widespread nature of the liquidity crunch, the corporate decision-makers will not likely see that their corporation's problem has anything to do with mistaken entrepreneurial judgments that they themselves may have made in the past. On the contrary, it will simply lead them to conclude that there is obviously too little lending capital available, and that the answer to the "temporary" and merely "financial" problem is to increase the money supply sufficiently to get through the crisis. Then everything will be alright again.

The blame for the crisis is certain to be attributed to the monetary authorities for halting or slowing down the supply of bank credit in the first place. There is no denying that a correlation does exist between a slowing in the increase of the money supply and the beginning of the recession. Without the benefit of sound theoretical understanding, it seems only natural that such a conclusion will likely always be drawn. It is, therefore, unsurprising to find key members of corporate management usually emerging as leading proponents of a further expansion of the money supply to meet their "normal" business needs.

Non-financial corporations are not the only business complexes, which become overinvested (malinvested) and hence find themselves faced with severe liquidity problems. The banking networks (commercial, savings, mortgage, and investment banks) and other intermediaries also become over-extended, especially if the upswing is of a lengthy duration. Inflation tends always to breed a climate, which leads to profligacy and discourages thrift. Banking institutions are hardly immune from this tendency.

As inflation proceeds, banks begin to move away from the proven tenets of sound banking, i.e., of having the time-pattern of their liabilities. In the real world of current banking practices where demand deposits (and time deposits in every practical sense are "on demand" also) are loaned out, all such loans should, at the very least, be of short duration and of self-liquidation nature.

> The theory of the 'self-liquidating' loan is that the transaction which presumably was facilitated by the original making of the loan should itself provide the funds with which to discharge the loan. In this way a bank can speedily reduce its loans, and a reduction of loans and reduction of deposits go hand in hand, it can improve its reserve-deposit ratio and hence its liquidity in a comparatively short span of time.[22]

In discussing a case where banks got into just such liquidity problems (the 1920s), the same authors state:

> This decrease in the proportion of short-term, self-liquidating assets served to lessen the liquidity of the banks and to reduce their ability, both relatively and absolutely, to meet

> their deposit liabilities upon demand on short notice; at the same time the growth of assets of a long-term character made it increasingly difficult for the banks as a whole to realize upon those assets by conversion into cash if necessity for such action arose.[23]

What was true during the 1920s is also true of any lengthy inflationary period.

It seems safe to say that every time there is a long-term expansionary upswing, that the whole banking network will tend to get into these same liquidity problems. When the interest rate is pushed artificially low, the anticipated return on more time-consuming investments will rise. There will be a natural tendency on the part of banks (the most apparently deleterious effects take place in the commercial bank sector) to "stretch" their short-term obligations into longer and less liquid loans. "Liability management" becomes a new, important, and ultimately dangerous banking procedure. Banks will almost surely become over-extended in the mortgage field, witness the current and deep crisis situation in the relation between the banks and the Real Estate Investment Trusts (R.E.I.T.s). Apparently, then, the ratio of short-term, self-liquidating loans to longer, less liquid loans (remembering that the funds being loaned out are of an "on demand" nature) tend always to shrink during long-term inflationary expansions.

It seems therefore evident that the bankers, although perhaps somewhat more hesitantly, will also have a compelling incentive to continue the inflationary expansion of the money supply, just as much (if not more so) to hold off the downturn as to prolong the upswing. Since the representatives of these two most influential decision-making sectors within the system of political economy (state capitalism) share a growing common interest in prolonging the expansion period of the cycle, it is very unlikely that anything approaching the full process of adjustment will be permitted to take place as the first signs of a deepening liquidity crunch become apparent. For the only way that the system of political economy can be maintained *as it exists* is to continue the increases in the money supply.

### *2.7. Forced Savings: Sraffa vs. Hayek*

Increases in the money supply necessarily drive interest rates artificially lower than they otherwise would have been, and thereby bring about the phenomenon of "forced savings." One of the key underlying questions throughout this paper is, just who are both the short- and long-run beneficiaries of this "forced savings?" A relatively unknown but significant

controversy between Piero Sraffa and F.A. Hayek[24] in the early 1930s dealt largely with just this question.[25]

Sraffa, in his typically neo-Ricardian fashion, could not see what Hayek was talking about in *Prices and Production* when Hayek differentiates between the effects of savings of a voluntary sort and of "forced savings." Hayek says that the latter is different in that at the end of the artificial stimulation of the money supply, the investments induced on the basis of that stimulation must come tumbling down, whereas in the case of voluntary savings, the gains will accrue to the owners of the investments after the period of production (maturation) has taken place.

