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CRISES AND CYCLES

CRISES AND CYCLES

BY

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PREFACE.

In writing this book the author has set himself a rather ambitious and comprehensive task. In recent years the literature on economic crises and cycles has become abounding, and at the same time the discussion on the most controversial points has, under the influence of the urgent problems of practical policies, been carried ever further and deeper, especially among the English economists who have unmistakably taken the lead in this field of economic science. But perhaps there has now come the moment for an attempt at a synthetic presentation of the whole body of facts and thoughts on this all-important subject. To do this within the precincts of a book of reasonable dimensions and in a manner combining scientific responsibility with as little obscurity as possible, is surely a task the arduousness of which might be claimed as an extenuating circumstance for any of its shortcomings.

Since this book addresses itself both to the world of academic economists and to a wider public, it runs the risk partly of repeating familiar things to the former and partly of being too technical for the latter. In order to reduce this risk, the author made the arrangement, rather unusual in England, of reserving the main text of the book, set in normal type, for the more essential and elementary parts, while using small type for explanations of a more detailed, technical, or advanced character. Keeping this in mind, both groups of readers may be able to turn to that aspect of the book which suits their taste or their training. Regarding the rather liberal footnotes, it may also be said that they have been added solely for the benefit of those who will find them useful while the main body of the argument is absolutely intelligible without them. It is hoped, therefore, that the good intentions of the author will not expose him to being criticized for academic pedantry.

Though at every possible occasion references to other theories and opinions have been made, the reader will realize very soon that the author has some definite opinions of his own. What they are the reader will learn during the course of the book. It seems

indicated, however, to say in advance that the author's ambitions went towards a well-reasoned synthesis rather than towards bold originality. In this he cannot hope to please anybody among the more pronounced and pugnacious adherents of the different conflicting schools. All he hopes for is that his attitude will not unduly lack in reason and logical coherence.

As a foundation for this book use has been made of the author's treatise on *Krise und Konjunktur* which was written in 1931 and published in 1932 in Germany, while a somewhat different and enlarged Swedish translation of it appeared in 1934. Large parts have been translated, with many alterations, from the German and incorporated into the present book, while other parts written in English by the author have been added in order to complete as far as possible the account of the facts and to deepen the theoretical exposition. Both the translation of the German and the revision of the English parts are due to Dr. Vera Smith to whom the author is greatly indebted for her fine work. He also wishes to acknowledge his gratitude to Mr. Ragnar Nurkse, at the League of Nations, for having taken the initiative in preparing the publication of this book.

Unfortunately, the book was already set in type when Mr. Keynes' new work " The General Theory of Employment, Interest and Money " (London, 1936) was published. The author believes, however, that the reader will be able easily to discern where and why the bold views of Mr. Keynes do not coincide with those set forth in the present book.

WILHELM RÖPKE.

KADIKÖY, (MARMORA),
March, 1936.

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CHAPTER I.

INTRODUCTION.

This volume has been written during the worst and most widespread economic crisis ever recorded in the annals of economic history, that is to say, at a time when the problem of economic crises and cycles may claim to be one of preponderating interest, when the intolerable burden of the depression is threatening to endanger the very existence of the economic system, and when many people believe that it is a question not of a crisis within the capitalist system, but of a crisis of capitalism itself. The writing of this book thus belongs to a time when economic events are crowding close upon each other's heels, when the abnormal is becoming the rule, and when the revision of many principles in the practice as well as in the theory of economics is being forced upon us. While this unique period offers many advantages for the writing of such a book, it also makes for manifold dangers.

It is, for instance, an important advantage that both the author and his readers have the doubtful privilege of having become acquainted with the phenomenon of a crisis in all its forms, expressions, and consequences, in a rather painful and direct manner, and that both parties bring to the subject the passionate interest due to a question which has become a problem of existence not only for countless individuals, but also, gradually, for the whole of the social system of the Western World. On the other hand, we must not overlook the grave dangers. A time when economic events are crowding close upon each other's heels is not the time for distilling and bottling the fine wine of economic knowledge—it is in fact a time when even the science of economics is undergoing a process of fermentation. Many new facts are revealed to the eye of the student who gazes into the maelstrom of the crisis, but a considerable time must elapse before these facts can be incorporated into the structure of economic theory as permanent component parts. The onlooker must therefore try to interpret accurately what he sees, and must disentangle the ever-changing opinions of the passing hour from those new facts which give promise of possessing permanent value in the future and of waiting upon intellectual development without participating in all its nervous spasms. But however earnestly he may try the author cannot prevent a work like the present from becoming more quickly

" dated " to-day than would be the case in normal times. Nor can he prevent it from paying, in some respects at least, for its greater directness and closeness to life with the danger of more rapidly losing its freshness.

There is another danger of which both author and reader must beware: that of viewing the matter in the wrong perspective; that is to say, attaching too much importance to the events of the moment and consequently failing to see things in their historical perspective. Let us not be too hasty in expressing the opinion that Providence is doing us a special favour by allowing us to witness (or even to be instrumental in introducing) a new epoch of world history, and let us remember that world history is no ephemeral growth. We must have enough historical sense to know that nothing in the world lasts for ever, not even our present social and economic system; but, on the other hand, we must also have enough historical sense to see things in their historical perspective. In a word, let us not be affected by the prevailing nervousness which in certain individuals borders already on hysteria.

Only people devoid of historical sense could so quickly forget that it is a mere matter of fifteen years since the World War brought greater suffering to humanity than the present world crisis has done, and that the alterations in the economic system which then took place (disintegration of world economic relations, national autarky, suspension of the gold standard and all-embracing economic regimentation) have been of far greater import than the changes now being brought about by the pressure of the crisis. At that time, too, there were people who were quick to assume that the war-time economy had come to stay, who talked of the " dethronement " of gold and predicted the end, once and for all, of the competitive economic system, and the definite bankruptcy of Liberalism. And yet, after the war, with almost elemental force, all that was said to be dead—world economy, the gold standard, capitalism and liberalism—came into being again, and swept away the hysteria engendered by the war as if it had been the figment of a dream! It would be well if we at the present time were to keep cool and collected, and to behave in such a way that when in days to come we look back upon the vortex of this crisis we need not blush at the recollection of any hysteria. We may venture, without undue optimism, to predict that those who have not let the outcry of loud-mouthed prophets and reformers turn them from their belief in the lasting validity of the principles which have given the

economic and social system of the West all its greatness will be proved right in the end. We must at least reckon with the possibility that after this devastating crisis, as after the war, most of what is to-day being so loudly decried and reviled will come into its own again.

This belief that the present world crisis spells nothing less than the total collapse of our present economic and social system, a kind of last judgment, a "crisis to end crises," as it were, is indeed so popular nowadays that the substance of this book would seem rather shallow if we were to pass lightly over this problem. If it were true that we must abandon the wreck of our present economic system, leaving it to break up, and seek salvation on the shores of the promised land of planned, and, necessarily, autarkic economy, then what follows in the subsequent pages would be little short of a necrologue on the Splendours and Miseries of capitalism. It would not be without value, but it would mean something different from what the author intends it to be. Let us therefore consider the problem in more detail.[1]

Our first task is to make sure what the problem means. As it is, the question as to whither our economic system is drifting may mean two different things. In the first meaning, it amounts to a prognosis of the economic future of the Western World, by weighing up all the forces and counter-forces and estimating the ultimate outcome, independently of whether we prefer to lend our support to this process or to counteract it. In the second sense, the question assumes a more practical aspect, so that the answer may help us determine what direction the economic policy to be pursued at the present time should take. This will become clear at once if we reflect that, even if we were utterly pessimistic for the future of our economic system, we might still be driven to mobilize all our energies in favour of an economic policy directed against such a disastrous development. Just when we are inclined to give a pessimistic answer to the question in its first sense, in full realization of the peril hanging over the economic system of the Western World, we may feel it the more our duty to advocate a policy which may still have a chance of diverting what we think will be a disaster. Everything depends on the question as to whether the economic system can be preserved if only man will bring his efforts to bear, or whether there are unequivocal forces of an objective nature, mercilessly undermining the system. There can be no doubt that it has happened before, in the history

[1] The author has given to this question a fuller and somewhat different treatment in his article "Die säkulare Bedeutung der Weltkrisis," *Weltwirtschaftliches Archiv*, January 1933.

of mankind, that forces of this kind have brought about a situation where men had to realize that a new epoch had begun. The invention of gunpowder brought the whole period of the knights and their armies to a close, and every attempt to struggle against this trend would have been quixotic foolishness.

The question which must be put clearly and directly is this: Can we discover to-day objective forces of development which will finish with the competitive system just as unequivocally and mercilessly as the invention of gunpowder finished with chivalry? All depends on the answer to this question, for if the answer is in the negative no vague and mystical philosophizing can conceal the fact that the disintegration of our economic system is by no means a fate to which we have blindly to submit, but a fate delivered into our own hands.

Exactly what has actually happened that might force us to abandon the competitive system like a sinking wreck? Various answers have been given to this question, but when we come to examine them more closely none of them is really impressive, let alone convincing. The first answer we are likely to hear is that the *outlets for capitalistic expansion being greatly reduced*, capitalism is condemned to stagnation and internal disintegration. Two things are usually understood by this: *the slackening rate of the increase of population* and *the end of colonial expansion*. The idea seems to be that, owing to these two facts, capitalism has to face restricted markets for the surplus product constantly increasing with the advances in productive technique. An argument along these lines sounds plausible, but it cannot stand the test of a more careful examination. Even if we suppose for a moment that the theory of capitalist expansion being hopelessly restricted is true, it seems impossible that this can have acted as a cause of the present depression since it is obvious that the spatial and demographic restrictions on expansion have existed for decades without having prevented a fully fledged boom several years ago. We must allow, however, for the remote possibility that this restriction may have acted, up to the present, only latently, and that after the world crisis had been started by other causes, it may have exerted its paralysing effect openly and to its full extent. Therefore, the fundamental question to be raised is this: Is it really true that capitalism, in order to extend its markets, is continuously in need of fresh supplies of human beings and of unexplored territories? Put this way, the question can, of course, be answered only in the negative, for it is obvious that goods are not paid for with human beings or square miles but with

incomes, and these incomes owe their origin to the successful production of other goods. In other words, the fundamental fallacy, which is at the bottom of the argument in question, is simply that it confounds human beings and square miles with purchasing power, and so far it is only an interesting variety of what Whitehead aptly calls the "fallacy of misplaced concreteness."[2] It is a gross error of thinking which might be properly ignored in merciful silence were it not repeated monotonously every day. At the same time, it is a good example of the crude overproduction theory with which we shall have to deal later on (§ 11). It is interesting to note, moreover, that the neo-Marxian theory of economic imperialism has been based principally on the same sort of fallacies, a fact which is a good illustration of the tenacity with which survivals of Marxist thinking linger on in contemporary thought on economic, social, and political problems.[3]

To sum up, there is no reason whatever why our economic system must of necessity rely, for selling its increasing volume of products, on the wants of fresh supplies of babies or of newly discovered islands in the Pacific Ocean, and equally no reason whatever why an increasing productivity of our economic system could not be used for the fuller satisfaction of the wants of human beings already in existence or already within the trading area of the present world economy. There is no secret force within the mechanism of capitalism which should hinder it from expanding intensively instead of extensively. Apparently it cannot be too often repeated that the possibilities of intensive expansion are inexhaustible so long as the last Hottentot has not become a millionaire, and it seems that this has to be emphasized again and again before it is generally understood. It goes without saying that such an intensive expansion cannot continue without a corresponding increase of purchasing power, but it is also a matter of course that, so far as this prerequisite is concerned, intensive expansion is in no way different from extensive expansion.

We may conclude that the spatial and the demographic restrictions on expansion as far as they are real facts, are a long way from making the decay of capitalism an inevitable necessity. The wants of men remain just as unlimited as before. This is not to say, of course, that, owing to the trend of development depicted above, the composition of wants might not be altered. In fact,

[2] A. N. Whitehead, "Science and the Modern World," New York, 1926, p. 75. *Cf.* also L. Robbins, "An Essay on the Nature and Significance of Economic Science," 2nd ed., London, 1932, p. 51.

[3] This important subject has been dealt with at greater length by the author in his article "Kapitalismus und Imperialismus," *Zeitschrift für schweizerische Statistik und Volkswirtschaft*, 1934, pp. 370-386.

there are wants which, being easily satisfied for each individual, can, on the whole, only be extended by the increase of men. That is especially true in the case of grain. Consequently it does not seem unlikely that the present agricultural crisis—as far at least as it is a world-wide crisis of grain production—may be closely connected with the falling off in the rate of increase of the population of the bread-eating nations, a causal relationship intensified on the supply side by the improved technique of grain production (the combine, the tractor, and " dry farming " being well-known examples). This unfortunate development has, in turn, contributed tremendously to an intensification of the universal economic depression since the grain-importing countries of Europe, impelled by certain ideologies, did not resist the temptation to avert, by all possible means, from their own grain producers the consequences of the relative over-expansion of the world production of grain. As is invariably the case in State intervention of this kind, the ultimate price to be paid for it was not duly reckoned with. As in so many other instances, these nations thought they could protect themselves against some unpleasant draught coming from the world markets by just shutting the door and living happily ever after.[4] It was quite otherwise. Not only were these drastic measures apt to imperil the other branches of agriculture and to infect them also with the bacillus of depression, but they turned out to be deadly blows for the world economy as a whole and, consequently, also for the industries of the grain-importing countries.[5] Undoubtedly, this has been one of the biggest charges of dynamite to be exploded beneath the foundations of the world economy. There is consequently a subtle causal connexion between the changed dynamics of world population and the present universal crisis of our economic system. But it must be emphasized that the nature of this causal connexion is quite different from what the prophets of doom have in their minds, and that the causal sequence lacks the inevitableness which is generally supposed.

Another argument which seeks to show that capitalism must of necessity go to pieces as a consequence of objective driving forces, supposes, following on the well-beaten tracks of Marxian philosophy, that the *tendency towards larger units of enterprise* is a natural and inevitable one, and draws the usual gloomy conclusions from this seemingly relentless drive towards the Bigger and Better. Again, it is very doubtful whether the inevitability is as cogent

[4] The same will be shown later on when we come to consider the possibilities of nationalist monetary policies.

[5] The whole process has been demonstrated by the author for the case of Germany in his book *German Commercial Policy*, London, 1934.

as it is supposed to be. It can, in fact, be shown that the very popular opinion to which we are alluding is nothing else than a gross exaggeration which is not always sufficiently recognized as such. In still very important sections of our economic system, *i.e.*, in agriculture, in the small trades and the like, nothing of this sort is going on. But even in the case of industry it can be argued that the trend towards bigger units has, very often, less to do with real advantages derived from the increased size of the unit than with a certain megalomania which has been such a characteristic trait of the " gay 'twenties," with consequences which have become only too manifest during the present depression. Everywhere we witness to-day a decided decline of the " skyscraper principle," not only in architecture but also in the economic sphere.

Almost everywhere it becomes a fact beyond dispute that dimensions have outgrown the optimum size and must now be reduced, by a very painful process, to more reasonable proportions. It would be very interesting to have the testimony of engineers as to how far enterprises have been inflated beyond the technical optimum scale by a pathological predilection for mere size, by considerations of prestige and other irrational motives, and how far the recent development in the technique of machinery—especially the spread of the electromotor and the gasoline engine —has, in many directions, exerted even a lowering influence on the optimum size. In this connexion it should not be forgotten that, for example, the automobile signifies after all the triumph of the small unit over the larger one, so far as the business of locomotion is concerned. Thus it seems by no means true that natural forces are driving the world in the not too cheerful direction of the " skyscraper principle," and so it is equally untrue that we have helplessly to submit to structural changes in our economic system which an inevitable development of this kind might bring about. The breakdown of the " skyscraper principle " would have been still more complete to-day if so many governments had not obstructed the process of readjustment by all kinds of subsidies and interventions. It is beside the point to declare that many firms have become so large that they represent, as the phrase often goes, " national institutions " which the government can no longer leave to their own fate. The recent example of the Citroën Works in Paris, in vain imploring the French Government to socialize its heavy losses, plainly shows that the governments can perfectly well leave these giants alone, without the community as a whole being any the worse off by it. The question as to

whether the State should, in these cases, support the cracking pillars or let them fall is a question of expediency, without any cogent necessity in favour of the former policy, and still less convincing is the alleged necessity for the following up of the socialization of losses by the entire socialization of the whole firm. State subsidies of any kind must remain a very rare exception if the mechanism of capitalism is to work according to its well-tested rules, but it cannot be said that they mark the downfall of capitalism, and still less that, once this policy has been started, there is no way back. Again, we find no sign of any fate from which there is no escape.[6]

The point just considered is very closely related to another one. Modern capitalism, it is widely believed, is not only inevitably drifting toward an economic system composed of ever larger units, paving thereby the way to socialism, but also towards *monopoly* so that planned economy seems to become more and more a necessity demanded by logic as well as by social justice. In answer to this popular contention, it cannot be overemphasized that it is nothing short of a complete myth. It is absolutely untrue that competitive capitalism is *of necessity* developing into monopolistic capitalism. On the contrary, the truth is that there is a natural gravitation towards competition rather than towards monopoly, and this gravitation is commonly so strong that very rarely, indeed, has a monopoly come to life in the absence of more or less violent engineering on the part of the State. Even when the natural tendency towards monopoly has the appearance of being extremely strong as in the case of the iron and steel industry in Germany, which enjoys high tariff protection, the government had to do its utmost in order to effect a monopolistic combination. It is doubtful whether there would be many monopolies in the world if the State, in order to offset the natural gravitation toward competition, had not weighted the scales with its authority, its jurisdiction, and its general economic policy in the direction of fostering the formation of monopolies. This must be stated the more emphatically since the opposite opinion is almost invariably maintained in a manner indicating that it is regarded as being beyond any possible

[6] Even the much discussed case of the great commercial banks in Central Europe (the Creditanstalt in Austria, the Darmstädter und Nationalbank in Germany, &c.) is no real exception though it certainly comes nearer to supporting the argument in question, the averting of the crash really having been a social necessity. But here two points are to be considered. First, the socialization of deposit banks, though hardly to be recommended, cannot be said to jeopardize capitalism, any more than the socialization of the other money-providing institution, *i.e.*, the central banks. Secondly, there is no reason why the governments who kept those banks afloat should, after some necessary changes of the banking system, not go out of the business of banking again after a while.

discussion. This and the ideological predilection for the monumental, the big scale, for organization and regimentation, is, of course, very conducive towards creating the atmosphere in which monopoly flourishes. So is the widespread feeling that the days of capitalism seem to be numbered, and that the competitive system is a contemptible and petty thing unworthy of our modern age and in need of being replaced by a system rigidly regimented and consciously organized. All the catch phrases of our time like "orderly marketing," "wasteful competition," "rugged individualism," "corporativism," and so forth cannot deceive us as to the enormous contribution they make towards adding to this pro-monopolistic atmosphere. There is no reason, however, why the governments could not reverse their economic policy so as to lend support to the natural gravitation towards competition instead of working against it. True, it does not look just at present as if the governments were particularly eager to do this, but that is evidently less the fault of capitalism than the product of an ideology which we have still a legitimate right to attack if we are concerned for the happiness and welfare of the world.

One of the most characteristic ingredients of the present mass psychology seems to be the *general distrust of the mechanism of our economic system*, a distrust based on the belief that something has happened to this mechanism which makes it a mechanism no longer to be relied upon. Nobody unfamiliar with the intricacies of this mechanism can be blamed for this distrust to-day when, on the surface of things, everything seems to point to a complete breakdown of the capitalistic machinery. Nor can it be denied that, in the present world crisis, the mechanism, though still working to a perfectly amazing degree, is working extremely unsatisfactorily. But again, the point is, exactly how far this is due to any inherent defect of the machinery and how far it is due to sand being liberally thrown into it, and, consequently, how much hope there is of getting it back into working order so that it may be able to pull the world out of the present impasse. The subsequent chapters will throw some light on all these points by explaining the structure of the machinery and its dynamics and by describing the dominant features of the present situation. Much depends also on the question as to whether there is any real choice left to us, in other words, whether socialism, with its essential technique of planned economy, is a really workable alternative, from which we might legitimately expect greater economic harmony and stability. This question, which is strangely neglected in current literature and as regards which far too much

is taken for granted, will also be specially dealt with in a later section to which the reader is expressly referred as being one of particular importance.

There is one point, however, which should have a more prominent place among these remarks of a more general character. Reverting to the growing distrust in the mechanism of capitalism, we have to note that this distrust, once it is started by a number of circumstances, shows a most unfortunate tendency to amplify itself, since the deterioration of the mechanism engendered by the distrust and by the interventions evoked by it seems to warrant a still deeper distrust and so on. In this respect mankind bears a close resemblance to the centipede who had previously moved quite cheerfully without giving much thought to the complicated machinery of his legs; obsessed, however, by the idea that *laissez-faire* is a thing of the past, planning being the fashion instead, and losing confidence in his machinery of locomotion, he starts nervously to count his legs, but the more he counts the more he loses his ability to move, until, exhausted by the vicious circle thus set up, he goes back to his old well-tested method. This resemblance is most striking to-day in the field of *international economic policies* where it is most obvious that the method of the nervous centipede has made such progress that the end of this part of our economic system is already distressingly near at hand, with disastrous consequences for the structure of the national economies and for the outcome of the different recovery programmes now being conducted on a national basis. This international part of our economic mechanism, which was once a wonderful piece of machinery, is, indeed, utterly out of order to-day, and it is not easy to see how it could be repaired. It must not be forgotten, however, that one of the main reasons for this lamentable development has been the deliberate destruction of the *gold standard*. A nice theoretical case could indeed be made out for a world economy without gold and for a system of managed currencies, and it has been an easy task to ridicule the orthodoxy of the gold standard. But the glove is now on the other hand. The theoretical case has been tested by experience and found utterly defective, its main fault being, perhaps, the fact that the psychological side has been entirely overlooked.

Anyone trying to analyze the ultimate causes of the present-day world economic chaos cannot fail to realize that the destruction of the gold standard and the monetary imbroglio engendered by it has —in addition to the agrarian policy already referred to—played a leading rôle. The experience of the last years has shown how devas-

tating are the consequences if the mechanism of the international monetary system is knocked to pieces, with a contempt, mingled with pity, for an old-fashioned ideal and with an almost cynical delight in the unorthodox. A system, which ran smoothly and provided the world economy with the necessary supply of international credits, has, in fact, been replaced by a system which is characterized by fear, confusion, paralysis, red tape, and illegal trading. Instead of entering on long theoretical discussions with the adversaries of the gold standard and those who despise the idea of stable exchange rates, it seems to be sufficient now to point silently to the present state of the world economy and, perhaps, to add laconically "Your work!" A world economy without gold has proved, in fact, a world economy suffocated by hysteria and officialdom, mitigated by illegal trading. It will be extremely difficult to get the world out of this state again, but it is obvious that the process of restitution must begin with the restoration of the gold standard which must be followed, if it is to work again to satisfaction, by a complete scrapping of the present watertight compartments between the different nations. There is no reason why this could not be done if only the world wants it to be done, and there is every reason why it should be done. In order to see this clearly, one has to realize that there is no other way out if we want the world to be saved from a disaster of incredible magnitude. The idea that a sort of planned world economy, effected through the present devices of quotas, clearing agreements, &c., developed into an orderly system, might offer a promising alternative is very ill-founded, and that for a reason which is not yet clearly recognized.

It is obvious that a planned world economy is equivalent to a dense network of commercial treaties dealing with the minutiæ of international economic relations. It is, therefore, absolutely dependent for its functioning on an atmosphere of honesty, fairness, and continuity which has been a concomitant of the Liberal epoch and which is now slowly dying with it. In a world in which the fundamental principle of a civilized society *pacta sunt servanda* is more and more regarded as a Liberal prejudice a planned world economy is *a fortiori* an absolute impossibility. In other words, the same forces which are undermining the old Liberal world economy are also destroying the moral and legal foundations on which a planned world economy must be based, and the irony of it is that most of the planners are the same persons who are doing their utmost to lend their support to these sinister forces, apparently impelled by the curious idea that you can eat

the cake and have it.[7] The world is to-day living from a moral (and intellectual) capital accumulated during the Liberal epoch, and is consuming it rapidly, but the increasing difficulties of the new methods in international economic policies give a foretaste of that to which the world is rapidly coming. So a planned world economy is no real alternative at all, the only alternatives being the return to a Liberal world economy *or* complete chaos. In either case, the present attempts at planning in international relations have no future at all, the numerous assertions to the contrary notwithstanding. With these attempts the world resembles to-day a man who, having fallen down a precipice, is holding himself above the abyss by aid of a shrub which he happened to grasp: despite his boastful assertions that this is "the real thing," his only choice is to be rescued from above or sooner or later to fall down into the abyss below. Let us add that the rope for rescuing him must not be of paper but must have a strong golden thread in it. Here, as everywhere else, the essential thing is to make the choice clear.

Mention has already been made of the lamentable fact that the world is to-day living from the psychic capital accumulated during the Liberal epoch. I believe that this is the gravest and most important feature of the present situation, and, indeed, the most difficult to alter since it is so deeply rooted in the contemporary mind. But it is also a point which must be rightly understood if we do not want to be misled in our own attitude towards it. What we must always bear in mind is the conclusion which we reached previously, *i.e.*, that nothing has happened to our economic system such as threatens to blow it up just as the invention of gunpowder blew up the feudal system, in an irresistible and objective manner. The things threatening our economic system are no outward forces of this kind but ideologies of every description.

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[7] The idea developed above may be explained in yet another way. It is generally recognized that the world economy as compared with the national economy labours under two distinct disadvantages. The first is that there is no international legal system enforced by a World State; the second is that there is no world-wide monetary system. In spite of these two disadvantages, world economy has been able to develop during the last century because it has been possible to find substitutes for the institutions that are lacking. The lack of an international legal system based upon a World State has been compensated by a system of long-term international contracts and by a high degree of loyalty in keeping them. The lack of a world-wide monetary system has been mitigated by the gold standard. Both these substitutes are creations of the Liberal Era.

Planned Economy undoubtedly means an economic system centralized in the State. It is radical "Etatism." But there is as yet no World State. Consequently, international planning means radical "Etatism" without a corresponding State. The thing is even more absurd since to-day international planning is being demanded at a moment when even the substitutes by which Liberalism has been able to mitigate the lack of a World State are being undermined by the same illiberal forces which are behind the demand for international planning.

The effect may, of course, be just the same, but the essential difference must not be ignored. Just by emphasizing this difference, it may still be possible to hinder the ultimate triumph of these destructive ideologies. For one of the most dangerous aspects of the Antiliberal and Anticapitalist strategy is to discourage any possible resistance by presenting things that are purely ideological as irresistible forces of an objective nature which are taking their course outside our control and regardless of our independent aims. This trick—invented, by the way, by Karl Marx—cannot be too strongly opposed. This can be done by pointing out that these things are taking their course not outside of our control and independently of our will but with their very aid. Everything depends upon the strength of our control and of our will and upon there being a sufficient number of men in the world who, fighting to the last ditch, are willing to face even the chance of the ultimate defeat of their cause, following the gallant motto: "*Victrix causa deis placuit sed victa Catoni.*"

CHAPTER II.

THE PHENOMENA OF ECONOMIC FLUCTUATIONS.

§ 1. General Survey.

Anyone who realizes that all life, whether regarded from the point of view of Nature or of society, is governed by a certain rhythm, will instinctively suppose that it cannot be otherwise in the economic sphere. That it is so need therefore cause no surprise. On the contrary, it would be surprising if the fundamental law of rhythm did not operate here.[1] In fact the first thing which must be pointed out is that the rhythm of economic life is a complex one, consisting in the main of three types of undulation which are distinguishable from one another by their amplitude, their intensity and their extensiveness (that is, their spatial extent), and which, as they occur simultaneously and in close proximity to each other, have a far-reaching effect one upon the other.

First of all we have the undulation with the shortest vibration, a rhythm to which we usually apply the somewhat restricted term "seasonal fluctuations." I say "restricted," because seasonal fluctuations do not merely include the actual climatic rhythm of the seasons, which leaves its mark in some way or other on almost every branch of production, particularly, of course, on agriculture, the definitely seasonal industries (building, inland navigation, industries producing agricultural implements, &c.), and foreign trade. They also include every other possible short-wave oscillation, such as those fluctuations connected with fixed habits of payment and delivery, changes in fashion, and many more. We shall deal, then, in general with those economic fluctuations the amplitude of which does not exceed one year. Among these short-wave variations we may therefore also include those economic fluctuations which I have called "Anticipatory Cycles,"[2] to denote the well-known phenomenon that supply or demand tends temporarily to concentrate—if a change in prices is about to take place or is assumed to be about to take place—by way of advancing future or postponing present transactions (buyers' strike). This can often happen outside the actual economic cycle (for example, when political events are in the balance or when a new tax on some commodity is expected), but it has, of course, a special significance when it happens within

[1] J. Akerman, *Om det Ekonomiska Livets Rytmik*, Stockholm, 1928.
[2] W. Röpke, *Die Konjunktur*, Jena, 1922, p. 23.

the compass of the cycle itself, as this attitude of buyers and sellers, which is expressed in the " anticipatory cycle," is apt to accentuate the direction in which the cycle is moving at the moment, stimulating the upward trend or deepening the depression. The consequence of these phenomena, combined with vicissitudes of a local or individual kind, is that, independently of the effects of the economic cycle proper, we always have a certain minimum of unemployed workers and means of production. The resulting " margin of unemployment " in countries like England and Germany, before the World War, was estimated at something like 2-3%.[3] On the other hand, of course, the seasonal fluctuations can easily obscure the picture of the cycle proper, and lead to a false economic prognosis, if seasonal influences have not been eliminated from the statistics relating to the cycle, which is only possible within certain limits.

We must guard against the belief that the seasonal fluctuations form a self-contained rhythm. On the contrary, they are as much influenced in intensity and amplitude by the cycle proper as they in their turn influence the latter. Thus Akerman in particular has shown that the seasonal fluctuations in the production of pig-iron are very marked during a period of depression, while they become insignificant during a boom. Similarly, he advances the interesting theory that seasonal fluctuations play an active part in the course of the cycle, so that, for instance, the seasonal increase in economic activity in spring or autumn may contribute towards turning the tide of the depression. However that may be, one thing at least seems evident, that it is very difficult clearly to separate seasonal fluctuations from cyclical fluctuations.[4]

We turn now from this description of the seasonal fluctuation to the other extreme, *the so-called secular trend of development*, which leaves its mark on economic history in the shape of giant waves. It is the underlying trend of all economic data, continuing over long periods and through seasonal and cyclical variations of production, population, the volume of business, foreign trade, prices, accumulation of capital, &c. This is the point where the economist must be prepared to give place to the historian and

[3] The most comprehensive study of seasonal fluctuations has been made by Professor R. Bachi in his book " Le fluttuazioni stagionali nella vita economica italiana," *Annali di Statistica*, V 9, Rome, 1919.

[4] It follows from these and other considerations that the phenomenon of " excess capacity," which rightly plays such a prominent rôle in present-day discussions, is a general one, to some extent always in existence regardless of the business cycle. As a certain percentage of the workers is always without employment, a certain part of the plant is almost always idle, a certain part of the lodgings empty, &c. In all these respects, a minimum " excess capacity " (generally being that part of the total capacity that is qualitatively marginal) is necessary in order to give to the whole economic system that indispensable " play " without which it could not work freely. *Cf.* also J. M. Clark, *Strategic Factors in Business Cycles*, New York, 1934, pp. 149-151.

historical philosopher, and to let them decide the vexed question of whether it is possible also to discover and determine an economic rhythm, an up and down movement in the long periods of world history, running parallel to the course of political and cultural development. Changes in the basic " data " of national and world economy (changes in technique, in the popularity of articles of consumption, in forms of enterprise, in the organization of the economic system, in the size and composition of the population, changes in the geographical location of markets, in economic ethics, in the political, social, and natural milieu, and many other things) have of late been described as *structural changes* in contrast to merely cyclical (or conjunctural) changes. Many people to-day are of the opinion that the present world crisis should be viewed not as a cyclical but as a structural phenomenon, just as it was felt that there were many structural factors in the boom which preceded the crisis, especially in the United States. Within the long-run development during the major chronological periods whose laws we are accustomed to examine only from the point of view of the historical philosopher, we observe a certain well-defined regularity to which attention has only comparatively recently been directed. A closer study of the economic development of the last 100 years shows that every 20-25 years or so a period whose general course reveals an upward trend is succeeded by a period whose economic data prove that the general tendency has been downward. Apart from the fluctuations *within* these periods the average price level, business profits and the production figures in the one period, the depression period, are lower than those in the other, the period of prosperity. These long-term periods of depression and prosperity naturally also lend to the cycles a favourable or unfavourable note. Thus in the period from 1848-1873 the upward tendency dominated, while from 1873-1894 the main tendency was downward, swinging upward again in the period from 1895-1913. The riddle of these long waves of depression and prosperity has not yet been fully solved.[5]

Of course, it is still permissible to assume that mere chance may have played a large part in determining the situation. This assump-

[5] The discoverer of the phenomenon of the " long wave " seems to have been the Dutchman Van Gelderen (" Springvloed beschouwingen over industrielle ontwikkeling en prijsbeweging " in *De Nieuwe Tijd*, 1913, pp. 253-277, 369-384, 445-464). *Cf.* also S. de Wolff, " Prosperitäts- und Depressionsperioden," in *Der lebendige Marxismus* (Festschrift for K. Kautsky), Jena, 1924, from p. 13; Kondratieff, " Die langen Wellen der Konjunktur," *Archiv für Sozialwissenschaft und Sozialpolitik*, 56th vol., 1926, from p. 573; Wl. Woytinsky, " Das Rätsel der langen Wellen," *Schmollers Jahrbuch*, 55th year, 1931, from p. 577; F. Kuczynski, *Das Problem der langen Wellen und die Entwicklung der Industriewarenpreise*, 1820-1933, Bâle, 1934; F. Simiand, *Les fluctuations économiques à longues périodes et la crise mondiale*, Paris, 1932.

tion is all the more permissible since the statistical material relating to economic events is very incomplete for the greater part of the nineteenth century. Anyone, however, who is not satisfied with this explanation, could suggest two other possible causes. First, it is a striking fact that periods of depression have hitherto always followed a particularly violent crisis, and, indeed, the aforementioned period of depression of 1873-1894 is the best example of this. One may therefore assume that it took the economic system a long time to recover from the convulsions of that crisis. Secondly, however, it is to be assumed that the difference in the average price level in periods of depression and prosperity is connected with corresponding changes in the financial system. This is quite clearly shown by a comparison of the periods 1873-1894 and 1895-1913. Compared with its predecessor and especially with its successor, the first-named period is distinguished by a scarcity of gold relatively to the increased world monetary demand brought about by the international extension of the gold standard, while the period of 1895-1913 shows an increase in the monetary supply, due particularly to the continual spread of the use of bank money (cheques).

Within this double rhythm of the short-wave seasonal fluctuation and the long-wave oscillation from prosperity to depression there vibrates the most important rhythm of economic life, *the rhythm of the general trade or business cycle*, which has sometimes been christened the " Juglar Cycle," in honour of the pioneer student of the trade or business cycle, the French economist Clement Juglar.[6]

§ 2. The Nature of the Trade Cycle.

It is a prevalent custom to give the term " trade cycle " a very wide meaning, making it include every fluctuation to which the market is subject, be it short wave or long wave, local, national or international in nature. It is in this sense that the term is often used in the language of the commercial world. In science, however, it has become more and more customary to reserve the term " trade cycle " for that type of economic fluctuation which is distinguished by the following predominant peculiarities:

1. It is as a rule a *total* or all-embracing phenomenon, that is, it is one which affects the whole economic process, over and above independent fluctuations of particular branches of economic activity. This " all-embracing " character of the trade cycle can be seen from the fact that as a rule the statistical indices which reflect the general course of the whole economic process change

[6] Juglar's book, *Des crises commerciales et de leur retour périodique*, which made him a pioneer in the study of the business cycle, was published in 1860.

markedly during it. This applies especially to the price level, the volume of money and credit, the rate of interest and of wages, the level of employment, and volume of production. As a " total " phenomenon the fluctuation is also apt to affect the budget and the population figures.