Sraffa answers this logic by saying that nothing of the sort will happen:

> One class has, for a time, robbed another class of a part of their incomes, and has saved the plunder. When the robbery comes to an end, it is clear that the victims cannot possibly consume the capital which is now well out of their reach. If they are wage-earners, who have all the time consumed every penny of their income, they have no wherewithal to expand consumption. And if they are capitalists, who have not shared in the plunder, they may indeed be induced to consume now a part of their capital by the fall in the rate of interest; but not more so than if the rate had been lowered by the 'voluntary savings' of other people.[26]

There are certainly a number of problems with Sraffa's position, especially from the point-of-view of pure economic theory. The insights, however, become more interesting if we look at them from the perspective of socio-political economics rather than that of the pure logic of choice.

The Hayekian rejoinder to Sraffa is that as the social economy reasserts itself, the malinvestments will become apparent as such and a move to less capitalistic methods will be necessitated. What should have been stated far more clearly during this controversy was that the Austrian theory of capital is essentially a theory of *complementarity*. Once the previous monetary conditions change (the inflation is reduced), the complementarity of the capital structure also begins to change. This considerably changes the value of the assets owned throughout the structure of production. Therefore, while it is true that "one class has, for a time, robbed another class of a part of their incomes," (i.e., reduced the effective range of the quality and of the quantity of present consumers' goods, hence the "forced savings"), it does not follow at all that this class (the present owners of those thusly created capital assets) will be able to have "saved the plunder." For if the social economy does in fact reassert itself, then the present values of the malinvestments will decline precipitantly.

However, what if the social economy is not permitted to reassert itself? What if the regime of political economy is maintained and ever broadened

through a continuous influx of bank credit and by the addition of other now "necessary" rationalization or stabilization interventions instituted in an effort to cope with the dislocations caused by the continuing monetary tampering? Economic theory clearly tells us that this phase of the political economy (interventionism) cannot go on forever. However, as long as it does last, it seems clear that "one class (will continue to rob) another class of a part of their incomes."

### *2.8. The Privileged Position of the State Banking Axis*

We think we can safely assume that those who are in control of the state-banking apparatus will not permit the social economy to reassert itself. It is true that economic law continues to work its vengeful way even in spite of the money managers' decisions, but the process of readjustment certainly can be held off for quite some time. The decision to further intervene causes substantial problems for the economy at large and for the economic czars in particular. Throughout this period, though, the state-banking sector continues to augment its hegemonic position within the system.

Because they choose not to permit a fully purgative economic readjustment, the central bankers find themselves faced with the genuinely impossible task of trying to fine-tune the economy with fiscal, monetary and other interventionistic tools. The expansionary phase of the cycle can never be smooth for two reasons. First, it is impossible to calculate the precise degree of monetary stimulation that is needed to sustain the distorted structure of production, because one can never predict the time-sequence of people's reaction (a reaction which is psychological, not mechanical), to a change in the quantity of money.[27]

This becomes even more difficult as the expansion continues because an ever-accelerating rate of increase in the quantity is needed to achieve the same degree of stimulative effect. This, however, is a rate, which is beyond the ken of mere mortals, and economists do have feet of clay. Second, when the chosen rate proves to be incorrect, which is most likely, there is usually a strong political tendency to overreact to the economic consequences of that wrong choice.

If the rate is too low, a liquidity crisis will ensue, and a recession will begin. The tendency is to monetarily overstimulate, thus reversing the process. But after a lag, prices will surely rise even faster. If the rate proves too high, the tendency is to cut back strongly on the money supply. This will then also lead to a tumbling of malinvested projects. Thus the system is

subjected to the continual flipping back and forth between a series of milder, secondary expansionary/contractionary cycles within the underlying, major upswing. This, for instance, has been the case in the United States since the Second World War.

We saw earlier that the artificial lowering of the structure of interest rates led to an increase in external corporate debt and to a consequent increase in the leverage of the financial sector. This is just as true of the banks' position during the mini-cycle as it is over the long haul of the upswing. But what about the downturn? Don't the banks lose just as much leverage on the downswing as they gained on the way up? This probably would be the case if the social economy were permitted to emerge and fully readjust the socio-economic relationships. Such an emergence would, however, run contrary to our assumptions.

The banking system, it must not be forgotten, maintains a very privileged position in the political economy. The banks are far better insulated from the blows of recession than are other sectors of the economy. Socio-economic legislation such as the Federal Deposit Insurance Corporation (FDIC) is very important in giving an appearance of impregnability during the recession. The FDIC is not so important for what it actually can do as it is for what people think it can do. If people think that the FDIC secures the solvency of the banking system, they will then not make a run on the banks. This is true even though the reality is that less than one-seventh of all bank deposits that are now covered by available bank reserves.

The crucial privilege of the banks, however, is that of their spatio-temporal position throughout the liquidity crisis. They retain the ultimate "out" of this otherwise closed system. They can still always go to the Fed's rediscount window. They can rebuild their own liquidity positions *before* anyone else. The banks are the last to be hurt on the way down and the first to be aided on the way up. If they can receive aid before the downward plunge has accelerated and actually hit the banks, then they (at least relative to other sectors of the economy) will have effectively insulated themselves from the painful (cleansing) effects of the downturn of the secondary cycle. Admittedly, this can continue only in the short-run, but the short-run can be quite long. Indeed, the current expansionary phase of secondary cycles in the United States, for example, has lasted for three decades. The long-run in this case, though, is probably now fast approaching.

It seems important to note here that if it should become essential for the state banking system to cut some of its losses, the cuts will not likely be made among the larger banks. Liquidity will be rushed first to the big banks, for it would be politically, as well as economically, disastrous to allow one

or several of the big banks actually to fall. This will further entrench the position of the large, established (mainly New York) banks at the expense of potentially new and/or small and aggressive competitors.

### *2.9. Privilege Leads to Concentration and Further Dislocations*

Another alarming aspect of the continual swing back and forth of the secondary cycles is that this process ultimately leads to an abnormal concentration of control over economic resources, and, consequently, will lead further away from an optimum amount of competition, relative to the social economy. The result will be a slowing down of the process of adjustment, a further weakening of the entire market system, a decline in consumer welfare, and an unfortunate but understandable clamor on the part of citizen-consumers against the absurdly inefficient and unstable "free enterprise" system.

During a liquidity crisis, those firms with prime credit rating will be able to borrow funds first and most cheaply. Under conditions of an advanced political economy, however, an important complication arises. A corporation's credit rating no longer depends entirely on its economic efficiency. It depends mainly now upon its survival probability and consequently upon its anticipated ability to repay the loan. In the advanced political economy, it seems highly probable that large firms (either firms with numerous employees or highly capital-intensive combinations which are deemed vital to the "national security") will not be permitted to collapse. A firm's credit rating also often depends on how closely it is tied (and will continue on so being) into the state apparatus through privileges, contracts, subsidies, etc. As it becomes known that larger firms will not be allowed to fall and that privileged firms will continue to be subsidized, such knowledge will serve in effect as a quasi-guarantee on loans to those firms. Such a guarantee will clearly aid their credit rating at the expense of smaller and perhaps far more economically viable firms.

We can also assume that during an expansionary upswing, under conditions of an expanding political economy, the government will be engaging in large-scale spending programs. This is, after all, how they stay in power. Such spending will in all likelihood be deficit spending and will therefore have to be financed by borrowing.

These two abnormalities, both caused by the interventionism of political economy, (1) misassigned credit ratings, and (2) heavy government borrowing, are bound to have grave socio-economic consequences.

If the borrowing is supported by the central bank, then the problem of inflation is likely to get out of hand. If, on the other hand, enough liquidity is not made available to service all comers, then someone is going to get (in the current financial jargon) "crowded out." Marginal firms will surely get pushed aside. Of perhaps even greater significance, however, is that many very efficient, smaller firms will also be forced into insolvency.

It is Social Darwinism in reverse. Fresh and vibrant capital combinations are thwarted and often destroyed in order to maintain the social waste of government spending and the obsolescent dinosaurs of privilege and inefficiency.