It is in accordance with the logic of economic development, which tends towards an increasing degree of integration of the various branches of the economic system, particularly of late of those connected with money and credit, that the " totality " of the cycle should extend increasingly into the international sphere. Thus one of the chief characteristics of the present crisis is that it is a world crisis in the true sense of the word, and is afflicting the whole earth in varying degrees, sweeping over the globe like a great flood, indifferent as to whether it is inundating rich or poor countries, conquerors or conquered, democrats or dictators, lands in the tropical or temperate zones, agrarian or industrial countries. The details of how trade cycles become *international* in their effect cannot be fully discussed here. Only one thing must be emphasized, and that is that the connexion between the currency systems of the various countries effected through the gold standard plays a very considerable part in the international diffusion of the waves of the trade cycle. If there is a boom in an economically important country, it is synonymous with an expansion of the supply of credit and with a tendency to drive up prices. The trade balance becomes unfavourable, gold flows out, and starts a similar tendency, to an expansion of credit in the country receiving the gold.[7] That is the basic pattern of the relationship as far as the monetary diffusion of the waves of the economic cycle is concerned. Hand in hand with it goes the international connexion formed by international trade in credit and goods.

2. The form of the cyclical fluctuation is furthermore distinguished by the fact that (as its name implies) it is *cyclical* and is subject to a characteristic rhythm. That is to say that each phase of the trade cycle is to be regarded as a definite though not always strictly diagnosable phase, which along with other phases goes to form an economic cycle. Each phase develops from the one before—in a way which the theory of economic cycles has to explain—until the initial phase is again reached and a new cycle begins. The phase of the depression (the fall) is followed by the phase of the boom (the rise), which sooner or later, with or without the acute change which we call a crisis, passes into the phase of a new depres-

[7] This question will be treated in greater detail and in a somewhat modified form later on when we come to discuss the compatibility of the gold standard and internal stability, pp. 164 *et seq.*

sion which then makes way for a new economic cycle. This rough picture of the sequence of phases can be analysed in greater detail. Thus, according to Spiethoff,[8] who further subdivides the " cyclical phases " into " alternating stages," the typical course followed by the trade cycle may be analysed as follows: (1) recession, (2) primary rise, (3) secondary rise, (4) boom, (5) shortage of capital, (6) crisis,—recession and primary rise together forming the "slump," and the secondary rise, boom and shortage of capital together forming the " up-swing." The Harvard Committee of Business Research divides the business cycle into five phases: depression, recovery, business prosperity, financial strain, and industrial crisis. The German Institut für Konjunkturforschung has decided in favour of a four-part schema: depression, business prosperity, acute strain, and crisis. These are all refinements of the basic type of the cyclical economic fluctuation, which continually repeats itself in expansion and contraction.

We must not forget, however, that these pictures of the phase sequence only represent a basic schema, which is in reality liable to manifold variations. No trade cycle is an exact replica of its predecessor. Each has its special peculiarities, which also give a special character to the individual phases. They vary in their length, in their intensity, in their predominant symptoms, in their geographical extent and in their effect upon the individual branches of the economic system; and, finally, also in the speed with which they spread. Lastly, economic history shows more than one example of an economic phase relapsing, after a short time, into the preceding phase, as, *e.g.*, a depression being followed by a new depression after a very short period of recovery. Such relapses are so frequent that some students in this field (especially in the United States) distinguish a still shorter cycle of half the duration within the " Juglar Cycle " (the so-called " 40-month cycle "). An example of this secondary fluctuation may be seen in the depression of 1903 in the United States, which followed the depression of 1900 after the short space of three years, while there was no sign of it in Europe.

3. This brings us to the question of the *duration* of the trade cycle, on which we have already touched. Speaking generally, we may say that the trade cycle lies between the short waves of seasonal variations and the long-period waves of prosperity and depression. Basing our calculations on the more or less reliable economic history of the last eighty years, we may assume that the average duration of the trade cycle—from one peak of the cycle

[8] Article, " Krisen," *Handwörterbuch der Staatswissenschaften*, 4th ed., vol. 6.

to the other or from one crisis to the other—is a period of five to eleven years at the most, although here, too, there is no unanimity among students of the trade cycle and some assert that the irregularity is still greater.[9] According to Spiethoff's table German economic history from 1843-1913 shows the following turning points (from upward swing to recession, sometimes taking the acute form of a crisis)—

1847-48 Turning point from shortage of capital to recession.
1857 Crisis.
1866-67 Turning point from shortage of capital to recession.
1873 Crisis.
1882-83 Turning point from shortage of capital to recession.
1890-91 Turning point from shortage of capital to recession.
1900-01 Turning point from shortage of capital to recession.
1907-08 Turning point from shortage of capital to recession.
1913 Last turning point before the world war.

According to this table there was a space of six to nine years between the turning points. Still greater irregularities were calculated for England and the United States.

Even if it is possible to some extent to determine the absolute range in the time periods within which the trade cycle has hitherto run its course, the marked irregularity of the interval makes it impossible to speak of a real *periodicity* of the phases and crises in the sense of a uniformity of interval. All present-day students of the trade cycle are unanimous in agreeing that such a periodicity does not exist, although in the teachings of the older students of crises and cycles it had assumed almost a mythical character, and had given the trade cycle something of the uncanny inexorability of a cosmic process: indeed, they actually associated it with cosmic processes, especially with the frequency of the maximum number of sunspots. If, nevertheless, people still talk of a periodicity of crises and cycles, they can only mean the already explained cyclical character of business phases, that is, the regularity of the phase-sequence. As this use of the term is liable to lead to misunderstanding, however, it should be discontinued.

4. Finally, it is a significant peculiarity of the trade cycle that in spite of that " totality " to which we have already referred, it is first and foremost a fluctuation affecting the *industrial-commercial section* of the economic system, while agriculture, especially, more or less follows its own laws of movement and development, which in their turn of course exert a strong influence

[9] Especially the leading authority on all these questions: W. C. Mitchell, *Business Cycles. The Problem and Its Setting*, New York, 1928, chap. iv.

on the industrial-commercial movement. In this connexion it is essential to remember that the cyclical nature of the fluctuations in economic history can only be established from the moment when this industrial-commercial superstructure of the economic system assumed visible proportions, in other words, from the moment when the modern—" capitalistic "—structure of the economic system came into being. The trade cycle as we know it therefore doubtless made its first appearance in and with capitalism. This of course does not mean that even a socialistic régime, which retains the extensive use of capital and the highly differentiated character of the " capitalistic " economic order, will be exempt from similar rhythmical disturbances of its equilibrium.

That agriculture, on the whole, should obey its own laws of movement and development, follows from its peculiar nature, which clearly differentiates it from industry. The length of the periods of production and turnover, the enormous number of producers, peculiarities in the formation of agricultural prices, the special nature of the agricultural credit problem, the strong conservatism of the farmer (to whom agriculture represents not only a means of livelihood but also a form of life to which he clings despite the most adverse circumstances), the extraordinary irregularity in the supply of agricultural products, the marked inelasticity of the demand, the harassing slowness with which agricultural production costs are capable of adjustment to falling prices—all these things must be held responsible for the fact that while the cycle of rise and fall in agriculture may come into close contact with the trade cycle, it yet forms a movement by itself. It is correspondingly true that *agrarian crises* generally last very much longer than the industrial-commercial crises within the trade cycle, and easily become lingering and chronic in character. One of the worst agrarian crises of this kind was that which was in the main caused by the rise of the superior competition of the newly opened-up virgin territories (especially in the Middle-West of the United States of America). It lasted from the end of the 'seventies till almost the end of last century. It is, however, surpassed in gravity and international extent by the present agrarian crisis, whose origins may be traced back to 1921 and which represents a gigantic process of contraction and liquidation mainly caused by over-production.

The inner connexions and inter-actions between agrarian and industrial cycles have as yet, comparatively speaking, been little explored, as they are in fact very intricate and by no means easy to define. While it cannot be disputed that prosperity or

depression in the non-agricultural branches of the economy decides to a great extent whether there shall be prosperity or depression in agriculture (especially for the products the demand for which is more elastic, *e.g.*, dairy products), the question as to how the state of agriculture, inversely, influences the state of business, cannot be answered so simply. A depression in agriculture may accompany an industrial-commercial prosperity—more, it may perhaps stimulate this prosperity by bringing down the price of food and raw material, and by driving workers into industry. The proximity of industrial-commercial prosperity and agrarian depression in the United States from 1925 to 1929 is a good example of this. The question must therefore be handled with the greatest caution.[1]

§ 3. The Typical Course of the Trade Cycle.

When we speak of the typical course of the trade cycle, we must be careful to remember the already-mentioned fact that every trade cycle possesses features that cannot be compressed into any schema representing the " typical " course of the cycle. Any such schema will always have something artificial about it. And yet the number of typical characteristics in the individual phase of the trade cycle is great enough to justify such a schema of the " typical " course.

(1) *The Upward Swing of the Cycle.*

We begin at the point where business has reached the end of the period of depression and is in a state of comparative equilibrium, when all the important economic data have more or less settled down and the crisis is finally liquidated, while the forces which will bring about a new rise in economic activity have not yet begun to operate. Commodity prices, business profits, rates of interest and of wages persist at a low level, which combines with the reduced volume of production, the flagging of the spirit of

[1] For a careful examination of the problem see L. H. Bean, *Post War Interrelations between Agriculture and Business in the United States*, a study published by the U.S. Department of Agriculture, 1930. *Cf.* also C. v. Dietze, *Agrarkrisen, Konjunkturzyklen und Strukturwandlungen*, in presentation to L. Elster, Jena, 1931; M. Sering, *Internationale Preisbewegung und Lage der Landwirtschaft in den aussertropischen Ländern*, Berlin, 1928; G. F. Warren and F. A. Pearson, *The Agricultural Situation*, New York, 1924; W. Röpke, " Das Agrarproblem der Vereinigten Staaten, II. Die gegenwärtige Lage der Landwirtschaft," *Archiv für Sozialwissenschaft und Sozialpolitik*, vol. 59, 1928, from p. 96; S. C. Pervushin, " Cyclical Fluctuations in Agriculture and Industry in Russia 1869-1926," *Quarterly Journal of Economics*, vol. 42, May 1928; E. Altschul, " Agrarwirtschaft und Industriezyklus," *Wirtschaftskurve der Frankfurter Zeitung*, 1931, No. iv, from p. 394; A. H. Hansen, " The Business Cycle and its Relation to Agriculture," *Journal of Farm Economics*, 1932, from p. 59; Timoshenko, *The Rôle of Agricultural Fluctuations in the Business Cycle*, Ann Arbor, 1930; W. Abel, *Agrarkrisen und Agrarkonjunkturen in Mitteleuropa vom 13. bis zum 19. Jahrhundert*, Berlin, 1935.

enterprise, the lack of effective purchasing power, and the low level of employment, to form an unrelieved picture of economic lethargy. The easy state of the money market corresponds to the low rate of interest. With this, in turn, is connected, in this last stage of the depression, the rise of fixed-interest-bearing securities. This is partly because the easiness of the money market provides credits for speculative operations on the stock exchange, partly also, however, because the nominal interest on fixed-interest-bearing securities tends to be higher than the reduced rate of interest on new loans, and because, with the progressive consolidation of the economic position, owners of saving deposits gradually pluck up sufficient confidence to contemplate transferring their bank deposits into securities, but sometimes fight shy of investing in dividend-paying stock because of the still depressed state of production.

The longer this situation lasts, the more surely are all these factors of depression transformed into factors of recovery. The low rate of interest, the low prices, the low wages, the pressure of the demand, which was held off during the depression, the rationalization of the whole economic apparatus enforced by the depression—all these things have hitherto never failed in the long run to bring new sustenance to the spirit of enterprise as it slowly begins to revive, and to be spurred on by external stimuli (inventions, political events, bumper harvests, &c.). The depression moves by its own motive force towards the upward swing, which now gradually develops and, avalanche-like, reinforces the symptoms diametrically opposed to those of the depression: rise in demand, gradual clearing of stocks, followed by the beginning of a rise in production, expansion of credit with all the favourable consequences for employment, rates of interest, profits, wages, and prices which inevitably follow once this situation has firmly established itself. All these factors in turn combine to produce a whole series of repercussions.

As we have shown, the earliest symptoms of the revival of business begin to appear in the money market. In the course of the depression an easing of the market, reflecting the increased readiness of the banks to give credit, has taken place, which has an extremely important bearing upon the course of the whole economic process. This easing of the credit market is, as we have already seen, connected with a fall in the rate of interest, which reflects the unwillingness of the entrepreneurs to undertake new investments. The money therefore accumulates in the banks, this being a marked characteristic of the depression and, as we shall see later, one of its chief sources. The further the rate of interest falls, however, and the more distant business is removed in time, spirit,

and substance from the convulsions of the crisis, the nearer comes the moment when the savings deposits, the interest on which has been falling lower and lower, will again be invested in securities, and at the same time the increased readiness of the banks to expand credit will be applied to new investments which seem profitable as compared with the low rate of interest. The first step towards a rise in investments in the economic system is the investment of capital in fixed-interest-bearing securities; this in turn frees the banks from many uncomfortable debtors and thus increases their readiness to give credit. At a later stage of the development there is a rise in share values, while the rise in the price of fixed-interest-bearing securities, as a result of the gradual levelling up in the rate of interest, which is characteristic of the recovery period, gives way to a gradual fall. Not only the Stock Exchange figures but also the issue statistics reflect this characteristic development, behind which, as the ultimate great source of strength for the upward swing, stands the expansion of the volume of credit. This expansion of the volume of credit, again, depends upon two essential conditions: the greater readiness of the banks to lend, and the greater readiness of the business man to borrow, or what is almost the same, to *invest*. The question as to how this double readiness comes about at the beginning of the recovery period does not concern us here, as it would take us deep into the analysis of the causes of the trade cycle. It is important, however, to recognize at this point that the low rate of interest prevailing at the beginning of the upward swing increases the readiness to invest. Projects which were not profitable at a rate of interest of 5% become profitable when the rate of interest falls to 4%, and the further the rate of interest falls, the wider becomes the range of profitable investments for capital. And this brings us to a problem which has become specially important during the present depression: the problem whether the low rate of interest exercises always and under all conceivable circumstances the instigating influence attributed to it. The present experiences show clearly that it does not, for even a rate for short-term money of 1% or less fails to lead to a corresponding increase of investments. It has to be noted, however, that it is hardly conceivable that an unusually low rate for *long-term* credits, *i.e.*, on the *capital* market, would not be a strong stimulus for an increase of investments. This is especially to be expected in the building industry. There is nobody who would not take advantage of a long-term rate of 1% for building a neat little villa. The building industry is, indeed, playing an important

rôle in turning the tide of the depression.[2] It is obvious, however, that the transference of the abundance of the money market to the capital market is an essential prerequisite for economic recovery, a fact which has a special bearing on the recovery programmes of the present day.

The rise in the volume of investment—this much of the mechanism of the economic recovery is already clear—gradually sets the whole economic system in motion in a nexus of reciprocal reactions leading finally to a mobilization of all the reserves of material and human factors of production and thereby completing the picture of the boom. Production and employment increase and with them the national income and the national wealth. But it should also be quite clear at this point that this rise appears first and foremost in those industries which produce the capital goods necessary for the expansion of the productive equipment (machines, iron and steel, building materials, &c.) and are thus known as *capital goods industries* in contrast to the *consumption goods industries*. Modern trade-cycle theory is indeed unanimous concerning *the fundamental principle* that *the alternation of boom and depression is first and foremost an alternation in the volume of long-term investments and thus in the activity in the industries producing capital goods*. All economic phases, and especially the boom, are wont to attain their maximum effect in these industries: hence the striking increase in the consumption of iron and coal.

The animation of the whole economic process which characterizes the period of recovery leads further to a *rise in prices*, not only in single branches of the economic system or in particular markets, but as a rule throughout the whole economic system, so that certain economists (Hahn, for instance) have interpreted the general rise in prices as the most important symptom of the recovery. This general rise in prices has, at the first glance, something paradoxical about it, as it is during a period of increased production that it takes place. Indeed, such a rise in prices would not be logically possible, if the

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2 In the exact assessment of this rôle there is still a great deal of divergence of opinions. One holds (for instance, Spiethoff, *Boden u. Wohnung*, 1934) that building reaches its peak at the end of the depression and in the early stages of the recovery. This also seems the view of J. M. Clark, *Strategic Factors, &c.*, pp. 27-33. Other authors (especially A. Aftalion, *Les Crises Périodiques de Surproduction*, Paris, 1913, vol. 1, pp. 127-131) believe that building is essentially a boom industry. In the opinion of E. Wagemann, the Director of the Institut für Konjunkturforschung in Berlin, residential construction is essentially a depression industry, while public building has been concentrated in the past in times of boom (E. Wagemann, *Einführung in die Konjunkturlehre*, Leipzig, 1929, pp. 124-126). Wagemann's view seems to be confirmed by experience and reflection, though it must be admitted that the problem is a complicated one. In English literature, it seems to have been curiously neglected. *Cf.* A. K. Cairncross, "The Glasgow Building Industry (1870-1914)," *The Review of Economic Studies*, vol. 2, October 1934, and W. H. Newman, *The Building Industry and Business Cycles*, Chicago, 1935.

tendency of prices to fall owing to the increased output of goods were not counter-balanced by tendencies on the money side for prices to rise, either through *an increase in the amount of money and credit*, or *through a speeding-up of the velocity of circulation of money*. We come very near to understanding the essential nature of the trade cycle if we imagine the boom as a small inflation and the depression as a small deflation, and thereby link up our conception with ideas that have become familiar to us through the great currency upheavals of recent times. The overheating of the economic machine, the rise in prices, the urge to get out of money into goods and into real property, the speculation fever, the tremendous building activity—all that we know from the time of the great German inflation recurs in a lesser degree during every economic boom.

We also know from our experiences of the inflation that while the rise in prices is indeed general, it is by no means *uniform;* it is, we might say, general but not universal. The prices of raw materials and of half-finished goods are apt to rise more quickly than those of finished goods, and wholesale prices more quickly than retail prices. Above all, the increases in the rates of wages and of interest, that is, of two very important prices, usually lag behind the general rise in prices until the last stages of the boom, while the incomes of government employees and of rentiers remain right behind. The gradation in the increase of prices also implies a corresponding stratification of *incomes*. This lag in the various groups of prices and incomes is, as will be shown later, an extremely important link in the mechanism of the boom. As a consequence of these changes in the price and income structure it is obvious that *consumption* must also undergo typical changes: the degree of change will depend in each individual case on that factor which the economist calls "elasticity of demand," which denotes the degree, varying with each individual commodity, in which demand reacts to changes in the consumers' purchasing power and changes in prices. The greater this elasticity is, the greater the variations to which the consumption of a commodity will be subject during the trade cycle. When income is rising during the boom, the increase in purchasing power affects first and foremost those goods of which one consumes little when times are bad and much when times are good. The consumption of bread is therefore more constant in general than the consumption of gramophone records. That is why boom periods are often the times when certain articles, hitherto confined to a few persons as

being articles of luxury, find their way to the masses. A particularly good example of this may be seen in the recent boom period from 1925-1929, especially in the United States. It was during this period that the automobile, for instance, first became a popular means of transport, and gramophones, wireless sets, vacuum cleaners, and similar articles also benefited from this circumstance.

Finally, we may mention that in the course of the boom, owing to the rise in prices, the increasing demand of industry for raw materials, and the increased importance of the home market, there appears a tendency towards an adverse balance of trade, with a corresponding tendency to an increase in foreign indebtedness (that is, a tendency to borrow more from abroad than is lent abroad).

(2) *The Crisis or the Acute Reaction.*

At this juncture we shall leave out of account the question of what forces, sooner or later, finally bring about the end of the boom, and shall confine ourselves to describing the symptoms in which this turning point is expressed. At the top of the list we must place the tensions on the money and capital market which appear in the course of the boom period, and finally lead to those disruptions which we call a *crisis*, an expression which we shall examine more closely in the next paragraph. The difficulties of financing investments increase, and with them the rate of interest rises, reflecting the decreasing readiness of the banks to give credit (a reluctance concomitant with impaired bank liquidity), as well as the continued and now more and more pressing urgency of the need of credit—all phenomena which are summarized in the term " shortage of capital." The rising rate of interest on the money market makes speculation on the stock exchange more and more difficult, the more so since the stock exchange is quickest and most nervous in registering the change in the outlook. Security prices go down, and the more the acute reaction assumes the character of a crisis, the more dramatic and the heavier is the crash in prices. New issues fall to a minimum, thereby stopping up one of the principal sources of industrial finance. As it is no longer possible for industrial undertakings, which have got into debt with the banks owing to the enlargement of plants during the boom period, to liquidate these debts by the issue of new shares or debentures, and so to " fund " their debts, the banks make the unpleasant discovery that a large part of their advances are " frozen," that is, that they cannot be called in for some time, and that no further turnover of the corresponding deposit accounts takes place. The banks become anxious

and still less willing to give credit, which in the end makes the situation still more acute. The position of the banks may immediately become precarious, if they have invested a large part of their assets in securities whose decline in value now affects them directly, and if, in addition, their depositors become panic-stricken and cause a " run." At this moment the crisis begins to subside into its worst and most dramatic form: the *credit crisis*.

The more or less sudden contraction on the money and capital market leads first of all to a cessation of the expansion of production, and then to a decline in production, with its accompanying phenomena of increasing unemployment, fall in incomes, collapse of firms, and drop in prices. The drop in prices, combined with the rise in the rate of interest, the contraction of credits, the decline in the velocity of circulation of money, and the resultant repercussions on production, produces an unhealthy state of affairs which we may describe as a *deflation*, with the same justification as we called the boom period a small inflation.

(3) *The Depression.*

The acute collapse, the particularly violent form of which we call a *crisis*, gradually passes into the state of chronic reaction known as the *depression*, which represents in general a reversal of the boom. It is characterized by the fact that the collapse of the towering edifice of prices, production, and credit, erected by the boom, is gradually retarded and finally brought to a standstill. The economic process then generally lingers for some time at this extreme low level. The liquidation comes to an end, the weakest firms are eliminated, all kinds of irregularities which had crept in during the optimistic period of the boom, are now recognized as impossible of continuance, and are gradually tightened up, production is cut down to the uttermost, security prices are practically halved, and stocks are cleared. In short, the general clean-up is now at an end, but the new upward trend does not follow immediately. The end of the liquidation phase on the one hand and the falling off of production and of the spirit of enterprise on the other now lead to a continuous decline in the interest rate, especially for short-term credit (money market), in which available money is now invested because of the fear of long-term investments. With this glut of funds on the money market, the interest rate for short-term credit may sink to 1% or even less, as happened in Switzerland and other countries during the depression of 1930. The official rate of discount of the central banks is also correspondingly low.

It is at this point that the full force of the effect of the collapse of the boom upon the *labour market* is apt to be felt, and the unemployment figures are driven up above the level prevailing at the time of the acute reaction. This is in the main to be explained by the fact that for some time many contracts still run on and firms try to keep their employees going by producing for stock and by working shorter hours. The output of the capital-goods industries, which reached a particularly high point during the boom period, now drops inversely to its lowest level, and only improves when at the beginning of the upswing there is an increase in building activity, which pre-war experience shows to have reacted at a very early stage to the stimulus given to new investment by the low interest rate. In Germany there was before the war a correspondingly early rise in the values of mortgage debentures. This rôle which building-production played before the war as a branch of production, which used to expand as early as at the later stage of the depression, is so important that we must earmark it for future theoretical analysis. It will be clear even at this stage that it acted as an important brake on the depression in the same way as it had a modifying influence on the boom period by its early decline. An important safety-valve for production when the home markets are stagnant has hitherto been the *export trade*,[3] through which many industries are able at such a time to find an outlet to compensate for the lack of demand at home. This safety-valve function of the export trade is based in general on the fact that in spite of the increasingly international character of the trade cycle, the world market, by reason of its size, of the national nuances in the course of the cycle, and of the difference in the economic structure of the individual countries (industrial states—agrarian states!), offers many possibilities of getting round the depression in the home market. The best historical example of the fact that the depression has a tendency to stimulate a favourable balance of trade was the development of the German export trade in the year 1931, when under pressure of the crisis an export surplus of nearly 3 milliard RM. was achieved.

§ 4. Economic Crises.

Scientific research into the phenomena of economic fluctuations started out from the study of the crisis. This is understandable when we consider that the crisis is the most marked expression of

[3] *Cf.* Soltau, "Statistische Untersuchungen über die Entwicklung und Konjunkturschwankungen des Aussenhandels," *Vierteljahrshefte zur Konjunkturforschung*, Ergänzungsheft 2, 1926.

the fluctuations of economic equilibrium and must be of particular interest to the economist because of the practical need to help and to alleviate the situation or to prove or repudiate reproaches levelled against the capitalist system as a result of the havoc wrought by the crisis. To-day, when we are in the midst of the most devastating of all economic crises, this starting-point is more comprehensible than ever, and we can also understand better than we did before that economic crises may claim a special treatment, even though we do not renounce our hard-won point that crisis is only a phase within the trade cycle. Once we understand that point, we have made an important advance on the earlier idea that the crisis is an accidental disaster in economic life. The attempt to explain the recurrence of such accidents led to the building up of special " theories of the crisis," while according to the modern conception the explanation of crises must be deduced from the explanation of the trade cycle, and there is therefore no room for a special theory of the crisis outside of the general theory of the cycle. To explain periodic economic crises means, according to the idea prevailing to-day, to explain the boom and the forces leading to its collapse.

This is not, however, to dismiss the question as to whether every crisis is necessarily a *cyclical crisis*, or whether there may not also be crises which are essentially independent of the cycle. As far as agrarian crises are concerned, this question has already been answered in the affirmative. But it is also possible to imagine crises of the whole economic structure, which come in from outside, and cannot be construed as a reaction to a preceding boom. The causes may be political or natural catastrophes. The probability of such " exogenous " crises is not, however, very great. We are brought face to face with the intricate relationships of the innermost heart of our economic system when we remember that a political catastrophe like the Great War or a natural catastrophe like the Japanese earthquake of 1923, instead of retarding economic life, generally enlivens it, and thus tends to bring about not a crisis but a boom. Certainly catastrophes lead to an impoverishment of the economic system, but we must guard against confusing *impoverishment* with a *crisis*, all the more so as this confusion is an extraordinarily common one. If we agree to understand by an economic crisis *a temporary paralysis of the economic process which leads to a disturbance of the exchange apparatus with its consequences of over-production, surplus stocks, and insolvencies*, we realize that it is characterized not by a scarcity but by a superfluity of goods, while the hall-mark of impoverishment is a deficiency of goods. This deficiency of goods generally spurs on the economic

machine to make the highest number of revolutions of which it is capable, as was very markedly the case during the war. An economic crisis is therefore not an expression of shortage but of abundance or—to put it better—of what *seems* to us " abundance " because of the temporary paralysis of the process of exchange and of the economic process in general. That it leads in the long run to an impoverishment of the economic system is self-evident, but this does not affect the question of the *origin* of crises, which is the question we are discussing here. Nevertheless the possibility of non-cyclical crises cannot be flatly denied,[4] for it is precisely these that are meant when it is asserted that the present world-economic crisis is not merely a cyclical but a *structural crisis*, which, it is alleged, reflects the inner rottenness or instability of the economic structure and is accordingly to be described as a *permanent crisis*. To prove this people refer loosely to the presumed inevitable collapse of the world-economic system, the emergence of anti-capitalistic tendencies, the ossification of capitalism, the political and economic chaos of the world, the technical revolutions of the last ten years, and much more of the same kind. The question as to whether we are justified in interpreting the present world crisis as a structural and permanent crisis has already been discussed in the introductory chapter and something more will be said about it later. In any case it cannot be denied that it started from a cyclical crisis.

To revert to the " normal " cyclical crisis, we shall now seek to answer the question whether the reaction which follows the boom need necessarily always take the form of a crisis. The answer to this question depends on the definition which we give to the term *crisis*. If we reserve this expression for that form of the reaction which is marked by the suddenness and the stormy nature of the collapse, we shall find many examples, in the very recent history of business cycles, of reactions which were no crises in this dramatic sense of the word. Real crises happened in Germany in the years 1857 and 1873 and in the United States in the year 1907, whilst the cyclical reaction in Germany in the year 1907 showed just as few marks of a crisis as in the years 1913-1914. There can of course be no doubt as to the real crisis character of the present world-economic crisis. As we base the meaning of crisis on the characteristic signs of the " suddenness " and the " stormy nature

[4] The fact that the crises of the pre- and early capitalist period were generally such non-cyclical crises, arising out of political or natural catastrophes or adventurous speculations, will be specially emphasized in the next chapter.

of the collapse," we cannot of course possibly claim that this definition has any precision. How fast and how far must security prices fall before we can speak of a crisis? How great must the number of bankruptcies be? In many cases, therefore, the decisive factor must be the feeling whether the reaction is accompanied by a definite credit crisis or not. It is therefore understandable that some economists[5] should call every transition from boom to depression a crisis, and that, on the other hand, an authority like Mitchell[6] is emphatic in refusing to apply the term " crisis " to any definite cyclical phase.

The cyclical crisis, like the entire trade cycle, must of necessity be conceived as a " total " crisis, which differentiates it from the crises of isolated branches of the economic system (partial crises), which can be traced to the most varied causes and are of no interest in this connexion. Partial crises (a crisis in shipbuilding, in the English coal industry, in vine-growing, &c.), may naturally crop up in any phase, though they are apt to be modified in the boom phase and made more acute in the depression phase. The grave crisis of the American bituminous coal-mining industry (in Kentucky and West Virginia) during the recent unprecedented boom in the United States is a significant example of the lack of connexion between the trade cycle and the emergence of partial crises.[7]

The fact that the cyclical crisis is " total " in character does not prevent it from appearing at times in different forms and coming to a head in this or that sector of economic life. In so doing it would of course lose its character of a " total " cyclical crisis and become a mere partial crisis, if it remained confined to that particular sector. This must be kept in mind when considering the numerous attempts to find a classification of types of crisis.[8] For it is either a case of partial crises, when any attempt at classification would be meaningless since it would amount to nothing more than a catalogue of all the branches of economic activity; or it is a question of " total " crises, in which case the only purpose a classification can have is to show the possible variations of the crises with respect to their starting-point and climax, the danger here being that the character of " totality "

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[5] Thus A. Aftalion, *Les Crises Périodiques de Surproduction*, Paris, 1913, vol. 1, p. 12, and J. Lescure, *Des Crises Générales et Périodiques de Surproduction*, 3rd ed., Paris, 1923, p. 2.

[6] W. C. Mitchell, *ibid.*, pp. 378-381.

[7] Even stock-exchange crises and financial stringency may emerge without connexion with the trade cycle. Examples: Germany, 1877; England, 1878; Argentine, 1891; United States, 1896; China, 1912, &c.

[8] Thus W. Sombart in " Versuch einer Systematik der Wirtschaftskrisen," *Archiv für Sozialwissenschaft*, vol. 19, 1904; A. Spiethoff, *op. cit.;* M. Bouniatian, *Les Crises Economiques*, Paris, 1922, from p. 31.

may be obscured. With this reservation in mind, we reproduce Spiethoff's classification, which distinguishes the following types of crises:—

1. Credit crises, which are characterized by the collapse of the credit system and the general scramble for cash.
2. Speculation crises, whose sphere of influence is that of the pricing process. Their sub-divisions are:
   (*a*) The stock-market crisis, with over-speculation in security transactions.
   (*b*) The commodity-market crisis, with over-speculation in commodities.
3. Promotion crises, arising out of over-speculation in the promotion of new enterprises, based on wrong expectations or not fully financed.
4. Capital crises, arising out of over-speculation in loans and in investments in undertakings which have been begun, but for the completion of which there is an insufficient supply of capital available in the economic system.

Among these various types of crises the *credit crisis* deserves most attention, because it is representative of the crisis in its most acute and devastating form. How it comes about and how it usually runs its course has been shown in a particularly vivid manner by the *recent credit crisis in Germany in the summer of* 1931. The result of the Reichstag elections in the autumn of 1930 had, by reason of the alarming gains of the radical parties, especially of the National-Socialist party, deeply shaken confidence in the future course of political and economic events, at the same time leading to a noticeable disturbance of the German credit system. Following on this the distrust of the creditors (particularly of the foreign creditors) of the German banks became daily more acute in the early summer of 1931, under the influence of the failure of the Oesterreichische Kredit-Anstalt in Vienna and the revelation of the gravity of Germany's situation by the Hoover Moratorium. The Oesterreichische Kredit-Anstalt collapsed on the 11th of May; from the 23rd of May credit-withdrawal notices began to pour into Germany from abroad like an avalanche; on the 20th of June, Hoover, the President of the United States, announced the one-year moratorium on political debts, but as the matter had to be debated for a fortnight with the French Government, the psychological effect of Hoover's announcement was not only entirely wasted but was even the exact opposite to what had been intended, as the attention of the whole world had now

been drawn to Germany's desperate plight. The withdrawals of credit—strengthened by the flight of capital at home—went on increasing. Between the end of May and the 1st of July withdrawals from the Reichsbank in gold and devisen amounted to 1400 million RM., beside the 500 million or so which the banks had drawn out of their own reserves. To increase the tension there then came the failure of a big wool concern (the Norddeutsche Wollkämmerei und Kammgarnspinnerei) in Bremen. The desperate efforts of the Reichsbank to get new credits from abroad could no longer avert the disaster. On 12th July the Darmstädter and National Bank, which had suffered particularly heavy losses through the failure of the Norddeutsche Wollkämmerei had to declare itself insolvent. On 13th July the run spread to all the banks.

As the Reichsbank failed tragically to recognize the need of the hour—the immediate provision of any amount of cash required regardless of reserve regulations—the banks could only satisfy the demands of a portion of those who wished to withdraw their money, which only increased the panic. Finally, business over the counter was stopped entirely (a bank "holiday" was proclaimed), to be gradually resumed later. As the Reichsbank was unfortunately very slow in realizing that the greatest liberality in the placing of ready money at the disposal of its customers was the most effective and least harmful means of combating the panic, the German economic system had for more than a fortnight to suffer the agony of, first, a complete and, later, a partial crippling of its whole financial machinery. After many, to some extent very useful, relief measures (the establishment of a transfer association "Ueberweisungsverband," and of the "Acceptance and Guarantee Bank," the guaranteeing by the Reich of the deposits of the Darmstädter and National Bank, the taking over of the preference shares of the Dresden Bank, &c.) and after the Reichsbank had raised its discount rate on 1st August to 15%, bank payments were resumed, partially on 3rd August and wholly on 5th August. The resumption proved a complete success. Only the withdrawals from the savings banks continued till the end of the year, temporarily causing great anxiety. The stock exchanges, which had been closed on 13th July, were not reopened until 3rd September, and were reclosed after a few weeks, on 21st September, until further notice, as a result of the new shock of the credit crisis in *Great Britain.*

The credit cisis of Great Britain was a direct result of the German credit crisis, which indeed shook the credit

system of the whole world. As Britain had very large sums involved in the short-term credits which were " frozen " in Germany, international distrust now turned towards that country also, in a way which increasingly took on the characteristics of a panic. Repeated though moderate increases in the discount rate of the Bank of England failed to stem the outflow of short-term money, and even the aid obtained from repeated raisings of credits could not close the hole which had been torn in the British gold reserves, while the publicity given to the great deficit in British finances and the growing agitation for the devaluation of the pound and the abandonment of the gold standard, caused the distrust to become greater and greater. In face of this " run " by the creditors and after no less than 200 million pounds had been paid to creditors abroad within eight weeks, the British Government announced on 20th September, 1931, the suspension of the convertibility of notes into gold and thereby of the gold standard. The value of the pound was left to the free play of supply and demand in the foreign-exchange markets, which resulted in a short time in its depreciating by almost a third of its value.