When these economically sound firms are forced to fold, they go into receivership and are often merged into the state-maintained firms. Waves of burgeoning conglomerates often lie in the wake of such "crowding out" and financial reorganization. Perhaps it is true that this is the most efficient way of dealing with the situation as it exists, but it is clearly far removed from anything remotely approaching the optimum relationship that would exist under conditions of the social economy.

Both these economic dinosaurs and the reorganized capital combinations are often held tenuously together by sinews of ill-founded financial arrangements that are usually built on a mountain of debt. On the next secondary downturn, there is just that much more misinvestment which has to be rescued and maintained.

As a result of these secondary cycles, the banking networks continually increase their leverage of decision-making control over the non-financial sector throughout the whole of the expansionary upswing. Since the major banks are better insulated both from competition and insolvency, they generally prove more willing to slow down inflation in order to firm up the currency when it weakens in the international currency markets or threatens to move toward runaway inflation. They will tend to tolerate the mini-recessions, but when push comes to shove, they will likely pull out almost all stops to ensure that neither a full-fledged recession nor a runaway inflation will sweep them under also. We shall touch on this a bit more in the next section.

The alternating secondary or mini-boom/bust cycles keep the non-financial corporations highly dependent on the banking sector. This becomes more apparent and more acute as the expansionary phase lengthens and the subsequent liquidity crises deepen.

As inflation continues and accelerates, replacement costs soar. Machines, which must be replaced only every decade or so will cost perhaps one hundred percent more (or even greater) than when they were originally

purchased. Profit and loss statements will likely have been reckoned on the basis of historic cost. Firms, who on the basis of returns thus calculated, will be led to believe themselves making a profit when in fact they are very likely to be actually operating at a real loss and perhaps even eating into their capital fund.

Even if the corporation is lucky enough to get out of the predicament in a solvent fashion, the managers will surely have to go to the banking sector to have his replacement costs funded by debt.

As liquidity crises come and pass, each one is likely to become a bit more severe than the last. During the deepening liquidity crises, interest rates shoot up. The stock market and long-term bond markets vacillate and weaken. Equity capital dries up. Once again, the non-financial corporations are forced to go to the banking sector for funding and/or pay phenomenal interest rates on their bond issues (if they can be floated at all) and/or commercial paper I.O.U.'s. In any case, the debt economy grows and the banking sector remains secure in its decision-making authority. Is this security not merely analogous to one's becoming the captain on a sinking ship? Perhaps so.

### *2.10. Scylla and Charybdis and the Allure of Fascism*

As the underlying upswing of the major cycle is prolonged over a lengthening period of time, the distortions in the structure of production become ever more pervasive. The financial condition of numerous firms becomes increasingly fragile and precarious. This reality places before the political and economic decision-makers several alternatives, two of which at some point become equally unacceptable. They become caught between the Scylla of recession and the Charybdis of inflation.

One of the most important characteristics of the evolution of the political economy is that the state increasingly assumes the duty of ensuring corporate survival. Besides the advances of liquidity in time of need that we have discussed earlier, there is a whole panoply of interventionistic socio-economic legislation – contracts, subsidies, guaranteed loans, etc. created – all of which tend to *socialize* private costs while keeping profits private. Any macro-economic policy, which seriously disturbs this arrangement surely would not be looked upon kindly.

Another element in the growth and development of the political economy is the integration of labor unions into the political-economic elite as "junior partners." The trade union leaders almost never assume positions of

ultimate decision-making, but they do perform a particularly important limiting function, both politically and economically. Politically they become a force that has to be appeased. Economically, they bring rigidities into the price mechanism. The price system loses much of its flexibility. The unions tend to prevent the downward price adjustments of nominal wages.

These two circumstances, (1) the decision to maintain the corporate status quo and (2) wage inflexibility downward, put tremendous pressure on the political and economic decision-makers not to accept the cleansing of a recession. On the contrary, it will surely lead them to choose what appears to be the lesser of the two evils, a continuation of the inflationary expansion of the business cycle.

A third factor remains always in the background. That is that if the decision-makers were to actually opt for a period of full price readjustment, the hegemonic position of the state banking, financial sector would also come crashing down. When compared to conditions, which would exist under a reign of the social economy, the financial sector of the political economy would be precarious, indeed. The position of political-economic hegemony certainly will not simply be given up so that a free market can be ushered in. This simply is not the way the real world works. On the contrary, the answers very likely will be sought after in the deep reservoir of "political means" which they have constantly at their disposal. It is, after all, the only alternative that will save their privileged position.

In another paper, we deal in further detail with the growth of a static infrastructure during the development of the political economy,[28] especially in the highest stages of state capitalism.

In the present paper, we shall merely reemphasize that an alternative network of institutions, which is parallel and seemingly reinforces and complements the natural institutions is developed throughout the long transitory stage of political capitalism.

In the United States, the sort of state-capitalist infrastructure which has been built up both to socialize costs and to rationalize the economy consists, in part, of the following kinds of institutions: The Export–Import Bank, FDIC, the Small Business Administration, the Farm Credit Administration, and the Federal Home Loan Bank Board. There are, of course, many more.

Perhaps the most important features to watch in the development of this infrastructure are the recent and numerous proposals to revive the Reconstruction Finance Corporation (RFC).[29] A number of businessmen and especially bankers have been calling for an RFC., which would be empowered not only to advance liquidity to faltering businesses and banks, but also

to advance *equity* capital. This would surely prove pivotal in the move to a broadened political economy.

Once the route of recession has finally been ruled out, and once it becomes clear that inflation, if continued, will totally destroy the whole economic mechanism and take the privileged position of the decision-makers along with it. The single remaining alternative of comprehensive price control and consequent state planning, although not perhaps joyously embraced, will become nevertheless preferable to losing everything. The "private" financial sector leaders will almost surely have a strong position within the decision-making core of any state planning mechanism, thus they will be able to retain their familiar perquisites of economic and political power.

Comprehensive wage and price controls will be imposed in an attempt to get inflation under control. Many who reluctantly accept these controls will probably convince themselves that the period of controls and planning is but a temporary exercise which will be dismantled after things are straightened out and gotten under control.

The alternative infrastructure can begin immediately to serve as a control mechanism by simply fusing the whole state-banking network into the infrastructure, and then through that network, execute control over the corporate structure; but, of course, problems will still abound. The many problems of shortages which necessitate rationing and which in turn eventuate in resource allocations and cost subsidizations, grow enormous immediately. Thoughts of going back to the market get lost in the maze of unanticipated problems of running the system.

One complication, which almost no one foresees is that the capital structure is not nearly as productive as it was thought to be. Decades of inflation and debt lead to the improper maintenance of the capital structure. Added to the problems which inflation brings to assessments of profitability and hence an eating into the capital fund, the political economy is also characterized by huge social welfare programs which lead to far too much consumption in the present at the expense of real savings and investment for the future. The capital structure is but a shell of what it was thought to be. The "reserve fund" upon which the planners had hoped to sustain their economic plans simply does not exist. Any hope of getting out of this quagmire and back to the market will probably be lost for decades as more and more absolute control passes into the hands of fewer and fewer decision makers.

At this point the last remaining elements of the social economy will have been snuffed out. The market society, which thrives only on the "spontaneous" adjustment to changing circumstances, will be replaced by force and bondage. The social economy will be totally replaced by the political

economy. The allure of fascism in the face of the consequences of interventionism will have proven too strong.

Mankind's only hope at this point is the knowledge that the political economy is totally parasitic and cannot function for long. Soon a combination of reforms and revolts will be instituted and then the market system can begin slowly to make its way back.

It is more than anything the socio-economic policies that lead to the business cycle which have been and are continuing to propel us toward this ultimate disaster. These economic policies of inflationism are made possible only by central banking. Only a partnership of the state and the banking sector can cartelize banking into an effective inflationistic force. It is the crucial nexus that must be severed.