The British credit crisis differed from the German credit crisis substantially in that in the British case there was absolutely no run of the home creditors on the banks, and thus no crippling of the internal financial machinery. The run remained confined to the foreign creditors. While Germany succeeded in a short time in re-establishing to some extent the value of the mark by a number of artificial means (compulsory exchange control, legislation to prevent the flight of capital, standstill agreements), in Britain the external stability of the currency was abandoned. Other countries also were drawn into the international credit crisis and a number of them let their currencies follow the fall in the pound, particularly the Scandinavian countries and the British dominions. Later Japan also entered this group of countries abandoning the gold standard. At the end of the year the credit crisis flared up in the *United States*, where the public were getting more and more nervous, and very many of the smaller banks fell victims to the creditors' panic. The full explosion came here more than a year later in the spring of 1933, just when the new Roosevelt administration took office. As is invariably the case, the avalanche was started by a minor accident (the difficulties of the Union Guardian Trust Company of Detroit), but out of this there grew a panic which forced every bank in the country, including the twelve reserve banks themselves, to close their doors. The essential difference between the credit crisis in the United

States and in Europe was that the American crisis had all the characteristics of a real panic and that it was absolutely confined to an *internal* drain, the flight of capital, and sudden withdrawals of foreign funds being almost totally absent.[9] Even in *France* the nervousness was noticeable in anxious withdrawals, hoarding of cash, and a few bank failures (particularly that of the Banque Nationale de Crédit).

The credit crisis of 1931 was without any doubt the most dramatic collapse of the kind that the world had ever seen. The consequences made themselves felt in a general intensification of the crisis, in an increase in the hindrances to the functioning of the international financial machinery (exchange control, clearing agreements, &c.) and in a further shrinkage in the volume of production.

The closest great historical predecessors of the credit crisis of 1931 were the American credit crisis of 1907 and the Japanese one of 1927. The first-named in particular won a certain measure of fame as the events of the year 1907 were mainly responsible for the reform of the American system of banks of issue by the Federal Reserve Law of 1913.[1] The American credit crisis of 1907 —christened the " Knickerbocker Crisis " after the Knickerbocker Trust Company, the institution which was principally concerned— led to the wholesale suspension of payments by the American banks, to the shooting up of the rate of interest for call money to fantastic heights (as high as 125%) and, lastly, to the utilization of various substitutes for cash payments (particularly the Clearing-house Certificate).

The real essence of the credit crisis is the *collapse of the psychological foundations* of our economic system, which cannot exist without a definite minimum of confidence, as it depends on credit— which really means confidence—in all its forms. The modern credit system cannot stand a sudden loss of confidence, since it is extremely sensitive and has been shaped according to the utmost limit of pressure which it can stand. If the psychological net tears, the experience of every crisis teaches us that there is only one method of restoring equilibrium at once: the promptest and most unsparing readiness of the banking system to repay every deposit in cash. This readiness presupposes that the central bank, unreservedly and without hesitation or petty

[9] For a fuller account of the American crisis of 1933 see T. E. Gregory, *Gold, Unemployment and Capitalism*, London, 1933, pp. 146-161.

[1] H. Schumacher, *Die Ursachen der Geldkrisis*, Dresden, 1908; Sprague, *The History of Crises under the National Banking Acts*, Washington, 1911; A. Andrew, " Substitutes for Cash in the Panic of 1907," *Quarterly Journal of Economics*, vol. 22, 1908.

chicanery, should place at the disposal of the banks all the cash desired by the panic-stricken public. The dangerous hesitation which central banks often betray in stamping out the fire of the banking crisis has perhaps much to do with the general failure to realize cold-bloodedly that this crisis is at bottom nothing but the sudden preference on the part of the public for one sort of money (cash) instead of another (bank money). This momentary metamorphosis, which amounts to an atavistic recession, can, if given free play, have disastrous consequences, but the widespread belief that it involves an inflation of some kind is really unfounded. There is therefore no reason why the central bank should not apply its extinguisher instantaneously and liberally.

The more quickly this " bold generosity " is declared, the less—as Anglo-American banking literature is never tired of recommending from first-hand experience—it will require to be used, the more quickly will the credit crisis be overcome and the less marked will its repercussions be on the circulation and production of goods. Again and again experience teaches that at such times of panic the public only wants the money it cannot get, while it does not want the money which it *can* get.[2] The longer one hesitates, however, the more fatal will these repercussions be, the more difficult it will be to overcome the crisis, and the greater sacrifices it will cost when one is eventually forced to do what one should have done in the very beginning, viz., keep the banks open to satisfy the claims of everyone desiring payment. This old truth was forgotten in Germany in the summer of 1931.

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[2] It is known that the Deutsche Bank effectively prevented a run of deposit creditors at the beginning of the Great War, on Helfferich's advice, by answering the first rush with the opening of new counters for the paying-out of accounts and thereby at once stopping the panic.

CHAPTER III.

THE HISTORY OF CYCLES AND CRISES.

§ 5. Economic Crises during the Early Period of Capitalism.

Any account of the historical course of cycles and crises is always made very difficult by the fact that even for the nineteenth century, and still more for the earlier period, we are dependent upon very scrappy and inaccurate data, which are for the most part based more upon impressions than upon economic statistics. We must therefore exercise so much the more caution in attempting to interpret the mechanism and the character of the cycles and crises which occurred during the early period of capitalism. In spite of the inadequateness of these data, however, we are quite justified in considering that the crises which have been handed down to us from the seventeenth and eighteenth centuries were more or less fortuitous accidents occurring outside the actual production process, and that they lack the totality as well as the cyclical nature of the crises of the capitalist age. Accordingly, there is practically no sign of any real economic cycle during these centuries, the crises which occurred during them being always mere speculation crises, centring sometimes round the wholesale trade and sometimes round the securities market. At first these crises characteristically affected only the small capitalist superstructure of the economic system (which was, after all, feudal and pre-capitalist), but their influence extended as the superstructure grew, until finally the whole of economic activity was drawn into the stream of the capitalist economy. It is again quite in accordance with our idea of the recklessness, the greed for profits, and the love of speculation of the early period that the speculation crises of which history tells us should appear to have been unusually violent. This has always made them interesting, of course, more from the psychological and human point of view than from the economic. We shall therefore restrict our description of them to a very few references.[1]

A speculation fever of classical purity and also of irresistible humour was the *tulip crisis* which afflicted *Holland* when a speculation mania broke out in the year 1637, the commodity being, curiously enough, tulip bulbs. This is probably the strangest " boom " the world has

[1] *Cf.* W. Sombart, *Der moderne Kapitalismus*, 4th ed., vol. 2, half-vol. 1, Munich and Leipzig, 1921, from p. 213; A. Spiethoff, Art. " Krisen," *op. cit.;* Max Wirth, *Geschichte der Handelskrisen*, 3rd ed., Frankfort, 1883.

ever seen. Less naïve but much more serious was the crisis which broke out in France in 1719 when the " bubble " concerns founded by Louis XV's Scottish financier, John Law (the " Banque Générale " and the " Mississippi Company "), collapsed, after a period of unexampled " booming " of their shares. This speculation crisis was not isolated but was part of an international financial crash. Law's passion for promoting enterprises was paralleled in England by the so-called " South Sea Bubble," in which the shares of the South Sea Company played the same rôle as the Mississippi shares had done in France, with the result that the speculation mania soon spread to other doubtful objects of speculation (so-called " bubbles "). In these concerns the unscrupulousness of the promoters seems to have been surpassed only by the credulity of the public. In Holland and Hamburg also there appeared similar speculation movements at about that time, but as they were far from approaching the degree of speculative frenzy in England and France, they did not exhibit such grave crisis symptoms. All accounts of the English and French speculation mania, and the subsequent financial collapse in both countries, give one the impression that in both cases the excessive gambling must have bordered on madness. Especially did the rise and final crash of Law's concerns in Paris make a deep impression on the memory of the time. The familiar " paper-money scene " in Part II of Goethe's *Faust* was a last echo of that deep effect.

The Law boom and the subsequent crisis of 1719 is of special interest, as it reveals, in a most conspicuous manner, the inflationary origin of every boom and every crisis following a boom, a point which was curiously neglected in the older literature on the history of cycles and crises, but which has recently been brought very forcefully into the foreground by Mr. Keynes.[2] Of all the " one-sided interpretations of history " (other examples being the Marxian materialistic interpretation and the military interpretation),[3] the monetary interpretation, which stresses inflations and deflations as the most important motive forces of the dynamics of history, contains at least as much truth as any other attempt to simplify history. It should be noted, moreover, that this is also a point of view which is very much in sympathy with the general trend of this book.

§ 6. Cycles and Crises in the Nineteenth Century.

With the beginning of the nineteenth century we enter *the second phase of the history of cycles and crises.* It is characterized

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[2] J. M. Keynes, *A Treatise on Money*, London, 1930, vol. 2, chap. xxx. Mr. Keynes draws attention also to the very interesting investment boom of 1692-1695 in England, largely instigated by the recovery of a Spanish treasure ship. As we shall see later, the machinery for starting a boom has been much modified since.

[3] *Cf.* Paul Barth, *Die Philosophie der Geschichte als Soziologie*, 2nd ed., Leipzig, 1915; Brooks Adams, *The Law of Civilization and Decay*, London, 1895; M. Herzfeld, " Die Geschichte als Funktion der Geldbewegung," *Archiv für Sozialwissenschaft*, vol. 56, 1926, pp. 654-686. On the military interpretation of history something may be found in my own paper " Wehrsystem und Wirtschaftssystem," *Die Friedenswarte*, Geneva, No. 1, 1935.

by the fact that it is at this time, with the development of capitalist economy, first in England, then in the other increasingly industrial States, that the phenomena of fluctuations which we have recognized as typical of our economic system, first begin to emerge. And the crises, which in the early period of capitalism were of the nature of unregulated speculative excess, now become a definite part of the general economic rhythm. Crises naturally first took on this character in England, as that country was first to develop modern industrial capitalism. Any account of the crises and cycles of the nineteenth century must therefore give most attention to the economic events in that pioneer country of capitalism.[4]

The Cycle Period up to the Crisis of 1825.

Following on the Napoleonic wars there had occurred in England in 1818 disturbances in the nature of a crisis which bear a certain resemblance to the upheavals of 1921, which were directly connected with the World War. Further similarities with our recent experiences may be found in the general boom in economic activity beginning in 1822, which ended suddenly in the crisis of 1825, just as the boom of 1925-1929 ended in the world crisis of 1930. The boom of 1822-1825 may be described as the first real capitalist boom. All that is typical of such a boom was then, for the first time, represented almost to the full extent: an initial glut in the capital market, with a low rate of interest, the resulting increase in investment and in the production of capital goods, the expansion of credit, the rise of prices, and, linked up with all this, over-speculation on the stock exchange. The objects of the increased investment activity were at that time mines, factories, ironworks, shipbuilding, and canals; railways being reserved for the next cycle period. The collapse of this boom took place in the year 1825. The fall of prices was drastic in some cases (for instance, the price of wool dropped 60%). The crisis became particularly acute with the failure of numerous provincial banks (the so-called " country banks ") and the extraordinary fall in the price of shares. It is worth noting that the Bank of England, during the whole of the boom, kept its discount rate unchanged at 4%, which forced it, at the beginning of the crisis, to adopt precipitate measures of credit rationing. Discount policy in its modern sense was then still unknown. It was first developed in England in the following decades, as the fruits of experience. It is also worth noting that in the year 1825 the Bank of France came to the help of the Bank of England with a substantial loan: the first act of international co-operation between banks of issue.

The Cycle Period from 1826 *till the Crisis of* 1836.

The long and heavy depression connected with the crisis of 1825 ended in 1830, and a way was thereby made open for a new period of

[4] References (partly also on the general history of cycles and crises): M. v. Tugan-Baranowski, *Studien zur Theorie und Geschichte der Handelskrisen in England*, Jena, 1901 (also translated into French, Paris, 1913); M. Bouniatian, *Geschichte der Handelskrisen in England*, 1640-1840, Munich, 1907; Otto C. Lightner, *The History of Business Depressions*, New York, 1922; W. L. Thorp, *Business Annals*, New York, 1926; L. Lescure, *Des Crises Générales et Périodiques de Surproduction*, 3rd ed., Paris, 1923.

recovery, which seems to have been greatly favoured by a series of good harvests. A decisive part was played, however, by the increase of railway construction, the building of new canals and the opening up of new coal mines. The increase in the volume of investments was accompanied as always by an increase in security issues and a renewed expansion of credits. A new and important factor was the founding of numerous new banks, not only of issuing banks (country banks) but also of joint-stock deposit banks, which were now allowed for the first time and became henceforward an increasingly important instrument for the expansion of credit and at the same time for the abuse of credit. Moreover, it was significant that parallel to the English boom there was a boom in the United States, the collapse of which gave the first impetus to the collapse in England. Railway construction, land speculation, and inflation of credit characterized the boom in the United States, which throughout the century remained a field for experiments with note-issuing banks, and in consequence a hot-bed of speculative excesses.

The crisis which broke out in the year 1836 was on this occasion, for the first time, ushered in by a rise in the rate of discount of the Bank of England (to prevent the flow of gold to the United States). The collapse of prices followed at the end of 1836. Simultaneously there set in a serious credit crisis which emanated from Ireland, but was very soon checked in England by the energetic support given by the Bank of England to the other English banks. By the policy of raising the rate of discount and the courageous application of measures for the immediate combating of the credit crisis, the Bank of England on this occasion, for the first time in the history of banks of issue, established that rule procedure in financial policy which has been followed ever since, on repeated occasions, in England as in other countries, in times of crisis.

The Cycle Period from 1837 *till the Crisis of* 1847.

In England, the United States, and to some extent also in France the crisis of 1836 was again followed by a grave and wearisome depression, which was made worse by a number of bad harvests, the collapse of a gigantic cotton speculation in America, and credit crises in France and Belgium. Germany at that time still played too slight a part in world economic affairs and was still too much at the beginning of her industrial development to be perceptibly influenced by the violent economic spasms in Western Europe and the United States. At that time Germany's position was that of the economically cautious country with steady business trends—a position which was later to fall to France, when that country, partly under the influence of a falling birth-rate, exchanged its progressive economic activity for a cautious conservatism. Germany is a country which was very late in waking from economic and political lethargy, but which, urged on by an extraordinarily heavy increase in population, developed an economic activity, behind which many people in France are to-day inclined to detect a mysterious and typically German dynamic force, not realizing in what a short time these two countries have exchanged their economic spirit and their place in world economy under the influence of external factors. Surely this is an example of the fact that we should not theorize too much about such matters, and especially that we should not think that anything lasts for ever, and so lose our sense of historical perspective.

The long-drawn-out depression which followed the crisis of 1836 was probably one of the worst periods of distress ever suffered not only by England, but also by all the industrial countries. Unemployment at that time reached an extraordinarily high figure, and while provisions were made dearer by bad harvests and agricultural duties, public assistance was practically non-existent. The political ferment expressed itself not only in the formation of radical parties, but even in riots and acts of violence (the Chartist movement). The distress of the people was also reflected in the fact that while the marriage-rate dropped, the figures of crime rose.[5]

In England as on the Continent the recovery did not begin until the 'forties, when it was again favoured by good harvests and by the opening up of the Chinese market, as a result of the " Opium War " between England and China. The feverish activity in the promotion of new companies that now set in again chose railways with renewed zeal as its object. Connected up with this there was the expansion of the iron and steel industry and of coal mining. This upward movement in the industries concerned with producers' goods then spread to the industries producing consumers' goods, especially to the textile industry, which at that time had its great boom period in England. The recovery continued in spite of the bad harvests of 1845 and 1846, and did not break down until the year 1847. Germany took its full share in this boom, but was practically unaffected by the subsequent crisis, although of course the depression both increased and lengthened the political unrest of the year 1848 in Germany as well as in France.

The Cycle Period from 1848-1857.

The recovery period which began in 1852 was influenced first and foremost by the sensational discovery of gold in California in 1848 and in Australia in 1851, which opened up new overseas markets and extended the monetary basis of economic activity. It is not surprising, therefore, that this boom period should be even more than before encouraged and influenced by the stormy development of the United States. The building of railways was continued, and the steamship and the telegraph also came in. At the same time the first great commercial banks were established on the continent of Europe (the Crédit Mobilier in Paris in 1852, and the Darmstädter Bank in 1853). The Crimean War, which broke out in 1853, served rather to stimulate than to hinder the boom, which was more international than any of its predecessors. The inflationary nature of the boom was clearly expressed in the rise in prices, which, according to English statistics (Sauerbeck's index), was about 50% for the period from 1849-1854. In Prussia the active note circulation from 1855-1856 rose from 23 to 51 million taler. The Crédit Mobilier paid out a dividend of 40% in the year 1855, and the dividends of many other companies were not far behind. For duration, international scope, and intensity it was a boom such as the capitalist world did not experience again for another fifty years. The crisis of 1857 started in August with the crash of the New York capital market, and then spread to England and the Continent and even to South America and Australia. If the boom had by its international extent already registered the ever-growing spread of capitalism, more countries

[5] On these and similar consequences of cycles and crises *cf.* Dorothy S. Thomas, *Social Aspects of the Business Cycle*, London, 1925; and Maurice B. Hexter, *Social Consequences of Business Cycles*, Boston and New York, 1925.

than ever were now involved also in the crisis, the extensiveness of which was paralleled by its gravity and intensity.[6] As in the crisis of 1847, the limitation on the amount of the note issue which had been imposed by the celebrated Bank Act of 1844 had again to be suspended in England.

The Cycle Period from 1858 *till the Crisis of* 1866.

The new boom began in 1861, and again it was characteristic that the outbreak of the American Civil War (1861-1865), while causing considerable disturbances in world economic affairs, stimulated rather than retarded economic activity. One of the worst disturbances caused by the Civil War was the "cotton famine," which forced the cotton industry in Europe substantially to cut down production, but did not prove a lasting or serious hindrance to the boom as a whole. The effect of the famine was all the less felt as the era of free trade, which was at this time introduced into Western and Middle Europe and which lasted till the 'seventies, proved to be a recovery factor of the first rank. Again the construction of railways and the iron and steel industry were the foci of the promotion of new enterprises and of investment activity. A further outlet was now provided by building activity, especially in France.

After the boom had been interrupted in 1864 by a credit crisis, which, however, had scarcely any effect upon the movements of prices or production, a reaction set in in 1866. It was only in England that this assumed the nature of a serious crisis. It ran its course on the Continent without any marked upheavals, notwithstanding the war of 1866 in Germany.

The Cycle Period from 1867 *till the Crisis of* 1873.

The boom which preceded the crisis of 1873 was as remarkable as the crisis itself and once more confirmed the law of the balance of action and reaction which operates in economic fluctuations as elsewhere. If England and France had hitherto been the leaders in the cyclical movement, the storm centre now seemed to shift, and to move to Germany and the United States in proportion as these countries began to catch up with England and France in industrial development. There is, however, no doubt as to the special importance of the fact that during this period both Germany and the United States attained their national unity following on a successful war (the American Civil War of 1861-1865 and the Franco-Prussian War of 1870-1871), a fact which gave an immense impetus to their economic development. This was particularly the case in Germany, where the stimulus provided by the French war indemnity played its part, while this same circumstance greatly retarded the boom in France, and was also partly responsible for that country's being the only one of the Great Powers to be spared the crisis of 1873.

If we now turn to the development of the United States, we find that the most striking event is the rapid expansion towards the Far West which set in after the Civil War and was accomplished in an astonishingly short time. The most important aid to this expansion was the construction of the great transcontinental railways, among the first of which was the Union Pacific, completed in the year 1869. The

[6] *Cf.* H. Rosenberg, *Die Weltwirtschaftskrise von* 1857-1859, Stuttgart, 1934.

railways again caused a mania of speculation, in which vicious promoting and stock-exchange manœuvres played a great part. The railway mileage was a little more than doubled between 1860 and 1873. The output of pig-iron in America increased from 1·6 million tons in 1870 to 2·5 million tons in 1873. The industries in the North-east of the United States sprang up rapidly and gave a still greater stimulus to the investment and promoting fever. The improvement and cheapening of the production of steel by Bessemer (Bessemer's converter) did the rest, by making it possible to use steel rails in the construction of railways. In Pennsylvania, where the first petrol wells were sunk, petroleum entered upon its triumphant career through the world. The crash came dramatically in September 1873, when one of the banks connected with the railway-promoting companies in Philadelphia had to close its doors. On 19th September came "Black Friday" on the New York Stock Exchange, which had to remain closed for ten days. In the space of one year there were 5000 bankruptcies. A period of stagnation followed, which lasted for half a decade.

As far as the simultaneous development in Germany is concerned, it would be false to try to impute it solely or even principally to the economic and spiritual effects of the successful war. The boom had already set in before the war, and was international in character. The particular *degree* of the boom as well as of the crisis must, however, be traced to those effects of the war. The extent of the boom can be judged from the single fact that the consumption of iron per head was more than doubled from 1866 to 1873. This period was characterized by the orgy—unrestrained also from the moral point of view—of company-promoting, which earned it the lasting name of "the golden age of the company promoter." All the childish ailments which England had already suffered and overcome in earlier epochs now afflicted Germany—over-speculation and that credulity of the public which, accompanied by its greed for profits, drove it into the arms of unscrupulous swindlers. This delirium was centred round railways and the iron and steel industry. The rise in pig-iron production is shown in the following table:—

The output of pig-iron in Germany in

1840	was	143,000 tons
1850	,,	208,000 ,,
1860	,,	529,000 ,,
1870	,,	1,391,000 ,,
1873	,,	2,241,000 ,,

Speculation in real estate and building was rife, and there sprang up those ill-famed edifices which were to remind later generations of the bad taste of the "golden age of the company promotor." Luxury and rich living became the order of the day. The Viennese at that time used to pay 200-300 gulden to hear one performance by Madame Patti!

It was also from Vienna that the first sign of the collapse came, when on 9th May 1873 the speculation on the Stock Exchange collapsed in panic fashion. From there the crisis spread at once to Germany, burying the new enterprises beneath it in shoals. Huge sums were involved in this crash of 1873, which was the gravest crisis recorded up till then by capitalist history. Indeed, it remained the gravest until it was far surpassed by the world crisis in 1930.

The Cycle Period up till the End of the Century.

The extraordinary gravity of the crisis of 1873 was matched by the gravity of the depression which followed it and which kept the economic systems of almost every country in a state of exhaustion for years. For ten years there was no real recovery, and accordingly there is no real, *i.e.*, complete, crisis to report for that period; except that at the beginning of the 'eighties France became involved in a belated fever of promoting and speculation, which started with the Union Générale, one of the banks founded by Bontoux. (These events in Paris formed the basis of Emile Zola's novel, *L'Argent.*) The Bontoux crisis of 1882, however, remained fundamentally a purely French event, just as a crisis in the United States in 1884 remained purely American. Corresponding to the depression prevailing in industry at that time there was the agrarian crisis which has already been mentioned in other connexions (see p. 21). The scarcity of gold, caused by the decrease in the production of gold and the increase in the demand for it (due to the spread of the gold standard), also played an important part. It was only at the end of the 'eighties that business began perceptibly to improve. The European stock markets showed a lively interest in overseas, especially South-American, issues. It was here also that a crisis originated which struck a heavy blow to the London market in the year 1890 through the failure of the Bank of Messrs. Baring Bros., a firm which was engaged in Argentinian business. 1891 to 1894 were again years of depression everywhere. It was only in the year 1895 that a recovery set in and put an end to this long period of stagnation, during which many changes had taken place in the structure of economic life (reform of company law, formation of trusts and cartels, protection, social insurance, colonial policy, &c.); and, finally, the forces had gathered for a new and violent upward trend in the development of capitalism.

§ 7. Economic Development up till the Outbreak of the World Crisis of 1929.

The year 1895, in which a new and vigorous upward movement begins, also introduces a new phase in the history of economic cycles and crises. If up till then it had seemed as though the violent crisis of 1873 and the chronic depression which followed it had fulfilled the gloomy prophecies of the Marxist theory of the break down, it now appeared that the promoting crash was nothing but a severe " growing pain " of capitalism, which was only just beginning to develop, and that the period of chronic depression had been nothing but a long period of readjustment, rest, and gathering of strength. And it was only now that capitalism entered upon the epoch of its most stupendous growth, and right up till the outbreak of the World War it remained unshaken by disturbances of equilibrium and of growth anything like as severe as the great promoting crisis of 1873. The crises did not become more and more severe, as Marx had foretold, but more gentle, and even the alternation from boom to depression became less violent than before. The period from 1895 until the outbreak of the World War was a period

of very great development for the economic forces of the world—the value of world trade had exactly doubled itself between 1900 and 1913—but this development proceeded along much more restrained and subdued lines than before, thanks mainly to the improvement in the monetary and credit system of the principal countries (the conquest of the world by the gold standard and the general introduction of the central banking system). Thus the gloomy prospect of crises becoming graver and graver, as the promoting crisis had seemed to indicate, could give place to the hope that the rhythm of economic life would become gentler and gentler and thus reduce the " total " economic crisis to a thing of the past. The inner development of the economic system during this period was such as fully to justify this hope, until the outbreak of the World War destroyed the political hypotheses on which it was based, and introduced decades of the gravest disturbances and upheavals ever recorded by the history of modern times. These reached their peak in the world crisis which broke out in the late autumn of 1929, and the end of which is not yet in sight in 1936. If we realize that the economic system has been invaded by a policy which follows its own laws—or rather its own lawlessness—we see clearly that the events since 1914 do not mean a process of self-disintegration of capitalism, but the threatening of capitalism by forces and powers fundamentally alien to it.

The Period from 1895 *till the Turn in* 1900.

The unusually vigorous upward movement which set in in 1895, and was especially strong in Germany, was doubtless favoured externally by the more liberal trade policy and by the new discovery of gold in the Transvaal. In Germany it was principally fostered by the electrical industry. It reached its peak, however, as usual in the development of the iron and steel industry, in which the general upward trend in economic activity is usually focused. The boom also showed a certain strength in the United States and Belgium, while it was less marked in France and England. Its intensity in Germany can be judged by this fact among others, that from being an emigration country, Germany became an immigration country, and that despite the rapid increase in its own native population. The production of coal rose from about 79 million tons in 1895 to about 102 million tons in 1899, while the production of pig-iron rose in the same space of time from about 5·5 million tons to 8·1 million tons. The capital of the five greatest German shipping companies increased from 142 million marks in 1896 to 267 million marks in 1900 and the tonnage of the German merchant fleet from 1·3 to 1·86 million gross register tons.

The turn of the tide began in the autumn of 1899 with a panic in Russia, which led at the end of the year to the Reichsbank's raising its rate of discount to 7%. By the following year the depression had become general, and was rendered much more acute by the failure of mortgage banks.

The Period up till the Turn in 1907.[7]

The depression continued in England, Germany, and France until 1903, when there began a new boom period which lasted till 1907. This was substantially supported on the agrarian side by good harvests and by the recovery from the agrarian crisis. Once more the movement was strongest in Germany, until it was surpassed after 1905 by the American boom.

The reaction which set in in 1907 took the form of crisis—if we neglect the smaller countries—only in the United States, where it was extremely grave. Its repercussions on the money and capital market have already been described (p. 36).

The Cycle Period from 1908 *to the Outbreak of the World War.*[8]

Following the turn of the economic tide in 1907-1908 there was a depression which lasted till 1910, and which in Germany was for the first time rendered perceptibly more acute by the keeping up of cartel prices. The beginning of the boom in 1910 was already darkened by the shadows gathering on the political horizon. Thus the Morocco crisis of September 1911 (caused by the sending of the gunboat " Panther " to Agadir) led to a collapse of prices on the Berlin Stock Exchange. The confusion in the Balkans was also an element of tension of the first rank which acted as a check on the boom in 1912. Added to this was the fact that on the Continent the rising prices of provisions meant that the masses shared in the general improvement in social conditions less than in previous boom periods. Thus all the symptoms seemed to indicate that hard times were about to take the place of growing prosperity and politically undisturbed economic development. It is true that the depression of 1913, which in Germany was once more made very much worse by the rigid price policy of the cartels and trusts, was of comparatively short duration, but before a normal boom could develop, the World War, which had for many years been looked upon as almost inevitable, broke out in August 1914.

If the decisive sign of a boom is the mobilization of the productive reserves of the economic system leading to a maximum of employment, with prices tending to rise, the *World War* deserves the title in every sense of the term. This point must be well borne in mind, since, in *this* respect, the World War has the merit of being the most stupendous example of the gigantic heights to which the productive forces of capitalism can rise under circumstances which occur also, on a smaller scale, during every boom period, *i.e.*, whenever the capitalist system is subjected to very high pressure from the demand side. It will be remembered that before, and at the outbreak of the Great War, most people were strongly convinced that a war on the modern scale could not last more

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[7] *Cf.* J. Esslen, *Konjunktur und Geldmarkt* 1902-1908, Stuttgart and Berlin, 1909.

[8] *Cf.* A. Feiler, *Die Konjunkturperiode* 1907-1913 *in Deutschland*, Jena, 1914; A. H. Hansen, *Cycles of Prosperity and Depression in the U.S., Great Britain, and Germany*, Madison, 1921; W. C. Schluter, *The Pre-War Business Cycle*, 1907 to 1914, New York, 1923.

than a few months, because no country could stand the enormous economic strain longer than that, and it is with an indulgent smile that we think of the many people in Germany who at that time attributed great importance even to the war treasure of a little over one hundred million marks in gold kept at the famous Juliusturm in Spandau. All these notions merely betray a total lack of understanding of the real dynamics of capitalism, but though the Great War has at least had the one merit of having shown it through a magnifying glass, minor errors of this kind are always recurring, proving that the mysteries of capitalism are very rarely understood. What we have to face is the plain fact that while the Great War lasted not just a few months but four and a half years, the economic system was not only able to " finance " this greatest consumption of all times and to provide for the new industrial investments necessary for the production of war materials, but was also able to sustain the population at a level not so much inferior as is commonly supposed (at least up to 1917, and outside of Germany and Austria), and all this with the majority of the male population of the most productive ages busy killing each other; nor, until the very last stage of the war, was the monetary strain unbearable. The case was most conspicuous in the United States, who were able, by way of the Allied purchases of 1915-1916, to send abroad several billion dollars' worth of goods and to add substantially to their industrial plant, in addition to having more real income left for domestic consumption than ever before.[9] The fact that spending sometimes augments the total social product more than saving is corroborated by recurrent experiences and, in the normal course of events, by every major boom. It constitutes a real problem, which might aptly be called the *Paradox of Capitalism*, and which has to be faced by every economist no matter how orthodox his views.[1] It is, as it were, almost a case not only of eating one's cake and having it but of having even more of it—notwithstanding the grave digestive troubles that are sure to follow!

What we have said about the war boom was of course not said in order to eulogize the war or even the boom phenomenon, but only to stress a point which is most important for the theme of this book. The vast difference between the war boom and any normal boom must be obvious to everybody. The difference is that in the war the great effort to produce goods did not lead to an increase in material prosperity, but to unbounded impoverishment

[9] J. M. Clark, " Aggregate Spending by Public Works," *American Economic Review*, March 1935, p. 15.

[1] This theme will be developed more fully later on (§ 14 and § 15).

and loss of capital, and upset the economic equilibrium in the world for decades. These destructive effects of the war are imprinted on the economic development of the post-war period and are still playing a very great part in the world economic crisis of to-day.

Economic Development after the War is characterized up till about 1925 by the fact that there were rifts in economic international relationships, the extent of these rifts being proportionate to the different directions taken by the currency development in the various countries. This explains the characteristic contrast between the economic development in the inflation countries of Central Europe and that in the majority of the other countries in the world, so far as they attempted, during the first post-war years, to normalize their currency systems which had fallen into disorder during the war. This disruption of the international homogeneity of cycles after the war is a confirmation of what has been said earlier (p. 18) about the forces working for this homogeneity.

Outside the inflation countries the boom continued till 1920, thanks mainly to the credit expansion in the United States and to the famine in goods which made itself felt in Europe directly after peace had been declared. As a result of this famine in goods in Europe the overseas countries which produce raw materials were particularly fortunate in enjoying a good run of business from May, 1919, till March, 1920. People set to work feverishly to repair the fabric of world economy shattered by the war, and this showed itself especially in the extraordinary increase in shipbuilding, which in 1919 reached more than double the figure of 1913. Over-speculation and over-production were unusually pronounced when at the beginning of 1920 fate intervened in the shape of the first great world economic crisis of post-war times.

The World Economic Crisis of 1920 began in those overseas countries which had also been the main seat of the boom. After the fall in prices had already set in in the United States under the influence of a deflationary credit policy on the part of the Federal Reserve Banks, a real crisis, which forced the stock exchange to close, broke out in Japan in March, as the result of the failure of two banks which were involved in a great silk speculation. Soon every state, whether industrial or whether engaged in the production of raw materials—the whole world, indeed, with the exception of the inflation countries—was drawn into the crisis, which may be described as a deflationary and contracting process of the very first rank. Why then do we hesitate to call it a " deflation crisis "?

Simply because *every* economic crisis would deserve this name for reasons which will be discussed later on. At the same time, however, the efforts of countries to re-establish the pre-war purchasing power of their currencies were fundamentally different from the type of credit deflation which generally starts and accompanies every crisis. The success of these strivings for normalization, which was particularly disastrous to production, was expressed by the fact that the index figures of prices (taking July 1914=100) from April 1920 to April 1921 fell in the United States from 266 to 154, in Great Britain from 323 to 206 and in France from 600 to 354. The economic development of the individual countries (always excepting the inflation countries) reveals numerous deviations during the following years, and thus no longer admits of general description. If we confine ourselves to the economic development of the United States, which has become more and more important since that time, we shall see that the basic direction of the development from the time the depression was overcome in 1922 till the end of 1929 was on the whole upward (" structural prosperity "), but was at several points subjected to manifold oscillations, corresponding to the fluctuating tendencies in the credit policy of the Federal Reserve Banks, which was more and more guided by the intention of deliberately reducing the upward and downward movements of economic variations.[2] Thus during that period the Federal Reserve Banks made several successful efforts to nip in the bud a boom that was attaining dangerous dimensions.

With the stabilization of the disorganized currencies in Central Europe the even pace of international economic activity was gradually restored from 1924 onwards, and Germany was brought back into international economic affairs, although the course of economic development in that country did not lose certain distinctive depressing elements (reparations, capital losses resulting from the inflation, and the direct and indirect effects of the unsuccessful war and the peace treaty). The same was true of England, which, in addition to the weakening of her economic position

[2] *Cf.* " Recent Economic Changes in the United States," Report of the Committee on Recent Economic Changes, 2 vols., New York and London, 1929; W. R. Burgess, *Reserve Banks and the Money Market*, New York, 1928; H. L. Reed, *Federal Reserve Policy*, 1921-1930, New York, 1930; Hearings before the Committee on Banking and Currency (Stabilization), H.R. 7895, Washington, 1927; F. A. Hayek, " Die Währungspolitik der Vereinigten Staaten seit der Ueberwindung der Krise von 1920," *Zeitschrift für Volkswirtschaft und Sozialpolitik* (Vienna), vol. 1, 1926, pp. 254-317.—Generally speaking, it has to be remarked that the American boom up to 1929 has not yet been entirely satisfactorily treated in economic literature. There are still many points the obscurity of which has not been sufficiently elucidated.

through the changes that took place in world economic affairs at that time, had, after the restoration of the gold standard in 1925, to suffer from a too high level of costs (relatively to the external value of the pound), until in the autumn of 1931 she got rid of this disparity by going off the gold standard.[3] With these reservations, to which we must add an indication of the peculiar course of economic events in France connected with the currency developments there, we may describe the period from 1925 to 1929 as a time of international prosperity which from 1927 onwards passed into a boom.

Although the economic tendencies in the individual countries sometimes ran counter to each other, there can be no doubt that during the time from 1925 to 1929 the productive powers of the world had grown to an extraordinary extent. That this growth was not organic, but was accomplished amidst tremendous economic and, particularly, political tensions, was one of the main causes of the collapse at the end of 1929. World production and world trade increased from year to year and finally surpassed the pre-war level. An ever-broadening stream of credits poured from the countries with a surplus of capital (the United States, England, France, Holland, Switzerland, and Sweden) to the parts of the world where capital was scarce, Germany and South America being in the forefront of the latter. The advance of technical knowledge with its tendency to reduce production costs put everything that

[3] It may safely be assumed that what can be said, within the compass of this book, on the English post-war depression will not add greatly to the knowledge of the reader. The position of the author is the more fortunate since the literature on the subject is not only abundant, but also, on the average, particularly instructive and penetrating, so that we are now quite clear about the main points. It seems to be generally agreed now that the discrepancy between the external value of the pound and the internal cost structure, held rigid by the wage policy and other factors, constituted the heaviest strain on the economic equilibrium of Great Britain, supplemented by a number of international and internal dislocations. The reader is specially referred to H. Clay, *The Post-War Unemployment Problem*, London, 1929; A. Loveday, *Britain and World Trade*, London, 1931; Sir William Beveridge, *Unemployment*, new ed., London, 1930; L. Robbins, *The Great Depression*, London, 1934, pp. 76-96; Report of the Committee on Finance and Industry (Macmillan Report) Cmd. 3897 of 1931; "Britain in Depression: A Record of the Trade Depression since 1929," prepared by a Research Committee of the Economic Science and Statistics Section of the British Association, London, 1935. References on the cyclical development in Germany: Carl T. Schmidt, *German Business Cycles*, 1924-1933, New York, 1934; C. Bresciani-Turroni, "Considerazioni sui Barometri Economici," *Giornale degli Economisti* (Rome), January, May, and July 1928; Vierteljahrshefte zur Konjunkturforschung, ed. by the Institut für Konjunkturforschung (Berlin); Reports of the Reichskredit Gesellschaft (half-yearly); Annual Economic Surveys of the *Frankfurter Zeitung*. The structural changes of the German economy after the war have been analysed in numerous volumes in "Verhandlungen und Berichte des Enquête-Ausschusses" of which a short summary has been published under the title "Erzeugungs- und Absatzbedingungen der deutschen Wirtschaft" (Berlin, 1931). The most reliable source of information on business conditions in France is the yearly supplement of the *Revue d'Economie Politique*, *La France Economique*, *Annuaire de la vie économique française* (since 1922).

had gone before in the shade. The increase in investment activity, which on this occasion also was the chief characteristic and chief stimulus of the boom, was due principally to the new industries connected with the production of durable consumption goods (the automobile industry, the electrical industry, &c.), and to the activity in building. This growth was matched by a widespread tense optimism which in the end deteriorated into lack of perspective and discipline. This optimism went so far in places that people began to believe that there was such a thing as "permanent prosperity," and that economic crises could be eliminated. It reached its peak in the United States, but even on this side of the ocean people were not quite insensible to it. It is a dreadful irony that a time which surpassed all previous boom periods in exuberant optimism should have been followed by an economic crisis of hitherto unparalleled gravity and duration. When we think to-day of that period of growing prosperity and unshakable trust in the future that came so suddenly to an end in 1929, we may feel a kind of emotion similar to that of the visitor to the ruins of Pompeii, who thinks of the days before the wholly unexpected eruption of Vesuvius which annihilated that gay city one August day in A.D. 79. Eight years after the end of the Great War the world seemed to be healed of those terrific wounds received in the course of the struggle; and for several years this belief had held sway. The immediate destructive consequences of the war had long since been wiped out and people were now concerned with making good the more remote devastation it had caused. With production and trade increasing month by month throughout the world the moment actually seemed in sight when social problems would be solved by prosperity for all; and the feeling that the dreadful past was being left behind, together with the psychological reflexes induced by a state of universal plenty, went far to create an atmosphere of goodwill, broadmindedness, and tolerance which made the air during that period almost everywhere more breathable than at any previous time. Thinking back to those "gay 'twenties," we cannot help but be inclined to regard them as one of the most remarkable and astonishing periods in modern history. Probably economic history had never before beheld such a speed, or such a scale of material progress and improvement in the technique of production and organization. It is a curious token of human fickleness that ten years later men are simply wallowing in abuse of that period and are decrying its spirit almost as a strange abomination, an attitude which is all the more curious and even tragic as this total reversal of atmosphere is one of the main reasons for the persistence of the present depression.

§ 8. The World Economic Crisis Since 1929.

The present world economic crisis started in the United States, that being the country in which the curve of the upswing reached its highest peak. After several months of speculation in stocks and shares, which grew more and more unrestrained and was fed with speculative funds from all over the world, there followed on 24th October, 1929 ("black Thursday") a first violent drop in prices on the New York Stock Exchange. This was soon followed by further shocks, which put an end to all initial hopes on the part of the "bulls" of a recovery and drew security quotations on every exchange throughout the world after them. How tremendous the effect of this collapse of prices was may be shown by a few examples. The shares of General Motors fell from a maximum of 91¾ dollars in the year 1929 to a minimum of 31½ in the year 1930, Chrysler shares from 135 to 14⅛ and the shares of the General Electric Company from 403 to 41½. If the expectation that this was only a temporary setback proved false, the hope that the crisis would be confined to the Stock Exchange also vanished gradually. Actually in 1930 the crisis expanded with uncanny inexorability into a disaster from which, in the end, scarcely a country or a single branch of economic activity escaped, and the sad result was a crisis which in completeness, intensity, and spaciousness surpassed all previous historical examples. We shall see later, when we come to examine the causes of the world economic crisis, that the crisis on the New York Stock Exchange was not the cause of it, but was merely an event which set it in motion. That the explosion in New York *did* have this effect and that it must be cited first in the chronological order of events, cannot be doubted.[4]

The effects of the crisis on the most varied spheres of economic activity give some idea of the devastation which it wrought. Particularly striking, apart from the already-mentioned collapse of share prices, is *the fall in the prices of some important raw materials in world trade.* Agriculture throughout the world was particularly affected by the fact that the price of wheat fell to a previously inconceivable level, and by the middle of 1931 had already lost about 60% of what had been the prevailing average price in 1928. The pre-war price had been far higher. For instance, wheat on the Chicago Exchange in 1913 averaged 91 cents per bushel (= about 60 lbs.) while the price in 1932 hovered around 60 cents. This

[4] *Cf.* J. Vernier, *Les crises boursières et leur répercussions économiques* (L'exemple des Etats-Unis à la fin de 1929), Paris, 1932; Francis W. Hirst, *Wall Street and Lombard Street, The Stock Exchange Slump of* 1929 *and the Trade Depression of* 1930, London, 1932.

fall in the price of wheat was eclipsed, however, by the fall in the prices of other commodities. Thus the gold price of rubber fell to 13% of the price in January, 1929, while that of silk dropped to about 23% of that level. Maize, meat, wool, cotton and metals also fell to an extent that would at one time have been considered inconceivable. Naturally the overseas agrarian countries and those producing raw materials (South America, Australia, Canada, and Africa) were specially hard hit by this drop in the price of raw materials, while its effect upon the individual industrial countries depended on the relationship between the profit resulting from the lower cost of raw materials and the loss caused by the weakening of the overseas markets. The catastrophic effect of the drop in the prices of raw materials upon the countries producing these raw materials may be illustrated by the extreme example of the Gold Coast, which was thrown into such poverty by the depreciation of cocoa that her imports of the chief necessities and luxuries declined by 50-70%. The fact also that in Chile in 1930 the value of exports declined by 42% compared with the previous year speaks volumes.

The drop in prices in the raw-material markets of the world was accompanied by a less marked *decline in the general price level in every country.* Thus the level of wholesale prices in Germany at the end of 1931 had already reached the level of 1913, while in 1929 it had been still a third above that level. The prices of the so-called cyclically sensitive commodities were even at this time far below pre-war prices, while retail prices and monopoly prices of all kinds followed the general price movement only very hesitatingly. If we take an international average for the end of 1931, we can say that at that time the economic crisis had on the whole restored the pre-war price level, and thereby raised the purchasing power of money about 30% compared with 1929. It is therefore obvious that we are dealing here with a large-scale deflation.

But the saddest and most obvious expression of the world crisis is to be found in the *shrinkage of production* throughout the world. If we take the volume of industrial production in 1928 at 100, the chief countries had reached the following figures in June, 1932:[5] Germany, 60.7; Great Britain, 89.4; U.S.A., 53.2; Sweden, 76.9; and France, 73·2. And the shrinkage of production in particular

[5] Taken from *World Economic Survey,* third year, 1933-1934 (by J. B. Condliffe), Publication of the League of Nations, Geneva, 1934, p. 90. These annual surveys of the League of Nations which were started in 1931 by Prof. Ohlin's *The Course and Phases of the World Economic Depression,* give an admirable account of the development of the present crisis. A more detailed treatment may be found in another publication of the League: *World Production and Prices,* 1925-1933, Geneva, 1934.

branches of economic activity falls far below this average. Thus building activity both in Germany and the United States had fallen at the end of 1931 to half of what it had been in 1929, while the level of employment in the German machine industry had fallen in November, 1931, to 34% of the nominal figure, and the volume of automobile production in the United States went down to 49% of the average of 1929.

Even more sensational than the shrinkage of production has been the continuous *decline of world trade* since 1929. If this decline is expressed as a percentage of the gold value of world trade in 1929, we get the following figures:—

Percentage Decline in the Value of World Trade, 1929-1934.[6]

1929 - - - -	100
1930 - - - -	81
1931 - - - -	58
1932 - - - -	39
1933 - - - -	35
1934 - - - -	34

These figures, however, need some explanation. First we must remark that they give a grossly exaggerated picture of the extent to which world economic relations may legitimately be said to have broken down. The decline in value terms reflects not only the shrinkage of the volume of international trade but also the heavy fall of prices, measured in gold, which is especially important since this fall has been most pronounced in the case of raw materials, which bulk so largely in international trade. It is not surprising, therefore, to find that if the influence of falling prices is eliminated, the decline of world trade in quantity terms appears to be far from sensational (slightly over 25 per cent. between 1929 and 1934). Even this, of course, is bad enough, but it certainly does not warrant the wild statements now current about the end of international trade. A second conclusion to be drawn from the above table is the interesting fact that the full brunt of the crisis has fallen on world trade only at an advanced stage of the depression, while in the years from 1930 to 1932 the decline in world trade was markedly less than the decline in world production (and even slightly less than the decline in the *industrial* production of the world). As in accordance with previous experiences, foreign trade served, in the first years of the depression, as a partial outlet for the countries first and hardest hit

[6] *World Economic Survey*, 1934-1935, p. 157. The available data for 1935 show a further slight decline, measured in gold.

by the crisis, while, later on, the full effect of the trade restrictions, which had progressively increased since 1931, made itself more and more felt. These new trade restrictions, with their ruthless suppression of the normal course of foreign trade (higher tariffs, quota systems, foreign exchange control, clearing agreements, import boards, foreign trade monopolies, tampering with currency, &c.) must also be regarded as one of the most conspicuous and most ominous results of the world depression. Another feature of the later phases of the depression, which has added greatly to the decline of world trade, has been the almost complete breakdown of international credit, brought about by the international credit crisis of 1931, and the consequent abandonment of the gold standard in most countries. In view of these terrific obstacles, it really seems almost a miracle that world trade—even if reckoned in gold prices—has not actually sunk to still greater depths.

If we want to probe fully into the tragedy of the present depression in terms of human misery, we must, of course, revert to the statistics of *unemployment* and of the destitution connected with it. Despite the well-known difficulties of calculations of this kind, we may safely say that the great depression condemned twenty to thirty millions, together with their families, to keep their hands idly in their pockets (when not raised in threats against our economic and social system!) and to go without food except to the extent to which they get it from private benevolence or public expenditure, and this at a moment when gigantic masses of raw materials and foodstuffs are glutting the markets and so much industrial plant is lying idle—materials which could convert bitter want into prosperity if the world's economic organization were again restored to orderly operation. While wage rates have shown a very significant power of resistance in the leading countries, the total earned incomes, and still more the total income of the working classes of those countries declined heavily in face of the mass unemployment. Earned incomes fell most heavily in the United States (to almost one-third of the quarterly average of 1929, by the beginning of 1933) and in Germany (to almost one-half by the beginning of 1933), and much less in Great Britain (to 87 per cent. by the third quarter of 1932). So far as the standard of living is concerned, the effect of the decline in nominal incomes was, of course, partially offset by the declining cost of living. The decline in consumption has been, however, very substantial, which may be illustrated by the significant examples of beer consumption in Germany, and of the consumption of silk fabrics in the United States, both of which reached their lowest point

at about 50% of the pre-depression consumption. The same story is told by the fact that sales in the retail trade in Germany declined in 1933 to 60% of those of 1928.[7] Sad as all this is, however, it must be noted that it is again a tribute to the elasticity of our economic system and to the richness of its resources that it has been able to carry along its millions of unemployed for such a long time at a level of sustenance which has certainly not been inferior (if, indeed, it has not been actually superior) to the standard of living of the average Russian worker employed during these years. Alongside the example of world trade already discussed, here is again a fact which before the depression only the most sanguine optimists would have thought possible. This is not said to belittle the human tragedy of unemployment, but it seems certain that, bad as it is, the material significance of unemployment is, on the whole, surpassed by its moral and psychological effects.

Special mention must be made of the effects of the crisis on the *money* and *capital markets* of the individual countries, because they introduce anomalies which are essential to the understanding of the crisis. We have already referred to the extraordinary fall of share prices. In the United States this amounted on the average to 60% from September, 1929, till June, 1931; in Holland, to the same figure from March, 1929, till June, 1931; in Germany, to 61·7% in April, 1927, till June, 1931; and in France, to 55·7% from February, 1929, till June, 1931. In hardly any of the countries did the rate of interest for long-term investments show a marked tendency to drop during the greater part of the depression. On the other hand, the interest rate for short-term investments (the interest rate on the money market) in the principal creditor countries fell to quite an extraordinary extent (in some countries like England and Switzerland even approaching zero).

The banking statistics are of special interest in this connexion, since they reflect the process of credit contraction (deflation) underlying the more general process of business contraction.[8] Especially significant in this respect are the figures of the decrease of bank credits and advances, of the turnover of bank deposits (velocity of circulation of bank deposits), and of the volume of bank clearings. Bank credits and advances had dropped in 1932 in Germany (Big Berlin Banks) and in Austria to almost one-half compared with 1929, in France and Holland to two-thirds, and in the United

[7] "Deutschlands wirtschaftliche Lage an der Jahreswende, 1934-1935." Report of the Reichskredit-Gesellschaft, p. 34.

[8] A detailed account is to be found in the illuminating publication of the League of Nations, *Commercial Banks* 1925-1933, Geneva, 1934.

States, England and Wales, and Italy to about three-quarters. The velocity of circulation of bank deposits (ratio of bank debits to the average of bank deposits) declined, in the United States, from the peak rate of 3 in October, 1929, down to the rate of about 1 at the end of 1932 and in the first months of 1933.[9] The percentage of bank clearings in 1932 as compared with the average of 1929 was: in the United States (New York City) 27·9, in the United States (outside New York City) 46·4, in Switzerland 37·7, in Holland (Girotransfers at the Central Bank) 39·5, in Germany 43·7, in the United Kingdom (Metropolitan) 69·7, in France 72·4, and in Sweden 87·5. The position of banking has been very different in the several countries and during the progress of the depression. While the banking systems of a number of countries (especially of Germany, Austria, and the United States, to some extent also of Italy) were temporarily paralysed by the waves of credit crises, the process of increasing liquidity, normal to every major depression, went on without marked interruption in the other countries, especially in Holland, Switzerland (until 1933), and in the United Kingdom. It has been calculated that in the United Kingdom the commercial banks' advances, which in more normal times were estimated at 50-55 per cent. of their total deposits, had fallen to 38·2 per cent. in January, 1934, leaving a margin for about 200 million pounds worth of new investments before the traditional ratio would be reached.[1] At the same time, there was a large amount of hoarding of cash and of gold in most countries and a universal slackening of the velocity of circulation of cash (as distinct from the velocity of circulation of bank money shown in the above figures of the turnover of bank deposits in the United States). The amount of new gold hoarding (minus dishoarding) which took place in 1933 alone has been estimated by the Bank for International Settlements at more than 3 milliard Swiss francs. It is mainly due to the hoarding of cash that the volume of notes in circulation did not fall off in most countries proportionately to the actual degree of deflation and in some countries (France, Belgium, Holland, United States, and Switzerland) even increased.

A particularly disastrous feature of the present depression have been the *international financial troubles* and the *crises of the balance of payments* of numerous countries. Several factors concurred to bring this about. In the first instance, a huge amount of international short-term funds had been piled up which was estimated by the Bank for International Settlements for the begin-

[9] Robbins, *The Great Depression*, p. 217.
[1] *World Economic Survey*, 1933-1934, p. 279.

ning of 1931 as at least $10,000 million,[2] and this avalanche came down in the summer of 1931 with most fatal consequences, though it is again to the credit of our economic system that it proved possible to mobilize and transfer about one-half of this enormous amount of indebtedness within one year. Another strain, increasing year by year, was the international long-term indebtedness which had also reached sky-high dimensions, especially on account of the political indebtedness (reparations and inter-allied debts) and its implications. With the declining volume of world trade and the complete collapse of the prices of raw materials, the burden of this foreign indebtedness became increasingly unbearable for the greater part of debtor countries, especially for the countries producing raw materials. This, in turn, had disastrous effects on the banking systems of the creditor countries. So it was that numerous bank failures in the United States were closely connected up with the South-American failures. In addition to all this, irregular movements of capital, directed by the motive of security rather than by the motive of economic yield, gained an importance unheard of hitherto. The most fatal case, in this respect, was perhaps the flight of capital from Germany after the rise of political radicalism had become appallingly manifest by the sweeping victory of the National-Socialist Party at the end of 1930. Considering the ultimate effects of the breakdown of the German financial system, it is not too much to say that the triumph of the Nazi movement has been one of the heaviest blows to economic conditions not only in Germany but also in the world at large. Later on, with the waning number of stable currencies, political insecurity as a factor making for irregular capital movements was supplemented by the instability of currencies. In view of all these extraordinary circumstances, it is not to be wondered at that the monetary and financial system of the world went thoroughly out of order. One of the most conspicuous effects of this development—not its cause, as it is sometimes believed—has been the grossly unequal distribution of the world's gold reserves among the different countries, a factor which, in turn, has gone far to intensify the economic crisis. At the end of 1934, the central banks and treasuries of all countries held nearly 700 million fine ounces of gold, but of this total nearly 400 millions was held by the United States and France alone while the United Kingdom, in spite of her pre-eminence in world trade and finance and the position

[2] The figure given by the Berlin Institut für Konjunkturforschung is still higher (about $12,000 million). The normal pre-war volume of the international short-term indebtedness has been estimated by the Institut as 2-3,000 million dollars.

of sterling as a basis for other currencies, held less than one-fourteenth of the total, and no other country held more than about one-eighth of the quantity held by France alone.[3] It goes without saying that this distribution is absolutely out of harmony with the share of the different countries in the world's trade and finance and that it is a sure symptom of the world's financial mechanism being thoroughly out of gear.

Inadequate as this account of the present world crisis must of necessity be, it surely suffices to show that it has, in a rather short time, developed into dimensions which are at once catastrophic and unique in economic history. True, the depressions after the Napoleonic wars and after 1873, in their tenacious duration and their intensity, come very near the present depression, but all statistical comparisons show convincingly that this latter depression has outrun all previous examples. On the other hand, it has to be noted that, at the present moment, there is some evidence that the worst may be over so long as the rather insecure basis of the recovery which has been recorded since 1933 should not give rise to a new recession, especially in those countries where, as for instance in Germany, some real concern in this respect is warranted. The figures showing the increase of industrial activity and the decrease of unemployment since 1933 are, on the surface, quite impressing, and in some countries as in Great Britain and in Sweden the actual recovery seems sound enough. But nobody can fail to feel uneasy in comparing these figures with the still crumbling world trade, the still growing obstacles to international commerce, the persisting monetary troubles, the crude and haphazard socialism rampant everywhere and thriving under different political colours, and—last but not least—with the political atmosphere so incongruous with that spirit of confidence, optimism, and easiness without which all recovery programmes will rest on sandy ground.

[3] *Monthly Review of the Midland Bank*, April-May 1935, p. 4.

CHAPTER IV.

THE CAUSES OF CRISES AND CYCLES.

§ 9. Introductory.

In the preceding chapters an attempt has been made to acquaint the reader with the general phenomenon of crises and cycles, both from a morphological and from an historical approach. Our next and infinitely more difficult task must be to find out the cause or—what even *prima facie* seems more probable—the causes, of the said phenomenon. This is not only in order that we may satisfy our scientific curiosity, but also that we may discover, through an understanding of the causation, what policy should be followed in order to control and moderate the driving forces behind economic fluctuations and disturbances.

The history of doctrines which have attempted to clear up the mystery of recurrent disturbances of economic equilibrium is now more than one century old, Jean Baptiste Say and David Ricardo being perhaps the first to grasp the real problems involved. But though present-day economic science may be said to have made great advances towards a better and deeper understanding of the intricate questions to which the study of economic disequilibrium gives rise, and of the working of the mechanism of our economic system under the influence of disturbing factors, it would be unduly optimistic to assume that there has been found a solution of the problem of the causation of crises and cycles which leaves nothing to explore or which is satisfactory from all points of view. As in every other branch of economic science, a *communis opinio doctorum* on the origin of crises and cycles cannot be expected, and even on some of the most important points serious divergences of opinion still exist, though with a fair chance of being diminished as time goes on.

On the other hand, however, the theory of crises and cycles has that also in common with economic theory in general that the extent of actual agreement is much greater than is generally supposed by those who are not thoroughly acquainted with the subject, and who often betray their very ignorance by censuring economic science for hopeless divergences of opinion. It would be easy to show that the science of medicine gives the appearance of a still wider disagreement on very important questions of pathology and therapeutics, but every medical man will tell us that the bitter warfare in his science is being conducted on a rather broad groundwork of

universally accepted principles. More often than not, it is not the principles in medicine as in economics that are at stake but the conclusions to be drawn from them, their arrangement and combination, the emphasis to be placed on the different factors, the interpretation of new experiences, and the expediency of practical measures—though, in fairness to the outside observer, it has to be conceded that the embittered spirit in scientific warfare must sometimes give the impression that there are unbridgeable abysses hopelessly separating the opponents. Finally, there is the human element which accounts for the fact that the real differences of opinion are often much exaggerated, common vanity and pugnacity playing a prominent part. It is all too common that an economist—and the writers outside of academic circles are sometimes even worse—wants to make himself immortal by presenting a brand-new theory of cycles and making room for it by abusing all the others and emphasizing the differences rather than the similarities. In direct contrast to these tendencies, it is the special aim of the present author to keep watch for every possible reconciliation and to endeavour to combine elements from different and even opposed schools of thought. This is not to be done in a spirit of a kind of scientific pacifist who shuts his eyes to secret armaments, nor is the author unaware of the danger of easy compromises. What he is striving after is a synthetic attitude rather than an eclectic one. This is, he believes, an urgent necessity in present circumstances.

It would at first seem to be an attractive idea to start the analysis by giving a synoptic account of the *doctrinal history* of the theory of crises and cycles. On second thoughts, however, this idea loses much of its attractiveness. In order to be of any value, such a synopsis must be more extensive than is compatible with the scope of this book.[1] But even if this difficulty were overcome there would still arise the more serious difficulty of how to arrange the different theories in accordance with their most significant characteristics, which is essential if the synopsis is not to be merely a pointless chronology. A systematic classification of the theories of crises and

[1] A good and up-to-date history of the doctrines on crises and cycles is still lacking. The only comprehensive monograph on the subject, to the best knowledge of the author, is: E. v. Bergmann, *Geschichte der nationalökonomischen Krisentheorien*, Stuttgart, 1895, but the point of view of this book is somewhat antiquated. Other references are: Alvin Harvey Hansen, *Business-Cycle Theory, Its Development and Present Status*, New York, 1927; J. Lescure, *op. cit.*, pp. 313-414; W. Fischer, *Das Problem der Wirtschaftskrisen im Lichte der neuesten nationalökonomischen Forschung*, Karlsruhe, 1911; K. Zimmermann, *Das Krisenproblem in der neueren nationalökonomischen Theorie*, Halberstadt, 1927; Rolf Wagenführ, *Die Konjunkturtheorie in Russland*, Jena, 1929. Views of different writers on the present status of trade-cycle theory are assembled in the *Festschrift for Arthur Spiethoff*: "Der Stand und die nächste Zukunft der Konjunkturforschung," Munich, 1933.

cycles is difficult to attain because almost every theory so far developed, save the most eccentric ones, contains some elements belonging to another type of explanation so that an attempt at systematic classification inevitably leads to numerous overlappings and cannot do justice to the theories in question. To quote only one instance, it is almost impossible to draw a clear dividing line between the under-consumption theories and the over-capitalization theories, there being a large margin of overlapping, and even the division between monetary and non-monetary theories, though indubitably a very important one, has many loopholes. This accounts also for the fact that none of the several attempts which have been made at systematic classification of the theories of crises and cycles seems really satisfactory.

This is true even of the most successful attempts at classification among which those made by Wesley Mitchell and Alvin H. Hansen are especially noteworthy. Mitchell[2] divided the different theories into three large groups: firstly, theories which trace crises and cycles to physical processes (cycles of crop yields, &c.), secondly, theories which relate crises and cycles to emotional processes (especially with mass alternations of optimism and pessimism), and, thirdly, theories which connect crises and cycles with institutional processes, *i.e.*, with factors arising out of the structure and the institutions of our present economic system. The large third group is then subdivided into a great number of subordinate groups with different points of view. Hansen,[3] while clearly demonstrating the difficulties and shortcomings of any classification, distinguishes (1) the Capitalistic Economy schools, which stress either the capitalistic process of distribution or the capitalistic process of production; (2) the Exchange Economy school, which considers crises and cycles to be a function of the competitive exchange economy and points particularly to recurrent errors of judgment (the psychological school in Mitchell's classification), and (3) the Money Economy school which believes that the root of crises and cycles lies in the monetary and financial mechanism of our economic system, a school which is, broadly speaking, equivalent to what is more generally known as the monetary theory of crises and cycles.

In view of these difficulties, the present writer has preferred to forego a classified presentation of theories and theorists, and to adopt a different approach. The programme of this chapter is to examine all the elements and circumstances which offer any chance of

[2] Wesley C. Mitchell, *op. cit.*, pp. 49-53.
[3] Alvin Harvey Hansen, *op. cit.*, pp. 1-10.

explaining the origin of crises and cycles and to set aside for a final analysis those elements which, in the process of sifting, prove useful in this respect. In the last two paragraphs, special attention will be given to the problem of the origin and course of the present crisis. Following this programme, it is to be hoped that the analysis may seem less scholastic than is all too often the rule in these matters and may seem more realistic without losing its rigidly scientific character.

There remains the cumbersome but indispensable task of dealing with certain *methodological questions* which the problem involves. Among these the most important and also the most controversial question is to ascertain whether the method of deductive analysis or that of empirical description offers the better chances of bringing us nearer to a solution of the problem.

While the older literature on crises and cycles was principally based on deductive reasoning, though of necessity starting from the facts presented by the actual history of economic fluctuations, there has sprung up, in the last decades, a new school which claims, emphatically and with ill-concealed scorn for " theoretical " analysis, that the collection of statistical data, their intelligent arrangement, and their mathematical analysis constitute the only method appropriate to the problem. This method is sometimes spoken of as " quantitative analysis " (in contrast to the " qualitative " analysis of the deductive school), as " descriptive analysis " (Mitchell) or in the German literature, as " *Konjunkturforschung* " pure and simple (in contrast to the " *Konjunkturtheorie* " of the deductive school). Its general background is always the curious but ineradicable misconception of scientific methodology which was the characteristic of the late Historical school and which has been evolved further in its modern reincarnations, especially by the Institutionalist school in the United States.[4] The recrudescence of the fundamental error inherent in this whole methodological trend is closely connected with the activities of the numerous research institutes which have been founded in the last decade in the United States and also in many other countries, with a view to obtaining a better diagnosis of economic conditions and their fluctuations and also, in the eyes of the more optimistic workers in this field, a prognosis of changes in economic conditions. These institutes—among which the Harvard Committee of Economic Research, the National Bureau of Economic Research in New York (with Wesley C. Mitchell as one of the directors), and the *Institut für Konjunktur-*

[4] By far the best available book on all these questions of economic methodology is L. Robbins, *An Essay on the Nature and Significance of Economic Science*, 2nd ed., London, 1935.

forschung in Berlin (with E. Wagemann as president) are the most noteworthy[5]—have been developed into large economic laboratories where, with a most refined apparatus of mathematical distillation, the raw material of statistical facts is worked up until we get the finished products in the form of all kinds of " cycles," of " coefficients of correlation," of " trends," of " moving averages," of logarithmic scales, of business " indices " and " barometers," of " isolated time series " and what not. It is easy to understand that, in this atmosphere of institutionalized science with its air of exactness and progressive technique, not many escape the temptation to look down upon old-fashioned " theory," with its small business unit of the private study, as something hopelessly behind the times and to claim for their descriptive and statistical method a wider field of application than is compatible with the logic of scientific methodology. Instead of confining themselves to the more modest but very meritorious task of collecting, arranging, and interpreting all the available facts and statistical data and of verifying the results of deductive reasoning, these men thought it possible to replace deductive reasoning entirely by their empirical and statistical method. Deductive theory, essentially centring around the static conditions of economic equilibrium, was declared to be totally unsuited to explain the disturbances of this equilibrium; the new " Quantitative Economics " was claimed on many sides, as the only suitable method for complying with the desideratum of Dynamic Economics. Other writers of this same school—for instance, Wagemann and to some extent also Mitchell—go so far as to deny that the search for causal relations in crises and cycles is a legitimate object of economic science.

Now, there cannot be the slightest doubt that the development of statistical research work, with its refined methods of observation and interpretation of the facts of cycles and crises (" Konjunkturforschung "), has been, in its proper field, a great advance, and there is nobody who does not appreciate very highly the work done by the several research institutes. The picture of the phenomenon of crises and cycles given in the second and third chapters of this book has been largely based on this work. The empirical basis on which the theoretical analysis of crises and cycles must necessarily be constructed has been broadened by it in a manner which leaves

[5] Most distinguished work was done also by the Russian Institute for Cycle Research in Moscow established after the war, with men like Kondratieff, Wainstein, Oparin, and others among its staff. Unfortunately, this activity was abruptly stopped, several years ago, because the Government deemed it " reactionary," and the staff was sent to Siberia or shot. It is in reverential commemoration of these fine men, some of them personally known to the present writer, that this note has been added.

less room for mere guesswork and vague hypotheses, and also there is no disputing the educative influence emanating from the work of the empiricists on the mental sobriety of the theorists. On the other hand, however, it is equally indubitable that the scope of the work that can be usefully done on these lines is rather more limited than was believed in the early enthusiasm of the 'twenties. The present crisis, which has reduced so many extravagant expectations to more reasonable proportions, has also exploded the more far-reaching hopes of the cycle statisticians. The attempts at prognostication especially have lamentably failed as was most conspicuously demonstrated by the breakdown of the "Harvard Barometer." Since this is a striking example of the inherent defects of this kind of work, it may be useful to explain that the diagnosis and prognosis given by the Harvard Committee was based on the combination of three time-series the temporal order of which was supposed to follow a regular course so that, at a given moment, the point in the business cycle corresponding to the constellation of the curves at that moment could be determined.

It was indeed an ingenious idea to apply the principle of nautical astronomy to economic forecasting, but there was one fatal flaw. For as long as we have not made a thorough investigation into the causal relationships between the time-series, the mere temporal sequence does not tell us any more than that something has happened in the past which might not happen in the future if some variables in the causal mechanism should change. But in investigating the causal relationships we are thrown back from statistical empiricism to "theory" in the deductive and analytical sense. Hence this whole procedure of the empiricists falls little short of the reasoning of the legendary army doctor who, being informed that a foot-soldier sick with typhoid fever had quickly recovered after having eaten by mistake a liberal portion of sauerkraut, decided that sauerkraut is a cure for typhoid fever. And many hasty attempts at introducing some sort of theory, after the flaw in the empirical procedure has been detected, come quite near to the reasoning of the same army doctor who, after having applied his recipe on an unfortunate lancer with fatal effect, corrected his first deduction by saying that everything depends on the kind of arms. A great deal more could be said on this subject to show that the whole idea of forecasting, whatever its methods, is based on a number of misconceptions which go far to rule it out as a useful undertaking.[6] Even the accomplishment

[6] *Cf.* O. Morgenstern, *Wirtschaftsprognose, Eine Untersuchung ihrer Voraussetzungen und Möglichkeiten*, Vienna, 1928.

of the more modest task of economic diagnosis encounters great difficulties. The errors in diagnosis and prognosis made by the Cycle Institutes in the last five years have, indeed, been so many that it is really to be wondered whether the world would not have been better off without these more ambitious activities, considering the harm done in economic policy by misleading diagnosis and forecasting. These experiences are closely connected with methodological misconceptions about the merits of statistical empiricism and the demerits of analytical theory. It can be safely assumed that, to-day, there is perhaps a better understanding everywhere of the fact that no intricate statistical research work, no calculations of " coefficients of correlation," " trends," and " moving averages " can bring us a single inch nearer to the solution of the problem of the causation and of the mechanism of crises and cycles. By the statistical method, we ascertain facts, but we cannot explain them, *i.e.*, bring them into logical order so that we " understand " them. Only analytical theory can do that, and if there has been, in recent years, any furthering of our insight into the mechanism of crises and cycles, this has been the work of the theorists and not of the empiricists.

While it can be safely assumed to-day that the legitimacy of the method of analytical theory is hardly contested any longer (with the possible exception of very hard-boiled Institutionalists in the United States), there still continues a lively discussion about the real nature of the problem involved in the phenomenon of crises and cycles and about the type of theory appropriate to it.[7] For all our aversion from every kind of " prolegomenism " and from philosophizing endlessly about tools without really getting to work, it is well to be clear on two points: first, that the phenomenon of general economic disequilibrium as revealed by crises and cycles constitutes a problem unexplained by general economic theory which is essentially a theory of economic equilibrium and of the forces working interdependently for its continuous restoration, and, second, that, in spite of this, there cannot be any doubt that the problem constituted by the recurrent disruption of the economic equilibrium must be tackled by the same type of analysis as that applied to the problems of economic equilibrium. To decry this type of economic

[7] The literature on this subject is mostly in German, for instance: F. Lutz, *Das Konjunkturproblem in der Nationalökonomie*, Jena, 1932 (a very commendable book); A. Löwe, " Wie ist Konjunkturtheorie überhaupt möglich? " *Weltwirtschaftliches Archiv*, October 1926, pp. 165-197; E. Carell, *Sozialökonomische Theorie und Konjunkturproblem*, Munich, 1929; E. Preiser, *Grundzüge der Konjunkturtheorie*, Tübingen, 1933. Some very relevant remarks are now also to be found in English in the English translation of F. A. Hayek's book, *Geldtheorie und Konjunkturtheorie* (Monetary Theory and the Trade Cycle, London, 1933).

analysis as " Static Theory," and to clamour for a " Dynamic Theory " instead, is to confuse a question of method with a question of subject and to misconceive the real nature of analytical economic theory which must of necessity be the same whether applied to questions of Statics or to those of Dynamics. The real task and purpose of the theory of cycles and crises, therefore, is to modify and enlarge the scope of general economic theory so as to include the explanation of the recurrent disruptions of economic equilibrium. Since practical economic life has been up till now continuously caught in the ups and downs of disrupted equilibrium, the theory of crises and cycles is of special importance in making the whole body of economic theory more realistic. Such a theory, it must be repeated, is not a new and independent kind of theory with methods of its own, but a part of the general body of economic theory, based, as a kind of superstructure, on the theory of economic equilibrium and modifying or enlarging its general propositions. It must be, in the celebrated words of Böhm-Bawerk, " the last, or the last but one, chapter of a written or unwritten system of Social Economics and the ripe fruit of the knowledge of all economic processes and their functional connections." It must be noted, however, that in order to harmonize with the general body of economic theory, the theory of crises and cycles must be able to explain in a really convincing manner why the very strong forces always working for equilibrium are recurrently counteracted so that the whole system of balancing factors breaks up. Not all theories so far advanced have proved able to do this, for they point to disturbing factors which, in the light of general economic theory should be easily digestible by the economic system. It is well to remember this point in the subsequent sections.