*If* something is not soon done to break this all important state-bank connection and the flow of circumstances, which result from that connection, then we can find no good argument to counter F.A. Hayek's pessimistic prognosis when he recently said:

> What I expect is that inflation will drive all the Western countries into a planned economy via price controls. Nobody will dare to stop inflation in an ordinary manner because as things are at present, to discontinue inflation will inevitably cause extensive unemployment. So assuming inflation stops it will quickly be resumed. People will find they can't live with constantly rising prices and will try to control it by price controls and that of course is the end of the market system and the end of the free political order. So I think it will be via the attempt to regress the effects of a continued inflation that the free market and free institutions will disappear. It may still take ten years, but it doesn't matter much for me, because in ten years I hope I shall be dead.[30]

## NOTES

1. Of course, we recognize that all assumptions of equilibrium are theoretical constructs useful only in aiding our understanding of real world processes and that they are neither a substitution nor an approximation of such processes.

2. The term "social economy" is one that was used similarly by both Charles Dunoyer, the early 19th century French economist and social philosopher, and by Friedrich von Wieser, the early Austrian economist and sociologist.

3. Mises, L. von, *Monetary Theory and the Trade Cycle*, A.M. Kelley (New York, 1966), first published in 1933; *Prices and Production,* A.M. Kelley (New York, 1966), first published in 1931; *Profits, Interest, and Investment*, A.M. Kelley (New York, 1969), reprint of 1939 Ed.

4. Menger, Carl, *Principles of Economics*, The Free Press, Glencoe, IL, (1950). Mises, L. von, *The Theory … op.cit.*, pp. 62–94.

5. Mises, L. von, *ibid.* Rothbard, M.N., *What Has Government Done to Our Money?* Rampart College Press (Santa Ana, CA., 1974 Ed.).

6. A "natural" free market system is based on a regime of private property and the protection of that property. It must be stressed that money is property and must be treated like all private property; it must be protected. Hence any increase in money substitutes not backed by the commodity money is by definition theft, and under a regime of private property (social economy), such theft would be deemed illegal and prosecuted just like any other crime.

7. Rothbard, M.N., *ibid.*; *The Case for a 100 Percent Gold Dollar*, Libertarian Review Press (Washington, 1974).

8. Armentano, D.T., *The Myths of Antitrust,* Arlington House (New Rochelle, NY, 1972), see esp. Chapter 7; Rothbard, M.N., *Man, Economy and State*, Van Nostrand (Princeton, 1962), Chapter 10; *Power and Market*, Institute for Humane Studies (Menlo Park, CA, 1970).

9. For an excellent presentation of the struggle between the Banking School and the Currency School which culminated in the passage of Peel's Act of 1844, see L. von Mises, *The Theory, op. cit.,* pp. 368–373.

10. On the structure of production, see Carl Menger's *Principles, op.cit.*; F.A. Hayek's *Prices, op.cit.*; M.N. Rothbard's *Man, Economy and State, op.cit.*, esp. Chapters 5 and 6. On the lattice-work analysis, see esp. Ludwig Lachmann's *Capital and Its Structure*, G. Bell & Sons, Ltd. (London, 1956); see also: Eugen von Bohm-Bawerk, *Capital and Interest,* Vol. 2, Libertarian Press, (S. Holland, IL.); F. von Wieser, *Natural Value* (London, 1893), *Theory of Social Economics* (NY, 1927).

11. Mises, L. von, *The Theory … op.cit.*; for one of the best explanations of the flow of inflation, see Henry Hazlitt's *Economics in One Lesson*, MacFadden-Bartell (NY, 1970); another important study on the spatio-temporal aspects is Murray Sabrin's forthcoming dissertation at the Geography Department of Rutgers University.

12. Robbins, Lionel, *The Great Depression*, Books for Libraries Press (Freeport, NY, 1971), reprint of 1934 Ed.

13. This presentation of the Austrian theory of the business cycle has been distilled and condensed from the following works: Haberler, Gottfried, "Money and the Business Cycle," In *Gold and Monetary Stabilization*, Ed. Q. Wright, University of Chicago Press (Chicago, 1932); Hayek, F.A. *Monetary Theory, op.cit.*; *Prices and Production, op.cit.; Profits, Interest and Investment, op.cit.;* "The Ricardo Effect," In *Individualism and Economic Order*, University of Chicago Press (Chicago, 1948); "Three Elucidations of the Ricardo Effect," In *Journal of Political Economy* (March–April 1969). Lachmann, L.M., "A Reconsideration of the Austrian Theory of Industrial Fluctuations," In *Economica* (May 1940). Mises, L. von, *The Theory, op.cit.*; *Human Action, op.cit.* Phillips, C.A., McManus, T.F., & Nelson, R.W., *Banking and the Business Cycle*, The Macmillan Co. (New York, 1937). Robbins, *The Great Depression, op.cit.;* "Consumption and the Trade Cycle," In *Economica* (November 1932). Rothbard, M.N., *Man, Economy and State, op.cit.*; *America's Great Depression*, Van Nostrand (Princeton, 1963).