Something more must be said in order to describe more exactly the real nature of the theory of crises and cycles. Mention has already been made in § 4 of the fact that the scientific analysis of economic fluctuations began with the phenomenon of crises and only at a comparatively late date was it realized that the theory of crises must be incorporated into the more general theory of cycles, Juglar being the outstanding pioneer in spreading this new conception. It must not be thought, of course, that the earlier writers up to the last quarter of the nineteenth century were ignorant of the phenomenon of cyclical fluctuations; it was only that their scientific curiosity was predominantly directed towards the more dramatic phases of the crisis and the depression. The obvious reason for this narrowness of viewpoint lies in the fact that the boom phase of the cycle, characterized as it is by

full employment of the factors of production and by an altogether healthy aspect of economic life, gives the outward appearance of perfect economic equilibrium—except for the last stage of hectic speculation which aroused enough suspicion even among the earlier writers. Hence it was generally thought that this phase was just that phase which corresponds to Equilibrium Economics, without there being anything peculiar about it demanding a special explanation, and again from a practical point of view there seemed nothing pathological about the boom phase to give rise to concern and uneasiness. The only trouble was that it did not last; it did not only just come to an end but was usually followed by the worst kind of economic disequilibrium. This had to be explained, but it was only by a slow process that the origins of the crisis and of the depression were traced to the preceding boom and thus the real pathological character of the latter discovered. In all this, the attitude of the earlier writers corresponds closely to the attitude of the general public in these matters: the boom is generally taken as something normal and enjoyable with nothing the matter with it, and when the crisis breaks out the causes are sought in all directions save for the one direction in which they should be sought, *i.e.*, in the unhealthy and abnormal conditions created by the boom. The regular temporal sequence of boom and crisis (or depression) experienced during one century of capitalistic development has, of course, done much to shake this attitude and to suggest that the temporal sequence implies a causal one.

There remains one final question. Is it really true that the phenomenon of crises and cycles is a general one like the phenomenon of price or interest, or is every crisis and every cycle just an " historical " event more or less unique in its kind, with a kaleidoscopic change of constellations? If the latter should be the case, then a special theory of crises and cycles has evidently no real *raison d'être* since nothing useful could be said on crises and cycles *in general;* every crisis and every other phase of the cycle would create a new concrete situation which would have to be analysed with the tools of general economic theory. This is, in fact, a view held by several writers.[8] The present writer, however, is not prepared to accept it. Though he would concede that many cycle theories have the defect of making too sweeping generalizations, it seems that the radical view referred to overlooks the fact that all crises and cycles of our economic system can, if their ever-changing accessory traits are eliminated, be reduced to a uniform

[8] The best treatment may be found in the aforementioned book by F. Lutz of which the argument in question is the main theme.

pattern of typical constellations of data. The common denominator of all crises and cycles is to be found in the typical reaction of the mechanism of our economic system to certain disturbing factors by which the economic equilibrium is *totally* upset. This typical reaction is such a regular occurrence that it calls for a special explanation, which it is the task of the theory of crises and cycles to give. We may conclude, then, that this last and perhaps most serious attack on the legitimacy and necessity of the theory of crises and cycles can also not be said to have been really successful.

§ 10. The General Sources of Disturbance.

The real nature of our present economic order is characterized on the one hand by an extremely great differentiation of the productive processes (the division of labour), and on the other by the lack of any central, conscious planning authority to guide this vast complicated machinery. It is a blend of the finest differentiation and almost complete anarchy, and is based upon a boundless wealth of voluntary decisions, and upon freedom in production and consumption and in the lending and borrowing of credit. Economic theory shows by what inherent laws these millions and billions of individual decisions and economic acts are so welded together that this anarchist type of economy, which is capitalism, does not lead to a state of chaos, but actually makes capitalism capable of very high achievements, causing the achievements of the economic systems of the past to seem insignificant, and also assuring to the economic system of our day a position superior to that of any collective system of the future. That a social system of such extreme differentiation and complexity is likely to possess a very unstable equilibrium and to be subject to manifold disturbances is at once obvious. The miracle is not that it functions amid continuous disturbances and oscillations, but that it functions at all, and with such comparatively good results. That is the great miracle which has again and again fired the curiosity of men in modern times and has given rise to the science of economics.

The only way to understand the phenomena of economic fluctuations and disturbances, crises and unemployment, is to realize at the very outset that our present social order is an economic system based upon division of labour carried to its extreme limits. In any study of crises and cycles, it must be realized from the first that *in such a vastly complicated, knife-edged economic organization as that of to-day held together by the bond of voluntary decisions, frictionless co-operation cannot be expected.* It is inevitable that the individual parts of the process will fit

in with each other sometimes better and sometimes worse, and it is at least conceivable that the disturbances and frictions may become so great that the whole machinery will at times come to a complete standstill—with the paradoxical effect that millions of people who are able and willing to work must sit with idle hands, because they can find no work, although the distress of the masses during this very period of crisis cries out for an increase in production. If things are going badly in a country of self-supporting peasants like China, for instance, because over-population leaves too little land for each individual, the obvious thing is for the peasant to work more. He would not understand the phenomenon of unemployment and would think it a good joke if he were told that there are countries where work has become a boon for which men beg as for bread, and that those who do extra work in their spare time are hated by their fellows as "double wage-earners." He would consider this a grotesque state of affairs, and we should be obliged to agree with him. But we should have to reply that the periodic recurrence of this grotesque state of affairs is the price which we must pay for the enormously higher productivity of an economic system based on the logical carrying out of the principle of the division of labour. *The susceptibility of the economic process to disturbances of equilibrium grows with the degree of the division of labour, but so does the productivity of the economic system as a whole.* If we wish to avoid all disturbances of equilibrium, we must return to Robinson and his miserable standard of living; and if we do not wish to do that, we must be prepared to accept the greater instability of the economic system. That is the dilemma in which we find ourselves.

But the choice is no longer ours, since the increase in productivity due to the increasing division of labour, and the production technique made possible thereby, have led to a tremendous growth of population throughout the world, so that we cannot diminish the present degree of the division of labour without endangering the existence of countless millions of people and with it the existence of our social order—a very hard and sober fact which puts an end to all the dreams of economic romanticists and autarkists, but should also put a necessary damper on the usual optimistic appraisal of the growth of population and the equally common pessimistic view of the present decline in that growth.[9] In other words, the pronounced instability, combined with the top-heaviness and complexity, of our economic

[9] See W. Röpke, "Sozialökonomische, Betrachtungen über den abnehmenden Bevölkerungszuwachs," *Economist* (Dutch), September 1930, pp. 637-655.

system, based as it is upon a high degree of division of labour, are the high price which we must pay for an increased productivity, which has resulted partly in greater prosperity and partly in a tremendous increase in population; and as far as this latter result is concerned, we are no longer masters of our decisions but prisoners of our fate. This must be kept in mind in passing judgment on the growth of population in the past, as well as the decline of population in the present and the future. If the present world economic crisis is perhaps already a sign that the more and more stilted industrialism based on the division of labour has reached its limit, the falling tendency of the birth-rate of the present day and of the future certainly deserves special consideration in this connexion. If the growth of population in the past was a factor making for expansion and instability, the decline of population in the future will be a factor making for stability.[1]

The instability of our present economic system, due to the division of labour, is now being rendered still greater by the fact that with the increasing division of labour the technique of production has changed in such a way that the production of consumption goods is becoming more and more indirect, and follows the roundabout way of the previous production of producers' goods (machines and the products necessary for the construction of these machines, transport, building, &c.). The modern process of production is therefore not only based on the division of labour, but is an indirect process following circuitous and therefore time-absorbing routes. If the division of labour as such demands that the producers should estimate each other's demand for goods correctly, in order to avoid disturbances of equilibrium, the special production technique connected with this system of division of labour leads to the further necessity of correctly estimating also the demand for intermediate products, and the volume of the intermediate products must be kept in the proper ratio to that of the final products, and this despite the difficulties involved in the time-absorbing character of our production process. It is

[1] This view is opposed to the widespread belief that the slackening rate of population growth is a factor of growing instability, a belief which has already been dealt with in chap. i. It must be added, however, that this question constitutes a rather intricate problem in which there are many points with which we have to reckon. Thus it has been shown in chap. i that the slackening rate of population growth may bring a number of industries—especially agriculture—into grave difficulties. Another question is the political effect of the slowing-down of population growth which may also have economic consequences. In this respect, the slackening rate of population growth works in two directions. On the one hand, by reducing the pressure of population, it diminishes the strength of one of the most active forces behind modern imperialism. On the other hand, if the growth of population slows down faster in one country than in another, this may produce a feeling of insecurity in the first country, and thus poison the atmosphere of international politics.

easy to see that we have here a storm centre of the first rank. That it is indeed the principal disturbing factor, round which every adequate theory of crises and cycles must be built, will be shown later.

In so far as a *socialist state* maintains the present-day scale of the division of labour and the production technique described —and it will have no other choice, unless it immediately exterminates a considerable part of the population—it, too, must inevitably fall a victim to the disturbances which arise from the complexity of the economic system. It is therefore quite wrong to assume that a socialist régime would be able to bring about a state of affairs from which crises and disturbances were absent. Moreover, there is reason enough to assume that the bureaucratic, centralized organization of the socialist state, with its inevitable abolition of the pricing mechanism of the free market, would lose the indispensable measuring-rod of direction and economic calculation, and would finally provoke such violent disturbances that the further continuance of this system would prove altogether impossible. The reader should therefore be warned against drawing conclusions from a comparison of the present state of the Russian economy, which has only had a few years in which to test its staying power, with the present state of the capitalistic world, which has shown, over a period of more than a hundred years, not only that it is capable of continued existence, but that it is able to create prosperity, in spite of all its crises. That a socialist system may succeed in building electricity works and things of like nature in gigantic style causes us as little astonishment as the successful building of the Cheops pyramid. In both cases the only astonishing thing is the tremendous social pressure and the great capacity for restricting consumption, which make such investments possible, and the politico-social system which withstands such pressure.

Russia is to-day experiencing a boom which, like the boom in a capitalist country, is characterized by the forcing upwards of investment activity, and the prudent observer will wait and see what the final end of the Russian investment orgy will be. Russia cannot avoid the necessity of finding a new equilibrium of the national economy at the end of the investment period (which can be lengthened until the unhappy population are in a state of complete misery); and exactly as in the case of a capitalistic boom, this new equilibrium is all the harder to find, the steeper has been the rise of the investment curve. It will soon dawn upon us that the verdict of many people on the present Russian "prosperity" is as short-sighted and lacking in historical per-

spective as their verdict on the American " prosperity " of a few years ago, and that they fail to foresee the possible end, although the lack of foresight and perspective in this case is still more inexcusable, (1) because the American lesson lies behind us, (2) because the weak places in the Russian investment boom are still more obvious, and (3) because its violence can be plainly read in the simultaneous impoverishment of the Russian people while a capitalist boom usually leads to a *rise* of consumption. It does not show any very deep understanding of economics to assume that something is to be gained by replacing the ensemble of individual decisions, guided by self-interest, which is characteristic of capitalism, by the control of government authority. The contrary is true.

It is a striking fact that, in contrast to this view, popular opinion in many countries to-day takes it for granted that a Socialist Economy (which is, technically speaking, equivalent to a totally Planned Economy) has, whatever its other shortcomings may be, at least the advantage of being a cycle-proof economy. It seems that this opinion rests mainly on a kind of short circuit of reasoning. There is, of course, no denying the fact that, theoretically, an economic system is conceivable in which the typical disturbing factors of our present economic system are eliminated by a suitable management of the whole economic process in its every detail. To admit this is one thing, but it is quite another thing to jump to the conclusion that the magic word " Planning " suffices to open the door to this—in many respects rather dubious—paradise, promising to make the world safe for stability. It is not sufficiently recognized that " Planning " is only just a word vaguely indicating the general principle of Socialist Economy, and it is a safe bet that the overwhelming majority of our planners have probably no inkling of the gigantic problems which lie behind this word. In fact, Collectivist Economic Planning presents so many and such crushing difficulties that there is very little prospect of its coming anywhere near the productivity of our present economic system (even in its present deplorable state) and of its guaranteeing an harmonious balance of the economic body.[2] The socialist economic system will in all probability lead both to diminished productivity and to a greater lack of economic balance, and these two effects are closely interrelated.

As it is, the economic disharmony which promises to

[2] The best book on these questions, accessible to the English reader, is now *Collectivist Economic Planning* (ed. by Professor von Hayek), 2 vols., London, 1935. Of special interest therein is the treatment, given by Professor Brutzkus, of the problems and the experiences of Soviet Russia.

become a chronic ailment of the Socialist Economy will show this marked difference from the temporary disharmony of the Capitalistic Economy, that it will not become manifest at the place of its origin but will be shifted from the economic apparatus on to the shoulders of the consumers. In other words, the original tumour will breed, as it were, metastases in the more distant parts of the economic body. There will be no more bankrupt firms, and, given a certain inventive faculty for disposing somehow of embarrassing masses of human beings, there will not even be unemployed as we know them to-day. But that, of course, does not mean that we have got rid of the innate economic disharmonies. What it means is rather that we shall have destroyed both the machinery registering the place of their origin and those forces which, under our present economic system, work automatically to do away with them. The economic machinery continues to " function " in a way, but the population, besides being deprived of elementary personal liberties, will have to bear the consequences of the economic disharmonies by being worse off than before. " Crises " in the Socialist State of perfect Planning will be characterized, then, by the fact that people will suffer by them as consumers rather than as producers while the economic apparatus will show, at best, the outward appearance of being in some sort of order. But the latter, as already indicated above, is not an advantage but a great disadvantage as compared with capitalism. Hence the result we are most likely to get will be as follows: The socialist system of Total Planning will probably succeed, in a very short time, in turning the present paradoxical " poverty amidst plenty " into the more respectable " poverty amidst shortage "; but as the innate economic disharmonies will be a lasting feature of this system, the poverty is bound to become just as chronic as the corresponding disharmonies. What we get in exchange, then, for capitalism with all its shortcomings is poverty and disharmony being greater than ever before and becoming chronic into the bargain—and this without the economic, political, and personal liberties for which even the poorest unemployed in the capitalistic countries will regretfully yearn when it is too late. It is perhaps pertinent to add that the colour of the political flag under which the system of Total Planning is launched makes, of course, absolutely no difference.[3]

It is hardly possible to over-emphasize the fact that every

[3] The problem of the Dynamics of the Socialist Economy will be resumed later on from a more theoretical point of view. Unfortunately, it has not, up to the present, been adequately dealt with in economic literature. Some remarks, running somewhat parallel to the argument presented here, may be found in Professor Aftalion's book *Les Crises Périodiques de Surproduction*, vol. 2, pp. 405-411.

economic system, no matter how organized, which is based on a very high degree of division of labour and on a technique of production as complicated as the present one, is bound to be exposed to all sorts of dynamic disturbances. On the other hand, however, it would not be defensible to deny that the regulating principle of the capitalistic economy—the fundamental freedom of individual decisions and economic acts, which is bound up with the private ownership of the means of production and with competition—leads on its side to specific disturbances, which could perhaps be avoided by a modification of this regulating principle. It is indisputable that competition can lead producers astray into economic conduct which is guided more by the behaviour of the competitors than by considerations of the general economic interest. In this way the boom, like the depression, can easily assume an exaggerated form, and so to-day a considerable weakness of our individualistic competitive system is observable in the fact that no single entrepreneur believes that he dare take on new investments (a fact which explains the duration and acuteness of the present depression) as long as investments do not show a *general* tendency to rise.

In addition to the division of labour, the pronounced and growing importance of the production of producers' goods, and the special regulating principle of our economic system, there is the fact that our economy rests upon the use of *money* and *credit*, a further very serious source of trouble. Although it is an indispensable simplifying method to represent the complicated economic process of to-day as a procedure in which money is only an auxiliary and ultimately goods are exchanged for goods, it would be false to ascribe a merely passive rôle to money in economic life. On the contrary, changes in the volume of money (or of credit) and in the velocity of circulation of money can call forth changes and disturbances in the economic process, which are so important that one group of economic theorists (the adherents of the so-called monetary theory of the cycle) see the ultimate cause of economic fluctuations in happenings within the money and credit sphere.

Furthermore, it is important to note that *freedom in the application of money income* is indissolubly bound up with the regulating principle of our economic order. This freedom means, on the one hand, freedom of the individual to determine how much of his income he shall spend and how much he shall save, and in what way he shall save, and, on the other hand, it means his freedom to choose the goods on which he shall spend his money. As the economic equilibrium can only be maintained if the component

parts of production correspond to the application of the individual incomes (while this application can be more quickly changed than the corresponding components of production), it is obvious that this freedom to consume and to save is a further source of disturbance of the first order.

Finally, our economic system is, like every other, exposed to the disturbances which force their way into the economic process from without, either through nature or through politics. Particularly important in this connexion are the fluctuations of harvests, by reference to which attempts have been made to explain crises and cyclical fluctuations. But none of the representatives of this *climatological theory* of the cycle has succeeded in fully proving his contention.[4] The same is true of population changes, which doubtless represent a dynamic factor of great importance, but are not sufficient to explain crises and cycles.[5]

§ 11. Over-production.

The paradoxical nature of the crisis is characterized by the fact that production is curtailed in every direction, and there is no work anywhere, while so far as the economic position of millions of people is concerned, we could really be doing nothing better than getting every ounce of product out of men and machinery. Curtailment of production follows curtailment, dismissals of workers follow dismissals; machines and rationalization have made production easier all along the line during the previous boom, and have rendered human labour superfluous. In vain do we look round for new and profitable possibilities of production, which might reabsorb the unemployed. What is easier, then, than to assume that the cause of the crisis is general over-production, developed in the preceding boom—in other words, that the total production has outstripped the total consumption, and that the crisis must therefore be overcome by a reduction of production (curtailment of work, suppression of rationalization, and restriction of output). As a matter of fact, this is the most popular

[4] The first representative of this theory seems to have been the astronomer Herschel (Philosophical Transactions of the Royal Society of London, 1801). It was he who gave Jevons the idea for his theory which connected up the periodicity of sunspots with the fluctuations of harvests and with the trade cycle (*Investigations in Currency and Finance*, London, 1884). To the same school belong: H. Dietzel, article "Ernten" in the *Handwörterbuch der Staatswissenschaften*, 3rd ed., and H. Moore, *Generating Economic Cycles*, New York, 1923. The most has been made of this argument recently by John H. Kirk, in his very interesting book, *Agriculture and the Trade Cycle, Their Mutual Relations, with special reference to the Period* 1926-1931, London, 1931. See also § 2 above.

[5] Attempts have been made in this direction by L. Pohle (*Bevölkerungsbewegung, Kapitalbildung und periodische Wirtschaftskrisen*, Göttingen, 1902), and by M. B. Hexter (*Social Consequences of Business Cycles*, Boston and New York, 1925).

crisis theory at all times of crisis, and to it there corresponds the contraction of production which the producers, in the difficult position in which the crisis places them, undertake, or are forced by the government to undertake, all along the line. At such times men's thoughts and actions are dominated by a "fear to produce."

It is an indisputable fact that a general slump, which does not permit of the scale of production reached in the boom being maintained, sets in during the crisis, and it is equally indisputable that this general slump is the result of the total demand suddenly falling behind the total supply. But let us make sure what this means and what it does not mean.[6] Under no circumstances can it mean that the *cause* of the general slump is to be sought in the fact that production has outstripped consumption and that too many of all goods at once are being produced. Closer consideration shows that there is no logic in such a view, for in relation to what can too many goods be said to be produced? Surely not in relation to wants, *i.e.*, to the willingness-to-consume, for that would completely upset the idea of all economy as an activity concerned with the overcoming of the eternal scarcity of goods, and cannot be seriously considered. The standard of living among the masses, measured by what is considered as necessary to-day among the upper strata of society, is still at such a miserably low level that a hundred times the production hitherto attained would scarcely suffice to bring the well-being of the masses up to the level of the upper classes. Until that is done there is not the slightest sense in disputing that all productive forces at our disposal must be employed in the fight against the scarcity of goods. We are not really at a loss to know what to do with our productive forces as long as we do not live in Lubberland.

Taking all in all, therefore, we cannot have too many workers, but only too few; we cannot have too many machines or too much rationalization, but only too little. But are the millions of unemployed not a shattering proof of the fact that we have too many workers? The best answer to this question is not long theoretical arguments but the following simile. The struggle against

[6] Literature on this subject: J. B. Say, *Traité d'Economie Politique*, first published in Paris, 1803; L. Miksch, *Gibt es eine allgemeine Ueberproduktion?* Jena, 1929; W. Röpke, "Kredit und Konjunktur," *Jahrbücher für Nationalokonomie und Statistik*, March-April 1926, pp. 256-262; A. Aftalion, *op. cit.*, vol. 1, pp. 274-286; vol. 2, pp. 261-351; Hans Neisser, "General Overproduction," *Journal of Political Economy*, August 1934, pp. 433-465. Somewhat similar Anti-idiotica, as used in the text above, are administered by Professor Cannan, in his paper "Not Enough Work for All," *Economic Journal*, September 1932 (reprinted in his book, *Economic Scares*, London, 1933).

the scarcity of goods which we are condemned to wage for all time, and always with inadequate forces, can be compared to the struggle of the German army against the superior numbers of their opponents during the World War. Every soldier was used in that struggle, and the Germans would have been glad if they had had at their disposal more millions of men, or of tanks to replace soldiers, such as their enemies had. Nevertheless it happened, owing to difficulties of organization which could scarcely be avoided in such a huge and complicated structure as the German army, that from time to time isolated troops were kept out of action, while at other places on the front they were sorely needed. Thus a scarcity of soldiers in general was here accompanied by a superfluity of soldiers at certain isolated places. No one in possession of his senses would have concluded from this that these soldiers who were temporarily kept out of action should have been sent home as superfluous or that the " work " of the army could have been " spread " by lengthening the men's leave or replacing guns by halberds and pikes. The juxtaposition of too little in general and too much in particular was in this case so obvious that it could not escape even the densest observer. And yet most people find it extraordinarily difficult to believe that in the economic system it is fundamentally the same. This is because money and the division of labour, which characterize the particular method used by our economic system in its fight against the scarcity of goods, have drawn a thick veil over the connexion between the two, the piercing of which requires a special mental effort and, above all, the courage to reduce things to their simplest terms.

An economic crisis (that of to-day like those of the past) can therefore not be interpreted as a general over-production of all goods at once, a surpassing of the possibilities of consumption by the possibilities of production, but only as a lack of proportion between the different lines of production, in short, as a functional disturbance within the highly complicated modern exchange economy. The disparity between the goods at our disposal and our unsatisfied wants is more obvious than ever, but the wheels of the machine which delivers the goods do not fit together properly at times of crisis.

According to the logic of the over-production myth, the total volume of production in question is a more or less fixed quantity, to be shared by the people, with the result that each watches jealously to see that the others do not receive too large portions. A further result is that in international exchange the individual States strive by tariffs or other hindrances to imports, to preserve as large a portion as possible of the limited volume

of production for their own national economy. But how is this production quantum to be determined? Apparently by the fact that there is a fixed limit to the purchasing power needed to buy the products. But the incomes with which the goods produced are bought come ultimately from the production itself, and the total sum of the incomes is also determined by the total sum of the production. If we follow out these relationships to their logical conclusion, we find that production is not determined by consumption, but consumption by production. That is to say, there is no limit to profitable production as a whole (*i.e.*, apart from the question of the correct composition of the total production), since the saturation point of human wants is immeasurably far off, but there is, unfortunately, a limit to consumption, which is determined by the utmost we can produce with our limited forces and means. Anything else is absurd: the fear of production is absurd, as is the view that we must constantly be prepared to "spread" the volume of production; and equally absurd is the campaign against all efforts to increase productivity.

The over-production myth often takes the form also of connecting up the level of unemployment with the excess of the number of workers over the total amount of profitable production, and thus of interpreting unemployment as a symptom of *over-population*. But this idea that the number of unemployed expresses the degree of over-population of a country is equivalent to the erroneous conception that the total sum of the production to be undertaken is a given fixed quantity, which, beyond a definite number of the population, is not sufficient to occupy everyone. This conception is contradicted not only by all the theoretical arguments which have already been levelled against it, but also by the fact that the world crisis of to-day is afflicting rich and poor, thickly populated and thinly populated countries, with equal force. Unemployment in France—which, in the first phase of the world crisis, many believed to be safe from the scourge of unemployment as a country not suffering from over-population—also later reached considerable proportions corresponding to the degree to which France was affected by the world crisis. Finally, if we were to decrease the population of Germany by deporting twenty million people, taking care to leave unchanged the relative numbers of workers in the various branches of economic activity, we should not be one step nearer solving the problem of German unemployment, but we should find new confirmation of our thesis that it is a question of the qualitative factor, of the functioning of the apparatus, and not of the quantitative factor or the size of the economic apparatus.

That all these considerations are old-established propositions of political economy is shown by the following passage from Ricardo's *Principles of Political Economy and Taxation* (Chapter XXI)—

> Productions are always bought by productions, or by services; money is only the medium by which the exchange is effected. Too much of a particular commodity may be produced, of which there may be such a glut in the market as not to repay the capital expended; but this cannot be the case with respect to all commodities; the demand for corn is limited by the mouths which are to eat it, for shoes and coats by the persons who are to wear them; but though a community or a part of a community may have as much corn, and as many hats and shoes as it is able, or may wish to consume, the same cannot be said of every commodity produced by nature or by art. Some would consume more wine if they had the ability to procure it. Others, having enough of wine, would wish to increase the quantity or to improve the quality of their furniture. Others might wish to ornament the grounds or to enlarge their houses. The wish to do all or some of these is implanted in every man's breast; nothing is required but the means, and nothing can afford the means but an increase of production. If I had goods and necessaries at my disposal, I should not be long in want of workmen who would put me in possession of some of the objects most useful or most desirable to me.

An indirect disproof of the over-production myth may be given as follows. If it were correct and not merely a myth, we should have to conclude that, during the depression production all along the line must be pushed back to the level of consumption, that is to say, to the market opportunities. And it is just this conclusion that is drawn by every single entrepreneur faced by a glutted market when, in the case that a fall in costs does not take place to the necessary extent, he tries to reach a new equilibrium at a lower level by diminishing his production or by suspending his business altogether. Nobody can reproach him for this since he is compelled to do it by the circumstances. But if everybody acts similarly and has to do so out of individual economic necessity, does this remedy the malady as a whole? Undoubtedly not, so long as the diminution of production in one place does not make room for an extension of production in another. The " fear to produce " may be well founded in the individual case, but, in so far as everybody gives way to it, the effect is senseless because it runs directly counter to the purpose. What in fact happens is that the curtailment of production leads to the further destruction of purchasing power simply by virtue of the interdependence of production and the creation of purchasing power, an interdependence which we must continually stress. So long as no new production starts up, the economic system is caught,

via the universal practice of curtailing production, in a cumulative decline in which the original disequilibrium between supply and demand is progressively enhanced on an ever lower level. Consequently general over-production cannot be the cause of the depression since a diminution of production does not only not overcome it but even makes it worse.

It should be beyond all doubt that a general over-production relative to the desire and the capacity to consume is inconceivable. When we consider that purchasing power is created afresh with production, it follows furthermore that it is equally impossible to produce too many of all kinds of goods at once in relation to purchasing power. It is inconceivable that all producers can have produced an excess and that they cannot mutually exchange the surpluses provided that they have adjusted their production correctly to the corresponding demand. Let us assume an isolated economy consisting of two producers, of whom one (A) produces only bread and the other (B) only shoes. The equilibrium of the system depends on whether A and B estimate correctly each other's demand for bread and shoes respectively. If A, for example, miscalculates in this connexion, then a part of the bread he produces will be unmarketable. The total supply in this miniature economic system exceeds by so much the total demand. Over-production is undoubtedly present, but not in the sense that too much of all imaginable goods has been produced—B in our example would gladly have accepted a roast chicken—but because not the right kind of goods has been produced. But if this is the case, the equilibrium of the economic system can be seriously disturbed and a general glutting of the market occur. The essence of all these considerations is this: A depression is a time of a general glutting of the market, which can be described as the exceeding of total demand by total supply and expresses itself in a general price fall. But this glutting of the market is caused not by a general over-production (of all conceivable goods) but by a disproportionality disruptive of the equilibrium of the economic system in the composition of total production, in other words a partial over-production, which by reason of the mutual interdependence of all producers finally leads to a glutting of markets, that is, to a lagging of total demand behind total supply extending to all branches of the economy.

This elementary consideration must form the starting point for any adequate theory of cycles and crises. It is the task of this theory to show how a disproportionality destructive of equilibrium comes about. The rejection of the over-pro-

duction theory does in no way imply that the crisis is unobjectionable. It simply dismisses an impossible explanation. To those who are hit by the depression it may be quite indifferent whether we call it "general over-production" or "general glutting of the market"; it loses none of its gravity thereby. Neither should it be imagined that the partial over-production (disproportionality), which leads eventually to the general glutting of the market, still manifests itself in the crisis in such a way that those who produce too much find their counterpart in those who produce too little. The disproportionality develops in the upward swing of the cycle, but in the depression it is in vain to look round for branches of production where too little is being produced. The foregoing analysis will have made it clear why this is so: the disruption of the equilibrium in the economic system has disturbed the process of exchange all along the line, a disturbance in which the whole of production is involved. The requisite additional production has become a mere latent possibility which only comes to light with the restoration of equilibrium.

All these conclusions are of the utmost practical importance because without them we are absolutely unable to find our way through a mass of complexities. To the alarming question as to what shall ever become of the millions of unemployed and of the unused plant of rationalized producing units when all markets are glutted and every occupation and branch of production is overcrowded, the answer can only be: The market for the products of these at present unused reserves of productive resources will present itself when those who are at present pushed out of the productive process have, by their reabsorption, again become buyers, and that will be the case when the equilibrium of the system has been restored. The unused reserves of productive resources correspond in the same measure to unused reserves of purchasing power—this is the lesson that we have learned from the refutation of the over-production theory.

The restoration of equilibrium creates purchasing power. No discerning person will surely believe that the level of production at which we are now working constitutes the magnitude to which we are condemned in the long run, that the paradox of the parallel existence of highly productive but idle plant and millions of unemployed men willing to work and at the same time hungry for goods will remain permanent, and that the millions which we have spent on the modernization and rationalization of our productive equipment were wasted. In every depression the typical popular feeling is that the depressed state of the

economic system has come to stay for all time, just as in the boom it is typical of popular feeling to forget that on the fat years lean ones follow.

But calm consideration should convince even the most resigned pessimists that our permanent economic fate should not be confounded with the passing poverty in which the crisis, to the extent of the decline of production, has plunged us, and that once the " fear to produce " has been overcome by the reattainment of equilibrium it will turn out that we are much richer than we believe to-day when we are deprived of the production of the unemployed and of the idle equipment.

Furthermore, the recognition of the untenability of the overproduction theory does us the inestimable service of guarding us, in times of crisis, against measures which are next to useless even in the most favourable case, and which usually only protract and aggravate the malady, since they hinder the reattainment of equilibrium. All those measures, much discussed in all countries, such as spreading the work, labour service, relief work, the campaign against " double earnings," and the raising of the school leaving age, must be judged from this angle. All these measures are of a purely symptomatic nature, which may make the effects of the crisis more bearable but may harbour the danger of delaying the recovery from the depression. Their true nature can be realized if we return to the military analogy developed above and recall that it may seem absolutely necessary to " occupy " the soldiers who are temporarily out of action by pots-and-pans inspections and other means specially devised for this purpose, so as to protect them from demoralization. But it has also to be remembered that nobody in the war was struck by the idea that because we were somewhat at a loss to know what to do with a section of our men we should make this " occupation " an end in itself and a permanent institution. On the contrary, everything was done to avoid disturbances in the military organization and to get the troops that were held up back into the fighting lines. Here, just as in the economic sphere, the counsel of reason is the restoration of equilibrium.

We have by now already acquired the first essentials for a critical examination of *rationalization*, the aversion to which to-day overshoots the mark just as much as did its uncritical exaltation a few years ago. It is easily forgotten that even if the word is new the thing itself is not. It is as old as the history of mankind. Men have always striven to raise the productivity of their labour by means of tools, machinery, and the most efficient organization, because they have never been satisfied with the extent to which they have been supplied with goods. It was in this sense that we declared above that we cannot have too much but

always only too little rationalization. This proposition does, however, not exclude, of course, the possibility that the direction, extent, and tempo of rationalization may have been wrongly chosen so as to lead to a disruption of the proportionality in the structure of production. The effect of this in its social application is that the labour displaced in the first instance by the rationalization remains unemployed for a long time. Undoubtedly effects ensue from the rationalization which lead eventually to a reabsorption into the productive process of those rendered unemployed (increased employment in the machine-making industries, cheapening of the products resulting in an increased demand either for these or for other products to which the purchasing power set free by the price reduction, or under a monopolistic price policy the increased purchasing power of the entrepreneur, is applied). But this process of compensation requires time and this all the more the more inelastic the economic system has become through wage rigidities or through the inelasticity of the credit system.[1]

So it is that the present ossification of our economic system by all kinds of rigidities has rendered the process of absorbing displaced workers much more difficult. But this ossification is just that development with which most critics of the powers of adaptation of capitalism are heartily in agreement.

§ 12. Under-consumption.

The discussion of the possibility of a general over-production brought us to the conclusion that we must substitute for the untenable proposition of a general over-production the concept of disproportionality, a concept to which we shall often have to revert. The further question now arises whether the crisis can perhaps be explained by the fact that in the course of the upward swing of the cycle a deficiency of consumers' purchasing power is somehow introduced, rendering one part of the production unsaleable at prices covering costs. This question has repeatedly been given an affirmative answer especially by the socialists who contend that the unequal distribution of income to the disadvantage of the masses—an, as they believe, inherent failing characteristic of capitalism—is responsible for the deficiency of purchasing power which brings in its train over and over again a breakdown of production (as, for example, Rodbertus, and in a certain sense also Marx and his disciples). While the socialistic type of Under-consumption Theory can be traced back to writers of the first half of the nineteenth century, there has sprung up during the

[1] Among the large number of publications dealing with this question mention should be made of: Alvin H. Hansen, "Institutional Frictions and Technological Unemployment," *Quarterly Journal of Economics*, August 1931 (reprinted in his book *Economic Stabilization in an Unbalanced World*, New York, 1932.) For a different point of view, see Emil Lederer, *Technischer Fortschritt und Arbeitslosigkeit*, Tübingen, 1931, and A. Kähler, "The Problem of Verifying the Theory of Technological Unemployment," *Social Research*, November 1935.

last decades another variety based on alleged defects of the monetary mechanism of our economic system. Though both types have much in common, it seems preferable to keep them separate, and we shall call the first type the *Distributional Under-consumption Theory* and the second the *Monetary Under-consumption Theory*. The latter will be discussed separately at the end of this section.

So far as under-consumption theories assume the possibility of a general over-production, they do not merit any further discussion here. Moreover, their popular form, which starts from the assumption that the entrepreneur pays the labourers too low wages and brings about thereby a deficiency in the total demand, needs no lengthy disproof. For it is obviously forgotten that to the minus in the purchasing power on the side of the worker there corresponds a plus in the purchasing power on the side of the entrepreneur so that nothing is changed in the total amount of purchasing power. On the same reasoning, a drastic raising of wages in the upward swing of the cycle without an increase of the quantity of money and credit, would likewise only take place at the expense of the non-wage incomes and could therefore not prevent the breakdown. It is another question whether it hastens or retards it.

This same argument proves also the falsity of the widespread purchasing-power theory of wages and national welfare. This theory demands that the purchasing power of the masses should be raised in order to ensure sufficient buying power on the market for the continuous increase in national output made possible by mass-production and machinery and, conversely, that increased purchasing power should provide beforehand the prerequisite for the increase of production, so that the concentration and increase of general demand may increase the general welfare. If we pump purchasing power into the hands of the masses without treading the path to inflation, there must occur a diminution in the incomes of entrepreneurs, so it is only the composition of demand and not its total amount that is changed. As in the over-production case, the question arises here also whether the composition of demand as determined by the distribution of income and its changes, is not an important factor for the explanation of disturbances of economic equilibrium. This is indeed a question worthy of discussion and is the one point which gives scientific rank to the modern varieties of the under-consumption theory.[2] That the

[2] Modern representatives are, for example, J. A. Hobson, *The Industrial System*, London, 1909; E. Lederer, "Konjunktur und Krisen," *Grundriss der Sozialökonomik*, part iv, 1, Tübingen, 1925, from p. 354; W. T. Foster and W. Catchings, *Profits*, Boston and New York, 1925; R. Luxemburg, *Die Akkumulation des Kapitals*, Berlin, 1913; Erich Preisser, *Grundzüge der Konjunkturtheorie*, Tübingen, 1933.

socialists particularly should have seized on it in order to demonstrate the inherent defectiveness of the capitalist economy is all the more understandable inasmuch as here was presented the unique possibility of combining the criticism of the capitalistic organization of production with a still more vehement criticism of the capitalistic organization of distribution. The under-consumption theory is equally fitted to lend support both to a pessimistic prediction of the power of duration of capitalism (as with both Marx and Rosa Luxemburg) and to the recommendation of a change in the distribution of income in favour of the working classes. It is for this reason popular and ineradicable. So much the more seriously should its justification be tested.

Something must be said in passing about the development of the Marxian under-consumption theory by the *Neo-Marxists* (Rosa Luxemburg, F. Sternberg, &c.). Karl Marx had assumed that, owing to the inherent disharmonies of capitalism (progressive concentration and accumulation of capital by the capitalists and progressive destitution of the proletarian masses), economic crises would become more and more severe in character, leading in the end to the final collapse of capitalism. To the great discomfort of the Marxian theorists, however, the development actually taking place up to the Great War went absolutely contrary to this prophecy, crises and depressions not growing but markedly declining in severity. In order to save the central point of Marxism, *i.e.*, the idea of the self-destruction of capitalism, in the face of this altogether distressing development, Marxists had to discover circumstances to account for the postponement of the day of reckoning. For this purpose, the phenomenon of modern *imperialism* came in very handy. All one had to do was to assert that the life of moribund capitalism had been prolonged by imperialism easing the pressure of over-accumulation by opening up new markets in the non-capitalistic countries overseas. But this could not go on for ever. The supply of those countries would soon become exhausted, and with decreasing opportunities for expansion, the scramble for colonies, protectorates, and " zones of influence " would involve the capitalistic countries in political conflicts until the capitalistic world would blow up in the smoke of a world war. In this way quite a number of birds were killed with one stone: the philosophy of the doom of capitalism was resurrected, modern imperialism was stigmatized as the inevitable result of capitalism, and, as a final by-product, an explanation for alternating booms and depression was found in the ebb and flow of imperialistic expansion. This whole argument may sound rather captivating, but when we look at it more closely it reveals itself as a rather vulgar kind of faulty reasoning; for, supposing that a problem of capitalistic accumulation really exists, it is not conceivable that imperialistic expansion into the undeveloped regions of the globe can ease the pressure of over-accumulation. To realize this, one has only to examine how the capitalistic countries dispose of their " surplus production " by exporting to undeveloped countries. We have then to contemplate the following possibilities:

1. The additional export may be paid for immediately in cash so that the exporting country comes into possession of more gold or foreign

exchange. These may be used: (*a*) For augmenting the volume of currency, *i.e.*, other things being equal, for inflation. Besides the fact that this—*via* the production and exportation of goods and the fight for foreign markets—is a rather cumbersome and roundabout way to start inflation, it is difficult to see how the problem of over-accumulation can be solved in this way. On the contrary, inflation is, as we shall see later, sure to lead to a real and not merely imaginary over-accumulation, so that imperialism would be apt to intensify over-accumulation rather than to ease it. (*b*) To pay for additional imports, with the sole result that home goods are now replaced by foreign goods, without the problem of surplus production being brought any nearer to solution.

2. The additional export may be made on credit. So long as nothing is paid for interest or amortization, the exporting country has, indeed, got rid of the surplus production, but in no other sense than as if it had given it away or destroyed it. If this is the end of the matter, it becomes again legitimate to ask whether such a dangerous and roundabout way, with its political entanglements, is necessary in order to get rid of embarrassing goods without anything to show for it.* But as soon as payments are being made for interest and amortization, this case differs in no way from the first case where the additional exports were paid for immediately. It has to be remarked, moreover, that if additional exports on credit (foreign investments) really offer a way out of the plight of over-accumulation, there is no reason why the same should not be done, and with less trouble, inside the country.[3]

We may conclude then, that imperialism offers no solution of the problem of over-accumulation, whatever this may mean. If we should accept for the moment the crude view that increasing productivity leads capitalism into serious trouble, we should expect that imperialism would be apt to accentuate the problem of glutted markets rather than to alleviate it since the intensification of world economy consequent on imperialistic expansion works clearly in the direction of enhancing general economic activity. This conclusion, incidentally, throws some sidelight on the question as to whether the problem of over-accumulation is a real one. For it is a strong presumption against the existence of this problem that up to the Great War capitalism developed on a gigantic scale and without any dramatic disturbances, while the parallel imperialistic policy of the Great Powers was no real remedy for the disease of over-accumulation. So long as no other factors can be pointed out in explanation of the healthy aspect of capitalism before the war, it must be assumed that the disease of over-accumulation—at least as a chronic disease of capitalism—is imaginary rather than real.

Let us take as the central idea of that form of the distributional form of the under-consumption theory which is capable of scientific

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[3] This remark has some bearing on the present situation. For there are to-day many who, while opposing the idea of an internal expansion of credit, believe in fighting against the depression by using the idle plant at home for the economic development of backward countries, without seeing the identity of the two cases. So far as the real nature of the economic process is concerned, it makes really no difference whether the unused capacity of the cement industry is used for slum-clearance at home or for building a water-dam in Tibet, though the one scheme may be preferable to the other for a number of other reasons. It may happen, however, that the water-dam project in Tibet might attract entrepreneurial initiative at a time when equally attractive objects for investment at home are wanting. This is the only small vestige of truth in the theory of Economic Imperialism.

discussion, the idea that the share of the workers' income in the total national income is too small and the share of the entrepreneur's income too large to secure equilibrium in the economic system. Then the objection immediately presents itself that the crisis is preceded not by a slack time but by a boom in which the income of the worker rises along with the total income. In the same vein it must be objected that, contrary to what the under-consumption theory would lead us to expect, it is the consumers' goods industries which are usually the least and the last affected by the depression, as has been witnessed also during the present depression. This is really fatal to the idea that it is the appearance of a deficiency of consumers' purchasing power which is the factor bringing the boom to an end.

The under-consumption theory could only satisfy these objections if it were able to show that a dislocation of the income stream *causes* the upward swing of the cycle as well as bringing about its break-up. Only then would it be an acceptable theory of cycles and crises. Such a demonstration can, however, hardly be carried out on the basis of the under-consumption theory. Even if it were shown that the occurrence during the boom of a worsening of the income distribution to the disadvantage of the masses leads to a forcing upwards of capital accumulation (oversaving), supplied mainly out of the incomes of entrepreneurs, which finally disrupts the economic equilibrium, the question still remains unanswered how the boom is started. The conclusion consequently is, that the under-consumption theory neither grasps nor explains the real problem of economic fluctuations. Nevertheless, we must acknowledge that it has served to contribute to the explanation of the mechanism of the boom. For it cannot be denied that, in the course of the boom, there occurs a dislocation in the structure of prices, incomes, and costs which by reason of the lag of important cost elements behind the rise in selling prices of goods, raises the average profits of entrepreneurs, and so enhances cumulatively the original tendencies to increased activity. Chief among these cost elements, apart from interest, are wages. In so far as this over-expansion in the boom—which represents an over-expansion of real capital—contains within itself the germ of the later breakdown, the dislocation of the price and income streams occurring in the boom is an important link in the explanation of the boom and the crisis. In other words, if the ups and downs of trade cycles are to be explained by an increase of investment—that is, real capital accumulation at the expense of consumption—taking place by fits and starts and therefore associated with shocks, then

we must welcome every indication of a circumstance which helps to explain this periodic concentration and acceleration of capital accumulation, and the modern under-consumption theorists supply us with such an indication. There exists in fact a close connexion between the fundamental ideas of the under-consumption theory and the over-capitalization doctrine presently to be described, even though this connexion may be found difficult to acknowledge in face of the unscientific formulation of the popular variety of the under-consumption theory.

The inertness of contractual incomes, which explains the lag during the boom, leads in the depression to the reverse, so that these incomes, and especially wages, tend to follow the fall in commodity prices only very hesitatingly resulting thus in a fall in the average level of business profits. The same factor which intensifies the boom and the crisis, intensifies the depression likewise, but as a rule no mention is made of this by the more tendentious formulations of the under-consumption theory.

It might easily be concluded from our concession to the fundamental ideas of the distributional under-consumption theory that it would be a good trade-cycle policy to push wages up as early and as vigorously as possible in the boom period as a means of avoiding an over-expansion. This conclusion is, however, unjustified since we interpret the change occurring in the distribution of income in the boom not as a cause but only as an intensifying factor accompanying the boom. A forcing up of wages can, therefore, hardly be the appropriate means of combating cyclical fluctuations. The danger is rather that in view of the extraordinary complex nature of the cycle, a forcing up of wages contains within itself a new element of tension expressing itself in an augmentation of unemployment. It is sufficient to point out that a forcing up of wages during the boom gives a dangerous incentive to the over-extension of rationalization, as was undoubtedly the case in Germany in recent years. This in part explains also the extraordinary phenomenon that during the last boom in Germany, unemployment stubbornly remained at a high level. Finally, it is to be borne in mind that to a policy of wage-raising in the boom there must correspond a policy of wage-lowering in equal measure in the depression and that the lowering of wages is all the more difficult the more vigorously they have been raised previously. The essential truth in the distributional under-consumption theory does on no account give any clear-cut criterion of a trade-cycle policy for wages.

To complete this section, some special remarks seem necessary about that variety of under-consumption theories which I termed *Monetary Under-consumption Theories.* As this term indicates, the deficiency of consumers' demand, which is the gist of every under-consumption theory, is here sought not primarily in the unequal distribution characteristic of capitalism but in the monetary machinery of capitalism. Both types of under-consumption

theory work with the idea of a continuous deficiency of consumers' demand brought about by a defect inherent in the capitalistic mechanism, but while the distributional school stresses the unequal distribution of incomes as the fatal defect, the monetary school emphasizes the defective flow of purchasing power. Accordingly, the remedy prescribed by the first school is a more equal distribution (if possible within the bounds of capitalism), while the remedy prescribed by the second school is—to put it bluntly—inflation. The atmosphere of the first school is provided by socialists or mildly anti-capitalistic reformers, while that of the second school is dominated by monetary schemers without any marked anti-capitalistic ardour.

As an extreme example of the monetary school, most familiar to English readers, we may cite the theories of Major C. H. Douglas —as formulated especially in his books *Economic Democracy* and *The Monopoly of Credit*. In the opinion of this author, the economic machinery as constructed to-day produces a deficiency of purchasing power arising from the fact that only a part of the cost incurred in the production of commodities goes to the consumers as income, so that current income is not able to buy current output at cost prices unless the gap is filled up by an additional issue of money. As has been shown by various writers, to which the reader may be referred,[4] this view reflects a serious misconception of the economic process in general. No "deficiency" of purchasing power can occur as long as the economic system is in a state of equilibrium, but Major Douglas and the numerous other writers advancing similar views fail to show, in more than a vague manner, how equilibrium can be destroyed.

Apart from these more radical heretics, most theories of this monetary school of under-consumption amount more or less patently to the contention, already mentioned in our treatment of the distributional school, that there is a tendency inherent in our economic system towards over-saving. In contrast to the distributional school, the monetary school presents this view in terms not of maldistribution of income but of monetary maladjustment, so that the remedy offered is also a monetary one, *i.e.*, inflation.[5] It is the process of saving which puzzles these writers. They do

[4] *Cf.* E. F. M. Durbin, *Purchasing Power and Trade Depression, a Critique of Under-Consumption Theories*, 2nd ed., London, 1934 (a book with which the present writer is especially in sympathy); L. Robbins, "Consumption and the Trade Cycle," *Economica*, November 1932; H. T. N. Gaitskell, "Four Monetary Heretics," in *What Everybody wants to know about Money*, ed. by G. D. H. Cole, London, 1933.

[5] An outstanding example is to be found in the numerous books of Messrs. Foster & Catchings (*Profits*, 1925; *Business without a Buyer*, 1927; *The Dilemma of Thrift*, 1928, and others).

not deny that saving is necessary for adding to the productive wealth of society, but since saving means essentially non-consumption, thus creating a deficiency of consumers' demand, it is believed that it tends to defeat its own final purpose, *i.e.*, the better satisfaction of consumers' wants, and thus to provoke depression—unless the monetary mechanism is so constructed as to take care of this " dilemma of thrift " by providing additional purchasing power. There are many defects in this argument, as has been abundantly shown by a number of critics.[6] For instance, it is commonly overlooked that new productive investments, made possible by saving, reduce the unit cost of production so that, to this extent, the prices of consumers' goods can fall without involving producers in serious difficulties. The gravest defect of most of these theories, however, seems to be the confusion of a static with a dynamic point of view. In other words they fail clearly to distinguish between the effects of saving *per se* and the effects of an increase in the *rate* of saving. As regards the effects of saving *per se*, *i.e.*, a uniform or even gradually increasing rate of saving, it must be vigorously denied that it can disrupt economic equilibrium. In this " static " sense there certainly exists no problem of over-saving with reference to a maximum which cannot be exceeded without destroying economic equilibrium. On the other hand, it cannot be denied, however, that a sudden and marked increase of the rate of saving presents a real problem. We shall deal with this in § 14, but it must be said at once that the inflation cure, in which the reasoning of the monetary under-consumption theory invariably culminates, is bound to provoke just that sudden increase in the rate of saving which constitutes a real problem of over-saving. What is meant by this final shot at the under-consumptionists will also be made clear later on.

Summing up the contents of this section, we may conclude that there is a certain truth in the general trend of the under-consumption theory which may make some contribution to a final solution of the problem. This element of truth, however, is buried beneath a heap of very dubious arguments. How unsatisfactory the under-consumption theory is in providing a real solution of the problem might be inferred from the fact that neither of the remedies prescribed—the distributional nor the monetary remedy —promises to be efficacious, and they may be positively pernicious.

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[6] For instance : F. A. Hayek, " The ' Paradox ' of Saving," *Economica*, May 1931; A. H. Hansen, *Business-Cycle Theory*, New York, 1927.

§ 13. Psychological Factors.

In an economic system which is based on the free decisions and economic conduct of millions of individuals the fluctuations of mind underlying these decisions must be of decisive importance for the equilibrium of the economic system, and the question arises whether the phenomena of economic oscillations do not depend in the last analysis on such fluctuations in mass feelings and opinions. An affirmative answer to this question is given by the theory of the trade cycle of the psychological school.[7] There is much that this theory can count in its favour, especially the important circumstance that the upward swing of the cycle is characterized by a feeling of general optimism and the downward swing by one of general pessimism, and that the one is carried just as far in the upward direction as the other is in the downward direction. In every cycle the experience repeats itself with wearisome regularity, that in the boom people seem to trust to the eternal duration of prosperity, while in the depression they are seized with a dismal melancholy bordering almost on a feeling that the end of the world is approaching. They speak of the " end of capitalism " and forget that up till now every depression has none the less come to an end. It is a case of a mass mental epidemic which only very few are able to withstand, while the vast majority are carried away by the power of suggestion of popular feeling. This is what is in the main at the back of speculative extravagances on the stock markets in which people eventually lose touch with every real foundation of fact. In describing this frenzy, Lavington has compared people to boys who tread on a surface of ice on which there are already many people skating and are given courage by the very fact that there are already so many others on the ice, although the danger that the ice may break increases with the increasing number of the skaters. If a speculative price movement sets in on a market, it tends to be accentuated in a vicious circle and driven to excess. This is as true of the upward movement as of the downward one, so that the French saying: " La hausse amène la hausse " can be equally well applied to the " baisse." If, for example, the public, frightened off and disheartened by security losses in the crisis, has turned away from the security market, then the desertion

[7] Represented by: A. C. Pigou, *Industrial Fluctuations*, London, 1927; F. Lavington, *The Trade Cycle, London*, 1925. Schumpeter also is in a certain sense to be included among this school—see his *Theory of Economic Development: An Enquiry into Profits, Capital, Credit, Interest and the Business Cycle*, translated by R. Opie, London, 1934, and " The Explanation of the Business Cycle," *Economica*, December 1927. An analysis of the psychological factors in the business cycle is given in Röpke, *Die Konjunktur, loc. cit.*, pp. 70-84.

of the stock exchange is likely to intensify the lack of disposition towards investing savings in securities. This in turn presses on the whole economic situation and thereby strengthens the real grounds for the depressed state of security prices.

The psychological factor is particularly important in connexion with fluctuations in investment activity which in fact constitute the essence of the cyclical movement. In accordance with the very nature of transactions directed towards the uncertain future, they are dependent in special measure on subjective estimates, that is, estimates highly liable to error, and on the average level of confidence. The snowball-like growth or decline is strengthened all the more by the fact that the increase in investment by one entrepreneur induces investment by another entrepreneur not merely because he is affected by the more optimistic mood, but also because more orders now fall to his lot. For the depression the opposite is true. As a rule the force of competition leaves no choice to the entrepreneur but to swim with the stream. He dare not be the first to restrict his business undertakings in anticipation of an over-production and over-speculation: he always calculates that another will take the lead in this direction with the result that nobody does so. This is only human and it would be surprising to find it otherwise.

People take part in the ups and downs of popular feeling not only as entrepreneurs but also as savers and consumers. In the boom they confidently put their savings in the illiquid form of securities and mortgages while in the depression they hold them mistrustfully on demand deposit at the banks, or even, if the mistrust has reached its peak and spreads even to the capacity for payment of the banks themselves, withdraw them and keep them in the form of cash (possibly even in gold as has recently been the case in France). As consumers, they are prepared in the boom to convert their money rapidly into goods, while in the depression they buy only very hesitatingly in the expectation of a further fall in price. The conduct of both saver and consumer has the effect, *via* its influence on the liquidity of the banks and *via* changes in the velocity of circulation of money, of intensifying both the boom and the depression.

Lastly, it is of special significance that the bankers themselves are also subject to the psychological ebb and flow. So it is that in the boom, infected by the general ardent optimism, they loosen the reins of their credit policy, sift less strictly the demands for credit, look less fastidiously at collateral, overestimate the productivity of the credits they grant and are satisfied with less

liquidity. In the depression the memory of the sins of the boom, and the "frozen credits" with which they atone for these sins, cause the banks to fix the most extreme requirements for their liquidity and to subordinate to this all other considerations.

It is true of all these psychological factors that they could not reach such large proportions if the uncertainty about economic data, the defectiveness of economic information (which is again closely bound up with competitive considerations), and the uncertainty of the future did not give wide scope for mere presumptions and vague predictions highly coloured by sentiment, and for errors of all kinds. But, even for facts that are to a certain extent definite, the saying of a Greek philosopher is true that it is not the facts that determine human action but the opinions about the facts.

Nevertheless the reference to psychological factors cannot give a satisfactory explanation of cycles and crises. A theory which imputes the change from boom to depression to mere fluctuations of feeling and to mistakes, prejudices itself by its very simplicity when we consider the complicated nature of economic fluctuations. It fails in fact to give satisfactory answers to many vital questions. How, for example, does this rhythmical oscillation from optimism to pessimism, from activeness to lethargy, come about? Is it conceivable that mere mass feelings and mass mistakes cause real changes in the spheres of goods and money such as characterize the movements of the trade cycle? Is it imaginable that these mass psychological phenomena would last so long if there did not lie at the root of them real events from which they took their origin and which are continually giving them new force? Why does the psychological rhythm not repeat itself from month to month instead of spreading over years?

A satisfactory theory of cycles and crises cannot be content with merely describing the admittedly exceedingly important psychological events which are to be observed during the movement of the cycle, any more than fluctuations in the value of money can be adequately explained by referring to the factor of confidence without showing at the same time how this factor relates to the final determinants of the value of money—the quantity of money, the velocity of circulation of money, and the volume of goods. In the same way, price theory cannot be content with the mere statement that the ultimate forces behind price formation are the feelings, calculations, moods, and decisions of human beings; its task is rather to show the basic rules according to which these forces work. It is the same with the theory of cycles

and crises. It must always take into account that it is the judgments and decisions of human beings that move the economic process and it has to have regard to all anomalies, errors, and mass mental epidemics to which human beings may be subject, to describe their origin and to analyse their repercussions. But it cannot stop here. Its real task consists in showing how these psychological events connect up as a whole with the real facts of economic life, what disturbances there may arise in this manner in the structure of production, in the income structure, in the banking system, and in the structure of costs and prices. This is not to deny that psychological factors can in certain circumstances play a very active and independent rôle, as in overcoming the pit of the depression, or in magnifying the forces of expansion, or, lastly, in entangling the economic system in the net of a progressive depression. The last case is exemplified particularly forcefully by the present situation all over the world.

We see now more clearly than ever before that our economic system—like any other, including the Russian—rests, in the last analysis, on certain psychological reserves without which it ceases to work, in spite of its glorious technique and organization. Formerly, this requisite appeared so obvious that people did not think it necessary even to mention it, for they hardly contemplated a state of affairs in which it did not exist. It would almost seem as though the fact had been forgotten that the psychological—especially the moral—forces behind any economic system are the centre upon which everything else hinges, and that the most elaborate technical apparatus is of comparatively little significance if the electric current of these forces has been switched off. In fact, the gigantic apparatus of our economic system is absolutely dependent on an invisible network of psychological forces and relations between the individuals, between the individuals and the community, and between the individuals and their material environment. It cannot exist without confidence—in other individuals, in the State and its legal order, and in the future in general—without some possibilities of and inducements for making preparations for a more distant date than the immediate present, without a link between the present and the future, nor even without some ideology—or, indeed, a creed in the most general sense. Nor can it exist without an atmosphere of peace, liberty, and reason. Our economic system has multiplied the economic productivity of the world by mobilizing all moral and intellectual forces on an unprecedented scale and this is the real secret of its enormous success. But, on the other hand, it is also dependent on the existence of a minimum of these forces, otherwise it is bound to decay. That

is the lesson which the present depression is teaching us. Hence, we cannot help feeling deep sympathy with the general trend of ideas of the psychological school.

§ 14. Savings and Investment.

As we have already had occasion to remark, people who are not well acquainted with economic theory are always easily inclined to exaggerate the dissensions between schools and theories and, amidst the conflict of opinions, to overlook established truths. In the sphere of trade-cycle theory no less than any other there appears at first sight to exist a hopeless muddle of opinions. This leads to the false conclusion that in this question, which has to-day become a question of vital economic, political, and cultural importance, science fails to give guidance or explanation. This conclusion, while it offers a convenient excuse for avoiding a serious study of difficult trade-cycle theory, is hasty and superficial. A closer examination reveals that from out of the conflict of the various theories of the trade cycle a common core of knowledge has gradually been built up in the course of the last decades. To this belongs especially the fundamental recognition that the real causes of the crisis must be sought not in the economic conditions of the moment of the crisis but in the mechanism of the preceding boom, and the further recognition that the mechanism of the boom culminates in an increase of capital investment financed by an expansion of credit which, *via* a chain of reciprocal reactions, eventually sets the whole economic system in motion. The study of the cycle leaves no doubt whatever that the swing from boom to depression is primarily a change in the volume of investment and of the production of capital goods while the production of consumers' goods tends to be subject to smaller fluctuations. The rising curve of investment during the boom has its counterpart in the falling curve of the depression, and the more steeply inclined upwards is the first the more sharply does the second tend to slope downwards.

It is generally agreed that the real centre and root of the cycle is to be found in this rhythmical expansion and contraction of investment and the separate theories of the trade-cycle diverge from each other only so far as they give a different explanation of this rhythm. An increase of investment means the growth of the economic fabric, an increase and improvement in the productive equipment, and a step forward in economic development. So the swing from boom to depression reflects the fact that economic development does not proceed evenly but in rhythmical jumps whose force shakes for a time the equilibrium of the system so that con-

traction follows on the expansion. In other words, the cycle is to be considered as the typical form in which the growth of the capitalist economy takes place. In this light the crisis and depression appear as growing pains of the economic system from which we cannot escape so long as economic development proceeds by jumps instead of moving in a smooth even rise. The history of cycles and crises teaches us further that the jumpy increases of investment characterizing every boom are usually connected with some definite technical advance. In fact the beginnings of almost every modern technical achievement—the railway, the iron and steel industry, the electrical industry, the chemical industry, and most recently the automobile industry—can be traced back to a boom. It seems as if our economic system reacts to the stimulus of some technical advance with the prompt and complete mobilization of all its inner forces in order to carry it out everywhere in the shortest possible time. But this acceleration and concentration has evidently to be bought at the expense of a disturbance of equilibrium which is slowly overcome in the time of depression. This is a fundamental proposition which must be particularly stressed.

The origins of this proposition can be traced back to the early under-consumptionists (Lauderdale, Malthus, Sismondi and others). It was developed very much further by Marx. The same trend of thought has been followed up by the Russian Tugan-Baranowski[8] who is, not quite correctly, usually regarded as the real founder of this modern over-capitalization theory. His work has been developed further with some substantial modifications by Spiethoff and from there onwards the concept has become common property through the writings of Cassel, Schumpeter, Aftalion, Bouniatian, D. H. Robertson[9] and others.

Schumpeter lays special emphasis on the rôle of technical innovations and of the " active entrepreneurs " who do pioneer work in putting them into effect. He links up with the over-capitalization element both the technical and the psychological element. Liefmann and, most recently, Lederer also attribute an important rôle to technical progress.

If the essence of the cycle is that in the boom there takes place an over-extension of investment which is followed by an inevitable reaction in the depression, it only needs one further step to reach the conclusion that the formation of real capital in

[8] M. v. Tugan-Baranowski, *Studien zur Theorie und Geschichte der Handelskrisen in England*, Jena, 1901 (first Russian edition 1894).

[9] Spiethoff, *Vorbemerkungen zu einer Theorie der Ueberproduktion, Schmollers Jahrbücher*, xxvi, 1902; Cassel, *The Theory of Social Economy*, 2nd ed., London, 1932; Schumpeter, *op. cit.;* Aftalion, *op. cit.;* M. Bouniatian, *Wirtschaftskrisen und Ueberkapitalisation*, Munich, 1908; D. H. Robertson, *A Study of Industrial Fluctuations*, London, 1915. For the views of the present author, see W. Röpke, *Kredit und Konjunktur, loc. cit.*

the economic system can apparently not be speeded up and extended beyond a certain limit without introducing a disturbance corresponding to the degree of "forcing." In this sense, then, there undoubtedly exists an excess of capital formation. Since, however, the formation of real capital (investments) must be balanced by a restriction of consumption, however this may be brought about, the inference is: that the proportion between consumption and real-capital formation cannot be changed at will without causing disturbances. However desirable the accumulation of real capital may be, difficulties and possibly very serious shocks occur if the process of accumulation is forced. Up to this point there is unanimity of opinion among the greater part of trade-cycle theorists. Two further questions now arise in the answering of which opinions differ. The first question is: from where does the money capital come which makes possible the investment activity of the boom? The second is: why does this increased investment activity lead to a more or less violent reaction?

A widespread theory, first represented by Tugan-Baranowski, seeks to answer both questions at once in the following manner. In the depression idle savings are accumulated as a result of the lack of attractive investment opportunities. These idle savings serve to feed the investment activity of the boom, but are at length exhausted, and the boom is then brought to an end for lack of capital. It is then revealed that the investments have been extended beyond the limits allowed by the supply of capital in the community, so that there has to take place a painful process of recession. According to this theory, there corresponds to the change in investment activity, and therewith from boom to depression, a change also from a superabundance to a shortage of capital.

In this theory which, under the designation of the "shortage of capital theory," is the most popular theory among the more intelligent sections of the business world and among journalists, the one point is certainly correct: that the changing proportion between saving and investment—an excess of saving over investment in the depression and an excess of investment over saving in the boom—is a decisive factor. It is also true to a certain extent to say that a storing up of "capital" takes place in the depression corresponding to the extent to which the rate of saving surpasses the rate of investment. This has more than once been disputed and it has been quite mistakenly supposed that all that is saved in the depression is also invested. Even quite apart from the fact that in the depression people are disposed, out of mistrust, to estimate cash more highly, and apart from the rise

in cash reserves (slowing up of the velocity of circulation), a storing up of money capital can take place by way of savings being accumulated as bank deposits instead of being invested in securities. This is equivalent to a sterilization of purchasing power in so far as the banks have to hold liquid reserves against the money deposited with them and are particularly anxious to keep liquid in the depression.

Investments abroad also represent some reserve of power which accumulates in the depression ready for the boom, but only with certain reservations. It has also been supposed that there were stocks of goods corresponding to the stored-up money capital and that these stocks of goods supplied the real bases of the expansion of production in the boom. In fact, however, commodity stocks tend to be particularly low at the end of the depression.

The storing up of money capital during the depression is, then, an undeniable fact which furnishes an important elucidation of the depression. But it would be totally wrong to suppose that these accumulated reserves could contribute substantially towards fostering the heavy investments of the boom years. The conclusion is that the means of financing the boom can only be derived in the main from the boom itself. Its sources are increased savings during the boom period and, above all, additional credits (credit expansion). The inference from this is a further extremely important proposition to which we shall often have occasion to revert in the next paragraphs. In any case it disproves this part of the theory of alternating superabundance and shortage of capital.

We turn now to the contention often denominated as " the ruling theory of the trade cycle " that the cause of the crisis and depression is the *shortage of capital* setting in at the end of the boom period. Superficially considered, this is correct, but it offers no real explanation, since the shortage of capital is not a new independent element but a result of the whole mechanism of the boom. The shortage of capital is the signal for the breakdown, but it is made inevitable by the over-expansion of investments. If the emphasis is laid on the shortage of capital it gives the impression that a further increase of the supply of capital could avert the turn. But if the increase of investments has taken on pathological dimensions a further increase of capital can only postpone the turn and this only at the expense of a later and all the more severe reaction. The shortage of capital at the end of the boom period is a sign that the credit system has put its last reserves into the firing lines in order to support the wavering front. The

scale of investments at length even outgrows the framework of capital creation artificially extended by the expansion of credit. To use a simile, those who lay the main emphasis on the shortage of capital as the factor turning the boom into depression may be compared to some well-known politicians in Germany after the war, who used to say that the defeat could have been avoided if the people had shown more military strength instead of "stabbing the army in the back" by its defeatist spirit. It would have been excellent, of course, for Germany if, at the end of the war, she could still have had the armies and the spirit of 1914, but this is absolutely beside the point because it was precisely as the result of four years of war that Germany was down and out, and any effort to make possible the impossible would only have delayed the ultimate defeat at a terrible cost. It would be a grave injustice to accuse the German people of a lack of spirit of sacrifice instead of accusing the length of the war and its ever-growing dimensions. We may conclude, then, that the emphasis must be laid not on the supply of capital, but on the demand for capital. The evil is not that too little has been saved but that too much has been invested. The shortage-of-capital theory distorts, therefore, the causal sequence, limits itself to the surface and places the accent in the wrong place.

We answered the first question, as to the origin of the money capital which nourishes the boom, mainly by pointing to the rise in the supply of capital which comes about during the boom *via* increased savings and, above all, *via* additional credits. To the second question as to what causes the breakdown of the over-investment, we have yet to give a satisfactory answer. We shall try to give a summary of the most important points to be taken into consideration.

Firstly, it should be clear that the total income of a community is allocated partly to direct consumption and partly to saving, and that the total production is devoted partly to the production of consumers' goods and partly to the production of capital goods. Now it is essential for the equilibrium of the economic system that the composition of production (out of which income is created afresh) should correspond to the manner in which the public spends its income. If the proportions between the production of capital goods and the production of consumers' goods correspond to the proportions in which the public saves and spends its income respectively, then the economic system is in a state of equilibrium.

Now, if the savings proportion is in any way suddenly and substantially raised, the equilibrium between the composition of

production and the allocation of income is disturbed. The usual way in which a sudden increase in the amount of savings of the community takes place is the following: an increase in investment is the primary factor and it is by a roundabout process of the expansion of credit that this induces an increase in the volume of savings of the community leading to complications in our formula which cannot be gone into in more detail here. The increase of investment then goes on rising by its own force, since the expansion of capital investment brings more and more new orders to the capital-goods industries. The scale of investment grows, and so long as the rate at which it grows remains constant, or even increases, the boom has the power to last. Eventually, however, the moment must come when investment is not suddenly broken off certainly, but ceases to grow at the previous rate. We cannot always be building and " rationalizing " further, always constructing new electricity works or railways and installing new machines; especially as the power of the credit system to go on continually financing this investment delirium is finally exhausted. At this point the boom must come to an end since a shrinkage of the capital-goods industries is unavoidable. Whether the breakdown takes the form of a crisis or of a gentle transition to the depression depends on the circumstances. We shall see the process more clearly if we reflect that a boom in, say, poultry or silver-fox farming is also for some time self-maintaining, that is, so long as new farms are continually setting up and exercising a demand for breeding stock. But, finally, the moment comes when the establishment demand for fowls or silver-foxes is satiated. Then it appears that the fowl or silver-fox production is greater than corresponds to the normal requirements for consumption and breeding purposes. This will become apparent immediately the number of farms ceases to grow at the former rate. It is evident that once the fowl cycle is set in motion the breakdown is unavoidable. According to the shortage-of-capital theory, it is possible to postpone it by the stimulus of continually providing capital for the setting up of poultry farms, but it is obvious that this only magnifies the avalanche. Just as we cannot continually pursue fowl production for the sake of producing more fowls, no more can we eternally produce capital goods for the purposes of producing more capital goods. Since after a certain time the latter in their turn produce more capital goods, such an insane economic system can only go on so long as the scale of the production of capital goods is continually expanded. In other words: sooner or later the end must come and it is all the worse the further the scale of investment has been pushed.

This self-inflammatory character of any rise of the rate of investment due to the mechanism of intensification described above ("principle of acceleration") has been stressed by many trade-cycle theorists (Aftalion, Bouniatian, Bickerdike, Carver, Marco Fanno and especially by J. M. Clark[1]). As it is of the greatest importance for a better understanding of the whole process of the business cycle, something more must be said in order to make its meaning quite clear. From the examples given above, it will be easily grasped that any increase in general economic activity will have the tendency to produce a disproportionate expansion in the higher stages of production, the rate of expansion being the greater the higher is the stage of production, *i.e.*, the further it is removed from the sphere of consumption. The opposite is true for any decrease of general economic activity.