14. This assumption is useful but certainly not necessary. See F.A. Hayek's "Capital and Industrial Fluctuation" In *Econometrica* (April 1934).

15. On this see Ludwig M. Lachmann's *Macro-Economic Thinking and the Market Economy*, The Institute for Economic Affairs (London, 1973); also see, L. Lachmann, "Markwirtschaft and Modelkonstruktionen," In *ORDO*, Vol. XVII,

(1966). This essay has been translated into English by R.F. Ambacher and W.E. Grinder as "Model Constructions and the Market Economy," hopefully for publication in the near future.

16. Walter E. Grinder and John Hagel III, "Towards a Theory of State Capitalism: Ultimate Decision-Making and Class Structure," a paper presented at the second Libertarian Scholars Conference, and as yet unpublished.

17. Henry Hazlitt simplifies this process in his "Mirage of Inflation," In *Economics op.cit.* For a very sophisticated and excellent case study of the effects of inflation, see Constantino Bresciani-Turroni's *The Economics of Inflation: A Study of Currency Depreciation in Post-War Germany, 1914–1923*, George Allen & Unwin (London, 1968), reprint of 1931 ed.

18. For a detailed explanation of our view of economic classes see, Walter E. Grinder and John Hagel III, "Towards a Theory of State Capitalism: Ultimate Decision-Making and Class Structure," unpublished manuscript; more importantly, see: Albert Jay Nock's *Our Enemy the State,* Free Life Editions (NY, 1973), reprint of 1935 ed.; and Franz Oppenheimer's *The State*, 1914, soon also to be reprinted by Free Life Editions.

19. For our view of Interventionism, see, John Hagel's "From Laissez-Faire to Zwangswirtschaft: The Dynamics of Interventionism," prepared for the Austrian Economics Symposium, University of Hartford, (June 1975) [Reprinted in this volume – Editor's Note]; we base our views largely on the following: L. von Mises "The Middle of the Road Leads to Socialism" In *Planning for Freedom*, Libertarian Press (South Holland, IL, 1962); and F.A. Hayek's *The Road to Serfdom*, University of Chicago Press (Chicago, 1944).

20. Grinder, W.E. and Hagel, J., "Towards a Theory of State Capitalism: Ultimate Decision-Making and Class Structure," *op.cit.*

21. Hayek, F.A., "Profits, Interest And Investment," In *Profits, Interest and Investment, op. cit.*; "The Ricardo Effect" In *Individualism and Economic Order, op. cit.*

22. Phillips, McManus, and Nelson, *Banking, op. cit.*, p. 109.

23. *Ibid.*, p. 107.

24. Those of us who have the good fortune of attending the Ludwig M. Lachmann Seminar at New York University are indebted to Professor Lachmann for having pointed out to us the true nature and significance of this intellectual repartee.

25. Sraffa, P., "Dr. Hayek on Money and Capital" In *Economic Journal* (June 1932) pp. 237–249; "Money and Capital: A Rejoinder," In *Economic Journal* (June 1932). Hayek, F.A. von, "Money and Capital: A Reply" In *Economic Journal* (June 1932) pp. 237–249.

26. Sraffa, P., "Dr. Hayek on Money and Capital," *op. cit.,* p. 48.

27. Mises, L. von, *Human Action, op. cit.*, pp. 426–428.

28. John Hagel III, "From Laissez-Faire to Zwangswirtschaft: The Dynamics of Interventionism," a paper prepared for the Austrian Economics Symposium at the University of Hartford (June 22–28, 1975).

29. See Walter E. Grinder and Alan Fairgate, "The Resurrection of the Reconstruction Finance Corporation," *Reason* Magazine (July 1975).

30. See Walter E. Grinder and Alan Fairgate, "The Resurrection of the Reconstruction Finance Corporation," *Reason Magazine* (July 1975).