The reasons for this intensified impact on the higher stages of production are twofold: (1) In the absence of excess capacity any increase of the productive equipment of the country necessitates a further increase of the productive equipment in order to produce the initial increase (as in the example of the poultry and silver-fox farms). In order to produce more machinery the machine industry itself has to produce more machines for producing more machines; an enlargement of the cement factories calls forth not only an increased demand for building the additional cement plants, but also an increased demand for enlarging other factories delivering the equipment of the additional cement plants and so forth. (2) Assuming that in all stages of production and distribution a certain fixed percentage of sales is held as stocks, any increase of general economic activity (as measured by the volume of sales or goods produced) will bring forth an increase of orders greater than the initial increase of sales. If the demand for shoes increases, dealers will place orders equivalent to the aggregate of additional sales and additional stocks, and the same thing will be repeated in the higher stages on a progressively rising scale. But this whole machinery of increasing intensification will stop the moment the increase comes to an end. In substance, this process of intensification by the enlargement of stocks of working capital amounts to the same thing as the process of intensification by the enlargement of the productive equipment (fixed capital). In both cases the increased volume of production in the upper stages can be maintained only if the increase of demand in the lower stages goes on at the same *rate*. It is, therefore, not sufficient that the demand does not decrease absolutely, nor even that it continues to increase if only at a lower rate; for the maintenance of the top-heavy superstructure of production, it is necessary that the ultimate demand should rise at the same rate or, in other words, in geometrical progression.

This proposition is, however, subject to a number of *qualifications*: (1) If capital equipment is being continuously increased, a secondary demand is thereby created which is not dependent on a continuous and *progressive* increase of ultimate demand but only on its steady level. This secondary demand is the *demand for the replacement* of durable means of production which is bound to develop as time goes on and so

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[1] J. M. Clark, "Business Acceleration and the Law of Demand," *Journal of Political Economy*, March 1917, and also the same author's books, *Studies in the Economics of Overhead Costs*, Chicago, 1923, and *Strategic Factors in Business Cycles*, New York, 1934. Consult also the discussion between C. and R. Frisch in the *Journal of Political Economy*, October, December 1931, and April 1932.

partly to take care of the problem of how the top-heavy superstructure can be permanently maintained. It is conceivable that, under certain circumstances, this factor may serve as a parachute for the blown-up structure of production, the decrease in new construction being compensated to a considerable extent by the increase in replacement demand. But the peculiarities of the business cycle do not make it very likely that this will happen. Apart from the fact that the top-heaviness of the structure of production is usually much too great at the end of the boom to be relieved in this manner, the replacement demand is itself highly elastic and subject to the mass psychology of the different phases of the cycle. As it is, this factor is apt to work in a direction inverse to what is desirable for the purpose of compensation. For it is precisely during the boom period that replacements are speeded up, and it is precisely during the depression that replacements are postponed as long as possible. In both cases, this factor acts to intensify rather than to attenuate the violence of the movements. It is a well-known fact that the intensity of the present depression owes much to the circumstance that the replacement demand has been reduced to the utmost minimum. (2) Account has to be taken of the possibility that, on the average, *stocks* may not rise in proportion to the growing volume of sales and of goods produced during the boom, nor decrease in proportion to the decreasing volume during the depression. If that is the case, they will also serve as a compensating element. But it is again very unfortunate that just the opposite is probable, in view of the fact that rising prices (boom period) may induce the carrying of larger stocks and *vice versa*. Though we cannot be so sure in this case as in the case of replacement demand, it will not be an error to assume that the varying volume of stocks is an intensifying rather than a compensating factor. How both factors can work together, bringing about disastrous results, may be gathered from the fact that in the United States the production of automobiles (a durable consumption good to which the same principles must be applied) decreased from 5,621,715 in 1929 to 1,431,494 in 1932, while the number of registrations declined only from 26,545,281 to 24,136,879. Thus a decline of nearly 75 per cent. in annual production corresponded to a decline of only a little over 9 per cent. in the total number in use.[2] (3) A very important qualification must be made with regard to the possible existence of *excess capacity* and of *surplus stocks* during the upward-swing of the cycle. As long as the increase of general economic activity can be based on excess capacity and surplus stocks, the mechanism of intensification will not begin to work and so the otherwise unavoidable reaction may be avoided. Now, this is not a mere hypothetical assumption. It is usually the actual situation during the first stage of the upward-swing, though not so much for surplus stocks as for excess capacity. This is one of the main reasons why the upward-swing of the business cycle must be sharply divided into two phases, the first being of a compensatory and balancing character, the second of a self-inflammatory and unbalancing character.

Particular importance is, moreover, to be attached to the circumstance—which D. H. Robertson and Aftalion especially have emphasized—that the expansion of the productive equipment takes time. Before the products of the expanded productive equipment

[2] J. M. Clark, *Strategic Factors in Business Cycles, op. cit.*, p. 36.

come on to the market and flood it, several months elapse during which the over-investment may develop to gigantic dimensions unobserved. It is evident that the length of the boom is connected to some extent with the period of time necessary for the construction of the productive plant—the " period of gestation " in Mr. Robertson's terminology.

Over-investment, conducive of general economic disequilibrium, may develop in any economic system, provided that the volume of " saving " (in the broadest sense of a relative curtailment of current consumption, *i.e.*, " lacking " in Mr. Robertson's terminology)[3] is allowed to expand, in quantity and in speed, at a rate which is no longer compatible with economic equilibrium. There is no maximum rate of saving as such which must not be exceeded if disequilibrium is to be avoided. In this long-run sense a problem of " over-saving " certainly does not exist. But a problem of " over-saving " does appear if the rate of saving rises so suddenly and in such a degree that it leads to over-investment. The balancing forces of the economic system can take care of a rise of the rate of saving if it does not exceed a certain maximum of speed and quantity; beyond that point the equilibrium will give way.[4] The question then raised is this: how is such a sudden and substantial rise in the rate of saving conceivable in our economic system?

In answering this question, the crucial point is that the normal source for the formation of capital in our economic system, viz., voluntary savings by individuals laying aside a part of their incomes, is unlikely to give rise to a sudden and substantial increase in savings. It has to be observed, however, that once the up-swing of the cycle has been started certain forces are set in motion which stimulate a substantial increase of voluntary savings. Apart from the favourable effect of the increase in the national income on the volume of savings during the up-swing, we have to recall what has been said in § 12 about the change in the social structure of incomes during the up-swing, a change characterized by an expansion of profit incomes and variable

[3] D. H. Robertson, *Banking Policy and the Price Level*, 3rd ed., London, revised 1932 (a small book of the greatest importance though somewhat difficult for the uninitiated reader).

[4] There is a second meaning of " over-saving " relating to the situation during the depression when more is being saved than invested, so that saving leads to the disappearance of purchasing power from circulation and thus to its sterilization. This sort of " over-saving " is the driving force behind the cumulative process of depression about which more will be said in § 16. But its nature is quite different from that of the type of " over-saving " discussed above. Over-saving as discussed above means that too much is being saved compared to the power of the economic system to adapt itself to rising investments, while over-saving in the second sense means that savings exceed investments with deflationary effects.

incomes relatively to fixed incomes. This change is equivalent to a rise of those incomes which are more liable to be saved rather than spent. In addition to this, account has to be taken of the large *corporate surpluses* (entrepreneurial formation of capital or "self-financing") which are apt to develop during the boom, adding enormously to the aggregate of savings. This source of saving has risen to prime importance during the last decades along with the development of industrial monopolies and large corporations, with the policy of stabilizing dividends, and with certain degenerate tendencies in the financial structure of industry and banking.[5] The importance of this factor is enhanced by two further circumstances: (1) corporate surpluses are usually larger in the industries producing capital goods than in those producing consumption goods so that the tendencies towards over-investment are accordingly reinforced; (2) corporations have a well-known inclination to reinvest their surpluses in their own plants instead of investing them on the general capital market so that the rate of interest has to this extent lost its regulating influence.[6] This tendency, since it leads to over-expansion in special trades (for instance, the copper industry in the United States or the cement industry in Germany after the war) reveals an additional source of trouble. So we see that the entrepreneurial formation of capital (corporate surplus) may become an important means of enlarging the aggregate of savings and contributing to a tendency towards over-investment.[7]

But even this, I think, is not sufficient to raise the rate of saving so suddenly and so substantially as regularly to set in motion the process of over-investment. There are, moreover, other characteristics of the boom which, being of a monetary nature, cannot be explained in this way. I would concede that this factor, like the change in the social structure of incomes, is of great importance for reinforcing the process once set into motion, but not more. I believe that the rise of savings and investment brought about by these two factors will generally be capable of assimilation by our economic system without leading to grave maladjustments in the system as a whole. In order to

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[5] *Cf.* Berle and Means, *The Modern Corporation and Private Property*, New York, 1933; O. W. Knauth, "The Place of Corporate Surplus in the National Income," "*Journal of the American Statistical Association*, vol. xviii, 1922.

[6] This theme has been developed more fully by the present author in his little book *Die Theorie der Kapitalbildung*, Tübingen, 1929. *Cf.* also R. Weidenhammer, "Causes and Repercussions of the Faulty Investment of Corporate Savings," *American Economic Review*, March 1933.

[7] The most has been made of this argument by Professor Francesco Vito in his interesting paper "Il Risparmio Forzato e la Teoria dei Cicli Economici," *Rivista Internazionale di Scienze Sociali*, January 1934.

reach dimensions liable to break up the economic equilibrium, savings and investments must be forced up by a more powerful mechanism. For this it is necessary that some kind of coercion be exerted which releases the production of capital goods from the link with the community's voluntary decisions to save, and forces the proportional shrinkage of the production of consumption goods above the level to which the community is prepared to submit voluntarily through its savings. This coercion may take place with the brutal overtness of Russia to-day under the rule of the Five-Year Plan which represents to the trade-cycle theorist a gigantic attempt with the aid of government authority to free the tempo and extent of investment from the limitations imposed by the rate of savings—consumption being ruthlessly held down by means of State force. This throws further light on the probability mentioned already that in Russia also the steepness of the investment curve will find its counterpart in the sharp descent of the curve of reaction, only with the difference that the reaction in Russia will assume other forms than in the capitalistic countries. It is in any case useful to realize that what is being carried out in Russia differs from the type of boom characterized by over-capitalization in the capitalist countries in method and extent only, and not in kind, and bears a likeness to it even so far that all warnings of an inevitable reaction are thrown to the winds. In the capitalist economy the place of authoritarian force is taken by credit expansion.

As will be seen in the next section, the expansion of credit also involves "forced saving," though of a totally different kind. The difference may perhaps be expressed by saying that in our economic system it is *monetary "forced saving"* which sets the wheels of over-investment in motion, while in Soviet Russia it is *authoritarian "forced saving."* Whereas in Russia the coercive machinery is represented by the G.P.U. with its rifles and dungeons, in capitalism it is represented by the banking system with its cheques and overdrafts. This capitalistic machinery of credit expansion serves two purposes: in the first place, it provides the entrepreneur waiting to invest with the necessary additional credit and, in the second place, by raising profit expectations, it increases the desire to invest, of which the driving force is here, in contrast to the socialist State, governed by individual decisions based on profit expectations. This is, in fact, the way in which the process of cyclical movement regularly takes place in the capitalist world.

In the foregoing analysis, the reader has been, as far as possible,

spared any allusion to the fierce controversy at present raging round many, if not most, of the points discussed above. This controversy has become so highly technical and, to a large extent, even confused, that some detachment from it, at least for the moment, would seem to be indicated in order to regain clarity on the main issues, even at the cost of some over-simplification here and there. At this juncture, however, it becomes indispensable to compare our results with certain other theories of the present time and to attempt, if necessary, some classification. The point of view of the present author will, perhaps, become clearer in consequence. With this end in view, it will suffice to mention two theories which, seeming to a large extent mutually exclusive, have lately become more and more the centres of discussion: the theories of J. M. Keynes and F. A. von Hayek.

The central theses of Mr. Keynes,[8] which he develops by the aid of a number of ingenious though debatable equations, runs as follows: The real sources of rhythmic disturbances are not changes of the rate of saving or of the rate of investment but recurrent discrepancies between the two rates, in such a way that a rate of investment greater than the rate of saving engenders the boom, and a rate of saving greater than the rate of investment engenders the depression. Equilibrium can be maintained only by the equality of the rates of saving and of investment, but this is also a sufficient condition. Of these two rates the rate of saving is more steady in character, while the rate of investment is subject to jerky fluctuations. The essence of his theory is given by Keynes in this classical passage[9]: " It is enterprise which builds and improves the world's possessions. Now, just as the fruits of thrift may go to provide either capital accumulation (if savings are invested —R) or an enhanced value of money-income for the consumer (if savings are not invested—R), so the outgoings of enterprise may be found either out of thrift or at the expense of the consumption of the average consumer. Worse still;—not only may thrift exist without enterprise, but as soon as thrift gets ahead of enterprise, it positively discourages the recovery of enterprise and sets up a vicious circle by its adverse effects on profits. If Enterprise is afoot, wealth accumulates whatever may be happening to Thrift; and if Enterprise is asleep, wealth decays whatever Thrift may be doing. . . . Now, for enterprise to be active, two conditions must be fulfilled. There must be an expectation of profit; and it must be possible for enterprisers to obtain command of sufficient resources to put their projects into execution. Their expectations partly depend on non-monetary influences—on peace and war, inventions, laws, race, education, population and so forth. But . . . their power to put their projects into execution on terms which they deem attractive, almost entirely depends on the behaviour of the banking and monetary system." To this the present author would whole-heartedly subscribe, adding that it contains a truth which could hardly be put more eloquently. When Keynes makes the rise of the rate of investment above the rate of saving (which, in his definition, excludes " forced saving ") responsible for the boom, he says essentially the same thing as was said in the course of our preceding analysis where it was stated that it is usually the adding of " forced savings " to normal saving which raises investments to a dangerous height. Though the practical result is the same, the approach is different, since in our analysis it is not the rise of

[8] J. M. Keynes, *A Treatise on Money*, 2 vols., London, 1930.
[9] Keynes, *op. cit.*, II, pp. 148-149.

the rate of investment relative to the rate of saving which is the real cause of instability but the absolute rise of investments no matter whether financed by voluntary or forced savings. For all practical purposes this amounts to the same thing, so far as the explanation of the capitalistic boom is concerned.

But the different approach of Keynes has two consequences. The first consequence is that in his analysis the main emphasis is put on a point which, under certain circumstances (*i.e.*, when the absolute rise of investments is not brought about by a disparity between savings and investments, or, that is, by credit expansion), may be only of minor importance. So Mr. Keynes has little to say about the general possibilities of over-investment engendered by the acceleration principle, especially in a socialist system. This point is connected with the second consequence of the Keynesian approach that, making no use of the acceleration principle, he is rather vague about the disruption of the structure of production by over-investment and is evidently inclined to deny the necessity of a painful process of readjustment brought about by the crisis. This seems to me the weakest point in the whole analysis of Mr. Keynes. Where he comes out strongest, on the other hand, is in his analysis of the cumulative process of depression which, in my opinion, can indeed be no better stated than in the terms of the saving-investment approach elaborated by him. It seems to me that this is the main and the most valuable contribution of Mr. Keynes which can and must be highly appreciated even by those who prefer other explanations for the boom period.

Just the opposite is true in the case of the equally important contributions to the problem of crises and cycles of Dr. v. Hayek.[1] As far as the explanation of the depression is concerned, Dr. v. Hayek's endeavours seem to be unsuccessful to the point of being positively misleading, but his analysis of the boom period on the other hand contains elements which represent a real advance. The gist of his theory is that, while any amount of investments financed out of *voluntary* savings tends to leave the structure of production intact, it is a rise of investments financed out of *forced* savings which puts the structure of production out of balance so that a subsequent readjustment becomes inevitable. We cannot enter here into the very intricate details of his reasoning which are connected up with some rather controversial propositions of the theory of capital of the Viennese school (Böhm-Bawerk, Mises, Strigl[2] and others). Let it suffice to remark that, by emphasizing the

[1] *Cf.* especially his book *Prices and Production*, 2nd ed., London, 1935. For a fuller understanding of Dr. Hayek's ideas his numerous other publications must also be consulted ("Das intertemporale Gleichgewichtssystem der Preise und die Bewegungen des 'Geldwertes,'" *Weltwirtschaftliches Archiv*, July 1928; "Kapitalaufzehrung," *Weltwirtschaftliches Archiv*, July 1932; *Monetary Theory and the Trade Cycle*, London, 1933; "Capital and Industrial Fluctuations," *Econometrica*, April 1934).

[2] The most advanced book of this school on the theory of capital is now R. von Strigl, *Kapital und Produktion*, Vienna, 1934. This book is of special importance as it shows that it is possible on the base of the post-Böhm-Bawerkian theory of capital to explain the cumulative process of depression on lines not very dissimilar from those of Mr. Keynes. It must be said, therefore, that Dr. v. Hayek's theory is by no means the logical consequence of this theory of capital based on the fundamental conception of the subsistence fund. It is now generally recognized that the post-Böhm-Bawerkian theory of capital is badly in need of a thorough revision in several of its fundamental conceptions. Especially, the idea of the "length of the production period" has, recently, become an object of a very critical attack by a host of writers in different countries (Howard S. Ellis, Frank H. Knight, O. Morgenstern, Gifford and others). Of still greater importance for

rôle of forced savings (credit expansion) as the driving force of over-investment, Dr. v. Hayek's theory amounts, in the last analysis, to the same thing as Mr. Keynes' theory and our own analysis, at least for all practical purposes. But below the surface there are substantial differences. In our analysis, over-investment by forced savings appears as the special form in which, in our present economic system, the general source of instability, *i.e.*, over-investment no matter how financed, becomes a practical possibility. In Dr. v. Hayek's analysis, over-investment by forced savings appears as the sole case in which over-investment as a factor of instability is conceivable. To be more explicit, we must say that, in Dr. v. Hayek's view, the real source of trouble is not too much investment, but too little voluntary saving.

Dr. v. Hayek's theory is, indeed, the most uncompromising example of an *under-saving theory* of business cycles. The same amount of investments which, if financed by forced savings, spells disaster would, according to this theory, be harmless if it were financed by voluntary savings or even if the forced savings were replaced later by voluntary savings. *In our view, it is the steep rise of the absolute amount of investments which matters, not the fact that our economic system must rely on credit expansion to make this rise possible.* In our view, therefore, even a socialist state has to face the same problem if investments are sped up by authoritarian forced savings, a statement which is contrary to Dr. v. Hayek's analysis. He must, consequently, hold the belief that a socialist system is not exposed to this kind of disturbance. But there are other consequences too. While in our analysis the ultimate breakdown of the boom is explained by the acceleration principle, in Dr. v. Hayek's theory it is the shortage of capital which puts an end to the boom, and this shortage of capital must come sooner or later if investments are being financed by credit expansion. He makes no use of the acceleration principle and even rejects it, explicitly, by saying that the top-heavy structure of production could be maintained if so much more were saved as to increase the capital equipment in the higher stages to such a magnitude that its replacement demand would use fully the

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trade-cycle theory is the dubious character of the Böhm-Bawerkian conception of the "subsistence fund." Nobody can deny that this conception has a real meaning inasmuch as increased accumulation presupposes a restriction of consumption, but this meaning is by no means so clear as the post-Böhm-Bawerkian school supposes it to be. The idea that accumulation and consumption are mutually exclusive alternatives, in other words, that an increase in investment must always mean a corresponding *absolute* restriction of consumption looks rather defective in view of the palpable fact that, during the upswing, investment and consumption rise simultaneously. Even in this case, it is, of course, still true that accumulation means non-consumption, but the point is that this restriction of consumption is only *relative* while the absolute amount of consumption rises owing to the rise in total productivity resulting from the mobilization of idle productive reserves which has, in turn, been brought about by the increase in investment. Therefore, to some extent—*i.e.*, to the extent to which idle productive reserves are again brought into profitable use—an increase in investment stimulates an increase of the subsistence fund. If this reasoning is correct, the subsistence fund ceases to be an independent variable whenever the extraordinary conditions of depression have created a large increase of "idle capacity." Then, to reiterate, we have really a case not only of eating the cake and having it but of having still more of it while eating, though it is still true that the bit we eat we cannot have at the same time. Without this, neither the nature of capitalism nor its history can be really understood. It is important to note, however, that this applies only to the first phase of the upswing (the compensatory phase) not to the second (inflationary) phase in which the reserve of idle capacity is already exhausted. In the latter phase, accumulation and consumption become, indeed, strictly alternative in character.

capacity of the lower stages.[3] But since it is indisputable that the top-heavy structure has been brought about by a general rise of investments no matter how financed, it is difficult to understand how more savings and more investments could restore the balance instead of postponing the ultimate breakdown at the cost of intensifying it. In this sense, the shortage of capital at the end of the boom is an indubitable calamity, but, as was said earlier in this section, it is no real explanation, since it is the inevitable result of the whole process of the boom. All this is, it must be repeated, a philosophy slightly reminiscent of the legendary " victory at arm's reach " and " dagger-stab in the back " in Germany after the war.[4]

Though this and a number of other propositions are highly debatable the merits of Dr. v. Hayek's work can hardly be overrated. He has given a new stimulus to economic thinking on all these problems by diverting attention to questions hitherto unseen and by the brilliance and profoundness of his attack,[5] even in those points where his analysis is the most provocative of contradiction.

§ 15. Money and Credit and the Cycle.

The part played by changes on the money and credit side of the economic system has already come into prominence many times, and especially in the last section. It is in fact such an outstanding feature that a group of trade-cycle theorists who have recently become increasingly influential—the representatives of the monetary or credit theory of the trade cycle—see the ultimate causes of cyclical movements in the changes taking place during the cycle on the money and credit side, and they emphatically declare that cycles and crises are a mere monetary and credit phenomenon.[6]

That the part played by monetary factors must be very important is to be inferred from the mere observation that the upswing of the cycle is regularly marked by a price rise, in spite of the fact that it is at the same time a period of increasing production of goods, so that we should really expect a tendency

[3] F. A. von Hayek, " Capital and Industrial Fluctuations," *Econometrica*, April 1934, p. 155 (reprinted in the new edition of his book *Prices and Production*, p. 140).

[4] Dr. von Hayek's theory has been criticized on rather similar lines by Alvin H. Hansen and Herbert Tout, " Investment and Saving in Business Cycle Theory," *Econometrica*, April 1933. The views of these authors seem to coincide particularly closely with the views of the present writer.

[5] It is interesting to observe that in his most recent publication (" Preiserwartungen, monetäre Störungen und Fehlinvestitionen," *Nationalokonomisk Tidsskrift*, LXXIII, pp. 176-191) Professor von Hayek comes rather near to the view expressed in the text.

[6] The origin of the monetary theory of the cycle can be traced back to the English monetary theorists of the first half of the nineteenth century (the Currency school). More modern representatives are: R. G. Hawtrey, *Currency and Credit*, 2nd ed., London, 1923; L. von Mises, *The Theory of Money*, London, 1934 (first published in 1912 in German); F. A. von Hayek, *op. cit.*; L. A. Hahn, *Volkswirtschaftliche Theorie des Bankkredits*, 3rd ed., Tübingen, 1930; Irving Fisher, *The Purchasing Power of Money*, New York, 1911 (recently Professor Fisher has suggested a different explanation of cycles, the " debt-deflation " theory).

to falling prices. It follows that the upward swing must be characterized either by a rise in the volume of money and credit or by an increase in the velocity of circulation or by both at once. This theoretical deduction is confirmed by experience. Conversely, the depression is apparently a period of diminished volume of money and diminished velocity of circulation of money (and we have for present purposes to include under this the so-called book money represented by movements in the demand deposits of the banks). Expressed in another more concise way: the upswing is to be envisaged as a kind of inflation and the depression as a kind of deflation. All that we experienced on a large scale in the post-war inflation in Germany is here repeated on a small scale just as the other way round we can look upon the post-war inflation period as one great boom period whose unavoidable end was continually postponed by new and stronger doses of the inflation drug. All that was observable in this record inflation we have only to reduce to a smaller scale in order to obtain the typical characteristics of every boom: the general rise in prices, the whetting of the spirit of enterprise and speculation, the unhealthy expansion of productive plant, the general desire to buy, the increase in the volume of business, the desire to get out of money into goods, the tendency to passivity in the trade balance, &c. That the present economic depression is conversely to be conceived of as a deflation has already become familiar to everybody.

This contention seems to contradict the well-known fact that the most recent American boom which sowed the seeds of the heaviest of all economic depressions was not characterized by a rise in the general price level. This was presumed to be a sign that no reaction was to be feared and that we could count on "eternal prosperity." That this reaction has nevertheless followed, and in the most severe form, leads to the conclusion that the American boom of the years 1926-1929 was not very different in its essentials from an ordinary boom and that the inflationary expansion of the economic system can scarcely have been absent from it. In fact, although the volume of cash rose only slightly in that period, the volume of credit rose to an enormous extent. A rise in the general price level did not occur in spite of this enormous credit expansion for the reason that at the same time the prices of commodities were being pressed downwards by the fall in costs due to the progress of technique and organization. In other words: if at that time enormous quantities of additional credit had not been pumped into the American economic system, prices would have fallen considerably. The fall of average production costs in industry and

agriculture realized in that period was so large that a rise in the price level was all the time prevented in spite of the fact that additional credits were always being pumped into circulation. The opinion that the credit inflation would thereby be rendered harmless turned out to be fatal. To maintain stable a price level which in ordinary circumstances would have had to fall on account of a general lowering of production costs, amounts to the same thing as pushing prices up by an unconcealed credit inflation when production costs have remained unchanged. The important point is then not that the general price level rises, but simply the circumstance that additional quantities of money and credit are supplied to the economic system, calling forth dangerous disturbances in the structure of production. The monetary theory thus formulated is capable of explaining even the otherwise incomprehensible American boom. It is indeed the only trade-cycle theory which can really explain it satisfactorily.[7] The conclusion then is that in order to set in motion the boom mechanism which undeniably leads to a breakdown, it is not at all necessary for there to be an absolute credit inflation (in the sense of an expansion of credit leading to a general rise in the prices of commodities) but that a relative credit inflation is quite sufficient.

The increase of money, which the monetary theory of the trade cycle designates as the cause of the upswing, is essentially an increase in credit money which comes from the central note-issuing banks and banks doing current-account deposit business. An understanding of the monetary theory of the cycle presupposes above all a knowledge of how such an increase of credit money —" credit creation "—can come about. This process cannot be described here in detail,[8] but it may be more easily intelligible if we point out what an extremely large proportion of transactions are effected without the use of cash (cheques, clearing), that is by disposing over demand deposits (current accounts), so that

[7] F. A. v. Hayek especially has done much to refine the monetary theory of the trade cycle. See also J. Akerman, *Some Lessons of the World Depression*, Stockholm, 1931, and F. Machlup, *Börsenkredit, Industriekredit und Kapitalbildung*, Vienna, 1931.

[8] The process is now clearly explained in any text-book on economics, banking or money (especially recommendable is Hartley Withers' *Meaning of Money*). A fuller treatment may be found in the following books : R. G. Hawtrey, *op. cit.;* J. M. Keynes, *A Treatise on Money*, pp. 23-49 : C. A. Philipps, *Bank Credit*, New York, 1920; W. F. Crick, " The Genesis of Bank Deposits," *Economica*, June 1927, and F. A. von Hayek, *Monetary Theory and the Trade Cycle*, London, 1933. Without an understanding of this process and of its limitations, no real insight into the working of our banking system and, consequently, of our entire economic system seems possible, to say nothing of the mechanism of business cycles. There may still be many people who can no more believe the story of the genesis of bank money than they can believe the genesis of the Bible, but on the whole it now seems to be generally accepted. A last but hopeless attempt at disproving it has recently been made by M. Bouniatian, *Crédit et conjoncture*, Paris, 1933.

a superstructure of credit is built on the cash basis. The size of this superstructure is dependent on the width of the cash basis and on liquidity considerations of the banks, and it can therefore be subject to substantial fluctuations. This means that our credit system is elastic and that within certain moderately wide limits it permits of arbitrary changes in the volume of credit money. These changes are according to the monetary theory of the cycle identical with the cyclical movements. Thus the volume of credit rises to the detriment of bank liquidity in the boom period and falls accompanied by an improvement in liquidity in the depression. The leading rôle in this connexion is usually played by the central note-issuing banks.

For a complete understanding of the monetary theory of the cycle it is essential to realize that the pivot of the whole mechanism is the *rate of interest*. In so far as the banks—led by the central note-issuing bank *via* its discount policy—lower or raise the rate of interest, there ensues an expansion or contraction of credit. The decisive factor is not the absolute height of the banks' interest rate, but the discrepancy between this and that rate of interest (the real rate of interest in Wicksell's sense[9] or the equilibrium rate) which would establish itself if the volume of credit in the community were built up solely out of real savings and not out of additional credits besides. A credit inflation can therefore very well arise by the fact that the banks leave their interest rate unchanged or do not raise it far enough at a moment when the equilibrium rate in the economic system—which is only a fictitious figure reflecting roughly the average rate of profits anticipated from capital investment—has risen. This is, however, exactly what regularly happens in the boom period. If at the commencement of the boom the profit expectations of the economic system rise but the banks maintain their previous rate for credit advances or do not raise it sufficiently, then the automatic consequence is an increase in the demand for credit, owing to the widening of the gap between the rate of interest and profits on capital. In this case, therefore, no active intervention of the banks is necessary in order to call forth

[9] Wicksell, *Geldzins und Güterpreise*, Jena, 1898, and also his *Lectures on Political Economy*, vol. ii, London, 1935. The pioneer work done by Wicksell has given rise to an extensive literature refining and modifying his propositions (L. Mises, *op. cit.;* Hayek, *Monetary Theory and the Trade Cycle;* F. A. Fetter, "Interest Theory and Price Movements," *American Economic Review*, Supplement, March 1927; J. A. Schumpeter, *op. cit.;* G. Halm, "Das Zinsproblem am Geld- und Kapitalmarkt," *Jahrbücher für Nationalökonomie und Statistik*, 1926; W. Röpke, "Kredit und Konjunktur," *Jahrbücher für Nationalökonomie und Statistik*, March-April 1926; G. Myrdal, "Der Gleichgewichtsbegriff als Instrument der geldtheoretischen Analyse," in *Beiträge zur Geldtheorie*, edited by F. A. von Hayek, Vienna, 1933).

an increase in the demand for credit. It is sufficient if they do not follow or do not follow quickly enough the changes in average profit expectations (subjective real rate of interest). This is the situation that repeats itself with the beginning of every boom.

The credit expansion setting the boom going proceeds by way of the interest rate being " too low." The too low interest rate invites a general increase in investment which then leads to the mechanism of the boom drifting on towards its ultimate débâcle as was described in the preceding section. At the same time the additional credits are the source out of which the increased capital needs of the boom are in the main satisfied. The chain of reasoning is now complete: the expansion of credit in the boom expressing itself in the too low interest rate leads to an over-expansion of the economic process and by introducing a general over-investment disrupts the equilibrium of the economic system. It allows more to be invested than is saved and makes available the necessary increase in money capital from credits which do not originate from savings but are created out of nothing through the banking system. The restriction of direct consumption necessary for every increase in investment which is undertaken voluntarily in the case of real savings, is here replaced by the shrinkage of consumption imposed by the (relative) price rise, consequent on the credit inflation, on all those whose incomes are not adjusted rapidly enough to the rise in prices (monetary forced saving).[1] Through the additional credit there is made possible a shift in the economic system in the direction of an expansion of production, the " carrying out of new productive combinations of factors of production " as Schumpeter puts it, and " room " is " squeezed out " for the production of new goods at the cost of consumption.

The demonstration that the credit expansion of the boom leads to over-investment provides at the same time a proof that the capital formation induced by credit creation, and the extension of production that it sets going, leads to a painful reaction expressing itself in the crisis and depression. This reaction can indeed be postponed by a further increase of the credit supply but only at the price of a corresponding aggravation of the ultimate reaction. An " eternal boom " is therefore out of the question. The whole

[1] The dislocations proceeding in the economic process are gone into in detail by Pigou, *Industrial Fluctuations, loc. cit.;* Hayek, *Prices and Production;* R. Strigl, " Die Produktion unter dem Einflusse einer Kreditexpansion," *Schriften des Vereins für Sozialpolitik*, vol. 173/2, Munich, 1928, pp. 185 ff. (in this latter collection there are also other pertinent contributions).

That the shrinkage of consumption may, in the compensatory phase of the upswing be only relative in character has been demonstrated in the previous section (p. 109, footnote).

process of economic advance is, it is true, given a sharp jerk forward in the boom, but only to spring back again in the crisis and depression. The crisis breaks in the moment when the power of credit creation of the banks can no longer keep up with the continually increasing capital requirements of the economic system: there takes place, so to speak, a race between these two factors in which the banking system must finally succumb unresistingly if it wants to maintain sufficient liquidity to meet the increasing demands of the system for cash in the boom. The central note-issuing bank usually gives the signal for this by raising its discount rate.

The statement that the immediate cause of the breakdown is the necessity for the banking system ultimately to defend its liquidity position against the continuously growing demand for additional credits, needs to be carefully interpreted. Thus stated, it gives the impression that the machinery of the boom comes to a halt for a mere technical reason, *i.e.*, because of the monetary exigencies imposed by the gold standard. Many writers—even Wicksell himself is not entirely free from this error—have, indeed, contented themselves with this explanation given in purely monetary terms. But it is very unsatisfactory and far too narrow, for it leaves unanswered the question as to what will happen in a closed system without the "golden brake on the credit machine." Is it not another curse of the gold standard (or of any other currency with international affiliations and stable exchange rates) that it condemns us to cut short the road to eternal prosperity and to strangle the boom when everything is going at its best? The answer to this is, of course, that the only alternative to the "golden brake" (or its equivalent) would be a fully fledged inflation which, if no other brake were in due course to be applied, would end where the German inflation ended, without avoiding the ultimate crash. This must be looked at against the background of the "real" mechanism of intensification (principle of acceleration) described at full length in the preceding section. For the same reason also an investment boom financed by authoritarian forced saving or, if such a thing is conceivable, by voluntary savings, could not escape the same fate since in this case also the progressively growing scale of investments would necessitate a progressively growing scale of savings until the saving capacity of the nation were exhausted and, consequently, a correspondingly painful readjustment became necessary. In other words, the monetary aspect of the breakdown of an investment boom financed by credit expansion (monetary forced saving) is only a special form of the breakdown corresponding to the monetary causation of the boom. To be sure, this special form is also the usual and typical form characteristic of our economic system, but for reasons already indicated it must not be forgotten that it is a species belonging to a larger genus. The monetary theory of business cycles—even apart from its limited validity—can claim to be no more than a sort of Euclidean geometry among other non-Euclidean geometries.

In spite of the keenness and acuteness with ~~which it~~ has been added to and refined in the last few years, this exposition of the

monetary theory of the trade cycle still remains full of unsolved or not entirely satisfactorily solved problems. To these belongs first and foremost the question as to what causes the banks to embark again and again on a credit expansion: is it a matter, as Mises thinks, of the effect of a certain ideology, or, as Hayek believes, of a process into which the banks are forcibly drawn? The probability is that the latter of these two contentions is right, but this does not mean that no effective limitation of credit expansion and therewith of over-investment is possible.

To sum up: the central idea of the monetary theory of the trade cycle is that the periodic expansion of credit regularly brings about that dislocation of the economic process which expresses itself in over-investment and its consequences. It would be too much to contend that this is the only circumstance that can lead to an excessive increase of investment, but experience and reflection seem to show that this is undeniably the usual way in which the disruption of the economic equilibrium takes place. In this sense the monetary theory of the trade cycle is perhaps far superior to any other.

The monetary theory of business cycles has the invaluable merit of having exposed the real driving force without which the acceleration of investments in our economic system could not grow to such dimensions as lead up the hill of the boom and then down into the ditch of the crisis. But the account we have given so far of this theory would be not only incomplete but dangerously misleading if we did not finally introduce a very important modification which has a bearing on the present situation of advanced depression but which is omitted in most statements of this theory. All that has been said on credit expansion involving (by rising prices) forced savings, and leading in consequence to unhealthy boom conditions, is true only in the case of an *inflationary credit expansion*.

But surely not every credit expansion is inflationary. Whether a credit expansion is inflationary or not cannot be measured by the behaviour of the price level, as was demonstrated above by the example of the recent American boom. But the case is different if credit is being expanded when there is heavy unemployment of factors of production brought about by a previous credit deflation. This is exactly the situation of the advanced depression to-day. In this case the warnings against credit expansion are really ill-timed and dangerously apt to retard the process of recovery which can only be initiated by credit expansion breaking the vicious circle of depression and reabsorbing the idle factors of production.

Since in this case the increase of purchasing power would be at once accompanied by an increase of current output, no appreciable rise of prices, no forced saving in the strict sense and, consequently, no over-investment would occur. Credit expansion would tap the unused reserves of productive capacity corresponding to the deficit of purchasing power brought about by deflation and hoarding, and thus open up a source of capital without the dangerous recourse to forced saving. In contrast to the inflationary credit expansion at the later stage of the upward swing when the reserves of productive capacity are exhausted, the earlier credit expansion is compensatory, not inflationary. This *compensatory credit expansion* must be clearly distinguished from the former, lest the merits of the monetary theory of business cycles be diminished by sweeping exaggerations of its austere message and its deserved reputation be compromised by unfounded implications. It is a distinction which will be understood better after the process of the advanced depression (secondary depression) has been explained. This will be our task in the next section.

The monetary theory of business cycles, as so far expounded, centres around the idea that it is variations in the *quantity* of circulating media which set the process of alternating booms and depressions in motion. The widening or the narrowing of the money stream *in total* is declared to be the essential thing. This very important aspect must not, however, lead us to overlook the possibility that the *qualitative distribution of the money stream* may also become an additional factor of instability. Thus it might not be unimportant whether the flood of additional credits goes into commercial loans, into the real estate markets, into the export or import business, into instalment selling, or into stock exchange speculation. This question gained great topical interest in connexion with the last American boom period up to 1929. It has been already remarked that this period is full of riddles, and one of these riddles is the fact that this period which has been followed by the severest crisis in history shows, on the whole, a price level which was slightly sagging rather than rising. How, then, can there have been inflation? The answer to this question has been given in the text above where it was stated that, owing to decreasing costs following on technical progress, prices would have fallen if an enormous amount of additional credit had not been pumped into the economic system. Hence there was inflation, even if only of the relative kind. But it can be perfectly well argued that the quantitative effect of this inflationary credit expansion was considerably aggravated by an abnormal qualitative distribution of credits. One case is the great expansion of instalment credits which gives the impression as if the Federal Reserve system was trying to administer the heroïn not only *per os* but also *per rectum*. Indeed, hardly anything was more disquieting than the sanguine lightheartedness which prevailed at that time in the United States in the sphere of instalment selling. Another instance is the real estate market which was also grossly over-supplied with credits. The worst and most conspicuous case, however, was the stock-market speculation which was the leader on the road to disaster. For purposes of illustration, it may

be mentioned that the volume of brokers' loans rose from 1921 to 1929 by about 900 per cent.[2] It cannot possibly be denied that to conduct a large part of the additional credits over the securities market was a particularly dangerous procedure, for a number of reasons among which the disastrous international repercussions were not the least important. We may conclude, then, that the last American boom is a striking example of how the disequilibrating effects of variations in the volume of credit may possibly be greatly aggravated by peculiarities in the *qualitative* composition of the stream. But it must, of course, not be overlooked that this can only be an additional factor of instability and presupposes that an inflatory credit expansion is already going on. Without this, misdirections of credit can hardly give rise to a general economic disequilibrium. The same must be said about Irving Fisher's "debt-deflation" theory of cycles[3] which implies that it is over-indebtedness incurred during the boom which starts the crisis. Over-indebtedness could not occur without an inflationary expansion of credit, or, to be more explicit, it is only another word for it, since expansion of credit means, on the reverse side, expansion of debits, *i.e.*, a growing volume of indebtedness.

§ 16. The Secondary Depression.

The upshot of all that we have so far said is that the causation of the crisis and of the depression must be traced back to the mechanism of the boom. We understand now not only why the boom simply comes to a halt but also why it is usually followed by a painful process of contraction and liquidation. A satisfactory explanation of the boom implies, therefore, the explanation of the crisis as well. For this reason the theory of crises and cycles is essentially a theory of the boom. In the crisis, what has been sown during the boom has to be reaped; a readjustment of the disjointed economic system cannot be avoided. This is a point which must be emphasized strongly. But it is also a point which must not be driven too far. As the dramatic development of the present crisis abundantly proves, there is no denying the fact that the depression may, under certain circumstances, grow to dimensions quite out of proportion to the preceding boom, so that it loses more and more its function of readjustment and degenerates into a *secondary depression* void of any function whatsoever except to test the strength of the patience of the people in enduring a cumulative process of senseless and murderous economic destruction. Instead of restoring the economic equilibrium disrupted by the boom, the depression may lead, after a while, to a new disequilibrium which, caused by the process of the chronic depression itself, has nothing to do with the old set of disturbing factors. To explain this, a

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[2] *Cf.* C. Reinold Noyes, "The Gold Inflation in the United States, 1921-1929," *American Economic Review*, June 1930.

[3] I. Fisher, *Booms and Depressions*, New York, 1932.

special theory of the depression becomes necessary. Its task is to describe how the original process of liquidation and adaptation in the primary depression comes to set in motion a cumulative process of recession, the conditions of disequilibrium being continuously reproduced on an ever-declining level of economic activity.

To begin with, the primary depression is characterized by a process of general economic contraction which is, broadly speaking, equivalent to a process of deflation. This deflation is the unavoidable reaction to the inflation of the boom and must not be counteracted, otherwise a prolongation and aggravation of the crisis will ensue as the experiences in the United States in 1930 have shown. But the deflation connected with the secondary depression is quite different in nature. Its *raison d'être* no longer lies in the impossible situation created by the preceding boom. It results from a set of causes which only come into being as a result, and during the course, of the secondary depression. Neither the primary deflation nor the secondary (" induced ") deflation has anything in common with that sort of deflation which has been practised several times in monetary history as a policy of wilfully diminishing the volume of currency in order to raise the purchasing power of money. Like the inflation of the boom period, the deflation of the depression is the passive endurance of a process rather than an active policy, but, unlike the primary deflation which is a necessary reaction to the boom inflation, the secondary deflation is an independent process which we can freely combat. And unlike the boom inflation which undoubtedly has the positive function of accelerating economic development, the secondary deflation, being void of any positive function, not only can but should be combated.

The important thing now is to realize that this secondary deflation has a very complicated structure which must be thoroughly grasped in order to avoid widespread misconceptions which are apt to lead business-cycle policy at this time dangerously astray. For this reason the term " deflation " must be applied with caution to this phenomenon. We have already said that it would be an error to think of it as being a result of a policy aimed at wilfully diminishing the volume of currency. It would be wrong to suppose that this secondary deflation has been launched by anybody on purpose though it is perhaps fostered by all kinds of ill-advised measures. It would be equally wrong, however, to connect the secondary deflation primarily with the behaviour of the *general price level.*

The secondary deflation is, of course, accompanied by a fall of the price level, but this is only a part, and not even the most

important part, of a more general process, and the fall of prices is by no means a true measure of the whole extent of the process. To think otherwise and to define the secondary deflation in terms of the general price level is only to repeat in the opposite direction the erroneous conception of the boom as a price-level phenomenon, a conception which did so much harm during the last American boom. This obnoxious habit of thinking preferably in terms of the general price level may be aptly denounced as a "*price-level complex.*" We shall see later on that this habit has recently led, in the United States, to practical consequences hardly less disastrous than those experienced during the boom. The boom as well as the depression are not so much phenomena of price levels as phenomenon of quantities instead of one of prices, the same will be true production of capital goods). The sensational fall of prices of raw materials and agricultural products which has occurred during the present depression must not be allowed to conceal the fact that the general decline of prices is merely a rather weak reflection of the process of general economic contraction, as expressed in the statistics of production, incomes and unemployment. The obvious reason is that the effect on prices of the contraction of demand is to a great extent balanced by the contraction of the volume of production, with the marked exception of the greater part of the production of raw materials and agricultural products. In these latter cases the volume of production has been adapted very inadequately to the shrinking demand and in some instances an expansion of production has even occurred. Since the downward trend in the secondary depression has, on the whole, been primarily a phenomenon of quantities instead of one of prices, the same will be true of the upward trend. Anticipating the further treatment of this question, we may draw the conclusion at this point already that the process of contraction of the secondary depression cannot be counterbalanced by reflation (meaning a policy aimed at raising the general price level), but by re-expansion, apart, once again, from the special problem provided by the markets in raw materials and agricultural products. In other words, the policy of credit expansion at this time can be carried fairly far without bringing about a marked rise of the general price level, a statement which resumes a trend of thought which the reader will recall from the end of the last section.

If the fall of the price level is a very incomplete and inadequate index of the secondary deflation, what else is this mysterious and elusive thing? If we next turn to the behaviour of the *volume of currency*, we shall find that this also provides no real clue, and

that for two reasons: firstly, because the volume of currency (cash) represents only the base of our modern money system, and secondly, because the shrinkage of the demand for cash engendered by the economic contraction is, to a large extent, compensated by the increased demand for hoarding and for the strengthening of the liquidity of the banks.[4] Consequently, the shrinking volume of currency is also only a weak reflection of the general economic contraction.[5] The only adequate way of characterizing the secondary deflation is to point to the *contraction of the total demand*, especially as it is expressed by the *contraction of credit money* (the main symptoms being the immobility of banking accounts, the shortening of the banks' balance-sheets, the shrinkage of the clearing-house figures, &c.). This contraction of the total demand—which goes on behind the curtain of a more constant volume of currency—is the essential thing, the prime mover of the secondary depression. It is closely connected with the contraction of incomes and, also, though not so closely, with the contraction of costs, and ends in the general contraction of production which, in turn, reacts towards a contraction of demand and incomes. This mechanism of the secondary depression operates through a double "lag" which is self-maintaining as long as the vicious circle of the depression remains unbroken: firstly, the contraction of production tends to lag behind the fall of prices since it means a contraction of incomes and demand, and, secondly, the contraction of costs tends also to lag behind the falling prices. In the first case, it is the disproportion between supply and demand, and, in the second case, it is the disproportion between costs and prices, *i.e.*, the lack of profitability, which tends to be continuously maintained.

But why this continuous contraction of demand? Why do not the forces which are always working for economic equilibrium reassert themselves? To put the matter briefly, the whole trouble may be ascribed to the disastrous *destruction of that harmony between the process of the formation of incomes and the process of the utilization of incomes* which constitutes an essential condition of general economic equilibrium. The discrepancy tends to become cumulative and leads to a continuous fall of demand on

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[4] *Cf.* chap. iii, pp. 57-58

[5] It must be noted, moreover, that at this period the volume of cash will represent a larger percentage of the total volume of circulating media (*i.e.*, including credit money) than formerly. In other words, the proportion between cash and credit money has now been changed in favour of cash. It follows from this that the reversal of the process of depression will lead to an increase of credit money rather than of cash, a conclusion which may go far to correct certain fanciful ideas about the process of recovery, and to strengthen the nerves of the public against the bogy of inflation so dear to many economic puritans.

commodity markets, which in turn tends to bring about a yet further fall. The stream of money flowing to economic units—business firms and private households—and flowing out again is interrupted. Sums which flow in do not flow back to commodity markets, or else they flow back either only partially or after long delay. For purposes of illustration reference may be made to the large number of firms which are holding themselves as liquid as possible instead of using their funds for replacing old machinery let alone for making additional investments, or to those households which are actually hoarding money or leaving their banking accounts idle.[6] A special form of this process of sterilization of purchasing power is the preference on the part of the public for accumulating funds on banking accounts rather than investing them on the securities markets, a preference which is tantamount to preferring liquidity and security to profit. This " bearishness " (Keynes) of the public towards investment in securities is a very important part of the whole machinery of the secondary depression which must be taken into account by any rational policy of initiating the recovery.

In all these cases money is being saved in a form, and under circumstances, which largely prevent it from being invested, so that the *rate of saving is continuously greater than the rate of investment.* As long as this is the case, savings not only add nothing to the wealth of the community but are positively harmful for economic welfare. Saving in this case is not only " abortive " (Robertson) but downright destructive—always in the relative sense that the money saved finds no outlet in new investments. Or in other words: *money is withheld from expenditure on consumption goods, without any compensation for this non-consumption taking*

[6] That the hoarding of cash means sterilization of purchasing power is evident. But it is not always understood how money held in bank deposits can also lead to sterilization of purchasing power. The important point is that the extent to which sterilization takes place will depend on how far these bank balances are idle or active, *i.e.*, what is the rate of turnover of the accounts. Now, it is characteristic of the secondary depression that the rate of turnover of banking accounts slows down tremendously for the reasons enumerated in the text above, one of the contributing factors being the inflow into the banks of money which would otherwise have been invested on the securities market. While this " catalepsis of banking accounts," the common disease of chronic depressions, afflicts the banking system, the latter has—except for saving accounts proper—to maintain a high degree of liquidity and, for a number of reasons, actually endeavours to increase its normal degree of liquidity. In other words, whereas banking accounts are now largely inactive, exerting no demand and moving no goods, the banks can and will dispose of this inert purchasing power only to a limited degree. For these reasons it is evident that *inactive demand-deposits possess a deflationary character.*

In this connexion it must also be noted that as long as savings exceed investment, savings will largely evaporate in covering the losses of entrepreneurs incurred in the course of the secondary depression. This is, ultimately, a factor retarding the depression, but it takes some time to do so and involves a number of frictions. It must be clearly recognized that savings are in this way largely used to make good the losses they have caused which is not exactly what they are meant for.

place in the form of investments in capital goods. The general contraction of demand is, then, tantamount to an excess of savings over investment. By force of logic, these two things must be identical.[7]

Now, every attempt on the part of producers to get rid of their surplus production, resulting from the fall of demand, by lowering prices and costs and by curtailing output will necessarily be self-frustrating. For it will lead to a new fall in demand so long as the discrepancy between the formation of income and the utilization of income (*i.e.*, saving and investment) is not overcome, either by an increase of investment or by a decrease of saving. The general economic contraction brought about by this process of secondary deflation completes the vicious circle by impairing the chances of increased investment; and that for two reasons. In the first place, the general "crisis of confidence" which now breaks out serves as a kind of death-blow to the willingness of entrepreneurs to undertake new investment, while, secondly, this crisis of confidence is very apt to lead to the most fatal disturbances in the money and credit system. It may be remembered that, ever since the international liquidity crisis of 1931, the banking system in many countries has remained for a long time in a state of paralysis in which its willingness to finance new investment has been almost negligible. It is not difficult, moreover, to understand that the process of economic contraction is very apt to undermine the financial status of the banks by freezing and reducing the value of their assets, and this unfavourable development on the debit side tends also to impair the credit side of the banks' balance-sheets, as it is conducive of fright among the depositors so that the financial position of the banks is pinched from both sides. In this way a situation may ensue which gives the superficial appearance as if there were still something inherently unsound in the banking system as an inheritance from the (primary) crisis, a vestige of the debaucheries of the boom which must be cured by a strong medicine before any new expansion can set in. But, as our reflections show, banking difficulties at an advanced stage of the depression may just as well be caused by the vicious circle set in motion by the excess of savings over investment. This was undoubtedly the situation in Germany in 1932, and it seems that some disturbances in the financial situation in France and in Switzerland in recent times ought to be interpreted in the same

[7] Mr. Keynes has succeeded in making this process particularly clear in his picturesque example of the banana plantation where a Thrift Campaign breaks out (*Treatise*, I, pp. 176-178). But see Mr. Robertson's objection in *Economic Journal*, 1931, p. 399.

way. In other words, it is quite arguable that if the right moment for turning the tide of the depression by new credit expansion is missed, a relapse to a situation similar to the primary crisis may ensue. On top of all this, serious congestions in the monetary circulation may add to the difficulties, and the aggravation of the confidence crisis, together with the drop of prices and the progressive disintegration of the world's economic system, may make every idea of new investment seem nothing short of foolish.

Especially important in this connexion is the weak condition of the *securities markets*. For if equilibrium is to be restored by an increase of investment (which is one of the two alternatives, the other being a decrease of saving), it can be possible only on two conditions. In the first place, the banking system must be prepared to grant new credits, a stage that may, at this time, be fairly said to have been reached in the leading countries. But the various unsuccessful attempts made in the United States at pumping additional credits into the arteries of the national economy have proved that the willingness of the banking system to *give* new credits does not in all circumstances suffice to bring about a credit expansion. To this end, a second condition must be fulfilled, viz., the existence of entrepreneurs who are willing to *take* new credits for investment purposes so as to render the credit expansion really effective by enlarging the volume of circulating media instead of merely enhancing the liquidity of somebody. The American experiences have amply verified the surmise that even a rate of interest which approaches zero may be insufficient, in the conditions of the secondary depression, to induce entrepreneurs to enter upon new investment. If in such a situation the elasticity of demand for credit becomes almost absolutely rigid, attempts at credit expansion will not lead to the desired expansion of the total demand for commodities, but merely to an increase of general liquidity.

Now the reluctance of entrepreneurs to enter upon new investment is due not only to the confidence crisis, to the recession of prices, and to the over-investment of the previous boom, but also to the fact that entrepreneurs do not dare, for the purpose of long-term investment, to have recourse to short-term credits—almost the only available method of financing new investment at this stage—unless a marked recovery of the stock exchange points to the possibility of an early funding of the preliminary advances of the banks. That is the reason (apart from the immediate psychological effects) why rising stock markets are a necessary condition

for general recovery and why every measure and every event which has the effect of driving the public away from the stock markets constitutes a serious blow to recovery. And for the same reason it is the acid test for every recovery programme whether it succeeds in "priming" the securities markets, or not.[8] Again, it must not be forgotten that a rising stock market provides a tremendous relief also to the banks by improving their liquidity and by enhancing thereby their willingness to enter upon new credit expansion. This is done in two ways: (*a*) by offering the banks an opportunity for turning their own securities into cash, and (*b*) by doing the same for their debtors, thereby thawing their frozen assets.

The situation on the stock markets is a point which can hardly be overstressed if a real understanding of the present depression and its course is desired. For it seems that in this respect things have taken, during the preceding boom and the subsequent depression, a course which has become a special feature of the post-war development, especially in the United States, where, in the absence of those political disturbances which account for some of the worst aspects of the depression in Europe, the malignant progress of the depression demands a special explanation. One of the reasons accounting for the American crash seems to be precisely the abnormal situation on the securities markets.

Many factors have contributed to this, the frenzied speculation of 1929 being one of the most obvious. Among these factors, however, the fact deserves greater attention than it has so far received that after the war a larger proportion of capital to be invested than before the war has gone into time deposits (or savings accounts) instead of being invested by the public directly in securities. This may be inferred from the fact that in many countries the ratio of time deposits to demand deposits has markedly increased, most of all in the United States where, for the United States as a whole, the percentage of time deposits to total deposits has risen from 23 in 1913 to 45 in 1932 while, for the U.S. National Banks, the corresponding rise has been even from 9 to 47.[9] In order to grasp the significance of this change-over in favour of time deposits, one has to take into account the further fact that there corresponds to this change on the liabilities side a change also, in large measure, on the assets side, viz., the equally excessive enlargement of banks' investments in securities. In other words, the public is investing its money in securities

[8] See chap. ii, pp. 24-25.

[9] See the *Memorandum of the League of Nations on Commercial Banks*, Geneva, 1934.

indirectly by way of the banks, thereby combining security with a high degree of liquidity and also—if the banks are paying good interest on time deposits as they have done in the United States, in Germany and elsewhere—with a reasonable degree of profit. The banks are bearing the risk of possible depreciation of the securities held in stock, but—unfortunately even South-American bonds included!—this risk seemed so small during normal times that in the United States there even came into being a new school of Bank Liquidity which preached this sort of investment as the last word in the art of banking.[10] In the light of later experiences we may safely say now that this development was unsound and dangerous, so much so that the name "deposits disease" does not seem altogether inapt. When during the depression the confidence in the banks began to crumble and deposits were withdrawn the American banks had to sell out their securities on a weak market, thereby causing a collapse on the stock exchange to an absolutely abnormal extent out of all proportion to the mere influence of speculation. In contrast to the United States and several other countries, France is the outstanding example of a country which has remained absolutely free from the "deposits disease," the percentage of demand deposits having even slightly increased between 1913 and 1932. This notable fact is a very telling expression of the investment habits of the French population and of the kind of banking institutions corresponding to them. Since the great commercial banks of the type of the Crédit Lyonnais pay practically no interest on deposit accounts they offer no incentive to the public seeking investment for their disposable capital. It seems to the present writer that this accounts, to a large extent, for the fact that France has been relatively free from the kind of financial disturbances which have shaken American economic life to the core.

After this outline has been given of the destructive machinery of the secondary depression, it is a pertinent question to ask: where does it end? Bitter experience has taught us in recent times that, in the course of such a process, production may shrink to seventy, sixty or even fifty per cent. of the original volume, and we may well ask whether there is any mechanism operating to prevent a shrinkage to ten per cent. or less. In pure theory such a monstrous thing is not entirely inconceivable. But we may congratulate ourselves that a kind of automatic safety brake is provided against this

[10] The so-called "Shiftability Theory" of bank liquidity, developed especially by Waldo F. Mitchell, *The Uses of Bank Funds*, Chicago, 1925. *Cf.* Br. Suviranta, "'The Shiftability Theory' of Bank Liquidity," in *Economic Essays in Honour of Gustav Cassel*, London, 1933, pp. 623-635.

final catastrophe. In order to understand this, it has to be recalled that the depression can be stopped only in two ways, either by an increase of investment up to the level of saving or by a decrease of saving down to the level of investment. As regards the first alternative, it is surely possible that during the course of the depression something may occur which gives an incentive to new investments. The satisfaction of replacement demand cannot be deferred for ever, and here or there a new line of investment may even seem profitable, although the mechanism of the secondary depression works strongly against this. There are even certain industries whose profitability is likely to be enhanced as the depression progresses.

Leaving aside the industry of manufacturing books on crises and cycles, there are two big industries likely to prosper inversely to the depression, the armaments industry and the gold-mining industry. It is a remarkable fact that throughout the present depression the shares of the great armaments firms have not only kept their level but soared continuously at a time when almost all other shares were sagging, and it is surely not a too far-fetched idea to suppose that the rising prosperity of this branch of industry owes much to the political repercussions of the general economic and social atmosphere created by the protracted depression, especially in certain countries. What has been achieved recently in the way of economic recovery is, indeed, due, to no small extent, to the boom in all kinds of war materials. Certainly the temporary German recovery after 1933 must be largely ascribed to this factor, and it is no secret that countries like Sweden have greatly profited therefrom. But while in the case of the armaments industry the influence of the depression depends on many and uncertain intermediary factors, the favourable effect on the gold-mining industry is direct and quasi-automatic and this for a simple reason. " So long as there exists at least one country on a full gold standard, an essential condition of which is freedom to buy gold from or sell gold to the central institution at a fixed price, there is literally an unlimited demand for the commodity at that price. In other words, not only is a minimum price for the product of the industry guaranteed, but there is, besides, no limit to the amount the market will take. Added to this, the effective minimum price, translated into terms of the producing countries' currencies, has risen substantially in recent years, without a corresponding rise in costs, in consequence of widespread departure from the gold standard. Happily, prosperity in any one industry cannot fail to contribute to recovery in others, and in this respect gold producing is not

exceptional."[1] The world's gold production has, in fact, increased from 1930 to 1934 by about one-third.

But if all this fails to turn the tide, then, in the last resort, the automatic safety brake comes into action. As economic contraction proceeds, there finally comes a moment when, even without any increase in the rate of investment, equilibrium is restored owing to the rate of saving having been pushed down to the level of the rate of investment. This occurs when, on the one hand, general impoverishment forces people to consume savings and, on the other hand, the increasing budget deficit cannot possibly be covered any longer either by reducing expenditure or by raising taxation, except at the expense of a revolution. At this moment the crisis has quite definitely touched bottom. Making due allowances for the necessary qualifications to this statement with which we shall deal later, and fully recognizing all its dangerous implications, we must not ignore the truth contained in the bold conclusion that the one situation in which a budget deficit cannot possibly be avoided is precisely the situation where it is highly salutary. This proves that those are, after all, right who maintain that even the severest crisis will cease in the end—provided that the political and social framework will stand the heavy pressure. Even if we do nothing, the natural course of things will bring about its own solution though in the cruel way in which nature likes its solutions —with several thousands more having recourse to the gas-hose, several hundreds more being killed in civil warfare, and (consequent on the general destitution and exasperation) with the hysteria of the masses and their leaders increasing to such a degree as to shake State and society to their foundations. But the question why we should cross our arms in resignation is the more pertinent since the political convulsions arising from this process may lead to a very dangerous turn in economic policy which is apt to make the economic crisis a real crisis of our entire economic and social system. It would be easy to write the world's history of the last years largely in terms of this analysis.

There remain two final questions relating to the phenomenon of the secondary depression. After having answered the question as to where it ends, it seems an equally legitimate question to ask where it begins. This question is the more important since, in contrast to the primary depression, an opposite course of action is indicated during the secondary depression. While it is wrong to obstruct the inevitable course of the primary depression by new

[1] Quoted from the Monthly Review of the Midland Bank, April-May 1935.

injections of additional credits, this is just the remedy for curing the secondary depression. What are, then, the symptoms that tell us exactly where the primary depression turns into the secondary depression? No cut-and-dried answer to this question seems possible, since a more or less broad period of a doubtful nature divides the two phases, a period in which the right policy seems to be to stay on the safe side and to await events. But there are some broad principles which can be used for diagnosing the appearance of the second phase. The simplest is the mere elapse of time after which it may be reasonably expected that the primary depression has fulfilled its purging mission. It would reveal an incomplete understanding of the process of the secondary depression if we were to take the appearance of fresh disturbances as a sure sign that the process of salutary purging has not yet come to an end. For as the depression progresses it always breeds new disproportions. If production shrinks to 50 per cent., there will scarcely be any investment which does not turn out to be a "faulty investment," there will hardly be any wages which are not too high, and there will hardly be any bank or industrial firm which does not get into serious trouble. But, still, this is all rather vague. More conclusive is the symptom of persistent mass unemployment which may be taken as an indication that the primary depression has quite outgrown the dimensions imposed by its function of readjustment, and most conclusive of all will be the fact that the depression has also engulfed the industries producing consumption goods. This statement will be easily understood after the analysis given in the last sections.

The second of these final questions is a rather disquieting one. How are we to interpret the experiences of the secondary depression of to-day in the light of past experiences and of a more distant future? Is this depression of the nature of an historical accident and therefore an exception to the rule, or is it just the other way round, viz., that it is rather the milder form of the pre-war depression that is the exception? Is it not arguable that the tendency to degenerate into a secondary depression may be inherent in every primary depression, and that it is just a miraculous accident if this tendency does not become manifest? Possibly there existed before the war powerful forces which pulled the cart promptly out of the ditch by providing irresistible incentives for new investments and thus quickly absorbing excess savings? Perhaps imperialistic expansion? Or the pressure of a growing population? To argue in this way has always been the habit of staunch Marxists, but it is no wonder that the recent experiences of the present depression

have rallied an even wider circle of followers to this view. Some of these even go to the length of asserting that there is a permanent tendency for investment to be outrun by savings and therefore a tendency towards a chronic depression which is only interrupted by short-lived fits of concentrated investment. According to these gloomy pessimists—mostly sanguine inflationists in disguise, if not actually prophets of the end of capitalism—our economic system is headed for a sort of economic " entropy " where all economic energy will be paralysed by a suffocating excess of savings—unless there are huge earthquakes, big wars, and other pleasant things.

Enough has been said on these points to make a refutation of such wild surmises hardly necessary. It all boils down to the question as to whether it is conceivable that savings can ever become so abundant that we do not know what to do with them even at a rate of interest approaching zero. To this question, of course, only one answer is possible. Over-saving as such is an inconceivable thing, belonging to the same species as other economic scares like over-production. As long as the last peasant is not provided with a harvester, and the last suburban proletarian with a villa and a Rolls Royce, as long as not all the railways of the world are electrified, all countries covered with magnificent automobile roads and all cities of the world blessed with underground railways, it is futile to discuss this point. To designate booms as periods where the pressure of excess savings is temporarily relieved by adequate investments is really a very curious misrepresentation of actual facts. As we know, it is just the excess of investments over savings which is the essence of the booms. The very fact that recourse has to be had to forced savings (credit expansion) in order to finance the huge investments of the boom period and so to set in motion the familiar process leading to the crisis abundantly proves how utterly undeserving of discussion this view is.

But all this does not dispose of the possibility that, once over-investment has set in motion the process leading from the boom to the depression, our economic system may tend to fall into the coma of the secondary depression unless strong incentives of an extraordinary character drag it promptly out again. This is certainly a question worthy of discussion. It has happened in the recent case, and it has happened several times before in the history of depressions. But all this is neither here nor there. The real point is whether the " strike of entrepreneurs," which is virtually at the bottom of the secondary depression, is likely to be of any significance under ordinary circumstances or whether the opposite is true. It would be rash to give any peremptory answer to this

question since it is a question of greater or lesser probability into which many psychological factors enter. All we can say is that it is indeed not likely that things are exactly as the pessimists would make us believe—unless an unusual constellation of circumstances contrives to bring about that set of abnormal psychological reactions in which the secondary depression thrives. That is just what has happened to-day. It is the personal view of the present author that capitalism, as such, is essentially inimical to economic inertia. By virtue of its basic principles it has, like nature, a *horror vacui* which leaves no gap unfilled. It takes a great deal to kill this stupendous vitality inherent in capitalism, but in the last five years the world has managed somehow, if not actually to kill it, at least to knock it half-conscious, so that the wonder is not that so much of the previous vitality has gone, but that so much still remains. But even if this view should be incorrect and if the recurrence of deadlocks should become a regular feature of capitalism in the future, it would be wiser to apply some judicious measures to help capitalism along than to scrap it altogether.

Although even in earlier periods of long-lasting depression tendencies to treat it as a special phenomenon have not been absent, the *theory of the secondary depression* is the result of a rather recent development which only attained the dignity of a piece of analysis recognized in academic circles under the pressure of the present world depression. The very first treatment on the lines of the savings-investments approach, made famous later by Mr. Keynes, is perhaps to be found in an obscure little pamphlet in German published in 1903 in Brooklyn by an American business-man writing under the pseudonym of J. J. O. Lahn.[2] His real name was N. Johannsen under which his later publications are known.[3] He clearly recognizes that long depressions must be explained by the deflationary effect of savings which are not adequately absorbed by investments, a process likely to be made cumulative by the entrepreneurs' losses and their repercussions. He calls the savings thus made inactive and harmful "impaired savings," reminding us of the term "abortive savings" introduced more than twenty years later by Mr. Robertson.[4] Mr. Johannsen's pamphlet is full of shrewd observations and bold analysis, and his whole treatment is such that Mr. Keynes is right in giving him the credit of having "come very near to the truth,"[5] though Mr. Keynes does not seem to know his first pamphlet of 1903. But, as Mr. Keynes justly observes, the weak point in his argument is that he "regarded the failure of current savings to be embodied in capital

[2] J. J. O. Lahn (N. Johannsen), *Depressions-Perioden und ihre einheitliche Ursache*, Brooklyn, 1903. The present writer found this obscure pamphlet while rummaging among old books in the University of Constantinople. Mr. Johannsen died in 1928 before the great depression drew attention to his early contribution to the problem of the secondary depression.

[3] N. Johannsen, *A Neglected Point in Connection with Crises*, New York, 1908, and later post-war pamphlets. All these publications are mainly variations of the theme contained in the pamphlet of 1903.

[4] D. H. Robertson, *Banking Policy and the Price Level*, London, 1926.

[5] J. M. Keynes, *Treatise*, II, p. 100n.

expenditure as a more or less permanent condition in the modern world due to a saturation of the capital market, instead of as a result of a temporary but recurrent failure of the banking system to pass on the full amount of the savings to entrepreneurs, and overlooked the fact that a fall in the rate of interest would be the cure for the malady if it were what he diagnoses it to be." In this Mr. Johannsen has, indeed, come very near to the view rejected above. The main fact accounting for this is that, at that time, the nature of credit expansion and its rôle in financing the boom was, if at all, only dimly perceived. The real development of the theory of the secondary depression on defensible lines has been the result of a stream of thought which has become more and more prominent during the course of the present depression among various writers of different countries. Most outstanding in this respect has been Mr. Keynes' *Treatise on Money* which appeared in 1930. The treatment given in this paragraph owes much to this great work, notwithstanding the substantial reservations and differences which need not be repeated here. The present author must resist the temptation to follow up in detail the various phases of increasing heresy and to compare the developments in the different countries, emanating from the growing dissatisfaction with the orthodox view and the restrictionist policies connected therewith. As for his personal share in this development he may be permitted to say that he first became convinced of the defectiveness of the orthodox view and of the need for a special theory of the secondary depression while acting as a member of the German Reich Committee on Unemployment in the spring of 1931. The report of this committee clearly reflects its conviction that something could be done to shorten the road to recovery by arousing the national economy from the torpor into which it seemed to have fallen through the degeneration of the crisis. But in this the committee was much ahead of the development of common and even academic opinion so that its recommendations unfortunately went unheard at that time.[6] In subsequent years the present writer tried on several occasions to elaborate his point of view.[7] It coincides largely with the views of a number of writers in other countries, notably with those of Mr. Robertson in England,[8] of Professor Ohlin in Sweden,[9] of Professor Viner in the United States,[1] of Professor Haberler and Dr. Mahr in Austria,[2] and of Professor Verrijn Stuart in Holland.[3] It is to be hoped that by the joint effort of these much may be achieved in giving to the theory of

[6] See the author's articles "Praktische Konjunkturpolitik, die Arbeit der Brauns-Kommission," *Weltwirtschaftliches Archiv*, October 1931, and "Trends in German Business Cycle Policy," *Economic Journal*, September 1933.

[7] Especially in his contribution to the *Festschrift für Gustav Cassel*, "Die sekundäre Krise und ihre Ueberwindung" (*Economic Essays in Honour of Gustav Cassel*, London, 1933, pp. 553-568). See also his article "Die Nationalökonomie des 'New Deal,'" *Zeitschrift für Nationalökonomie*, 1934, vol. 5, No. 5.

[8] In various writings mostly published in the *Economica* and in the *Economic Journal*.

[9] Bertil Ohlin, "Ungelöste Probleme der gegenwärtigen Krisis," *Weltwirtschaftliches Archiv*, July 1932; articles in the *Index* (Stockholm), and his book *Penningpolitik, Offentliga Arbeten, Subventioner och Tullar Som Medel mot Arbetslöshet*, Stockholm, 1934

[1] Jacob Viner, *Balanced Deflation, Inflation or more Depression*, Minneapolis, 1933.

[2] Alexander Mahr, *Hauptprobleme der Arbeitslosigkeit*, Vienna, 1931. Professor Haberler's contributions are contained mostly in unpublished manuscripts.

[3] G. M. Verrijn Stuart, "Das Reflationsproblem im Lichte der Theorie des 'neutralen' Geldes," *Economic Essays in Honour of Gustav Cassel*, pp. 605-622.

the secondary depression that degree of refinement and qualification which it still badly needs.

§ 17. Summary.

The lack of agreement among the various theories of the business cycle is, as Mitchell rightly remarks, less a disagreement over fundamentals than one over arrangement and emphasis. This is explained by the fact that the laws of economic movement cannot be described and analysed without pursuing all those numerous forces which determine the course of the economic process: production and consumption, the distribution of income and its expenditure, saving and investment, optimism and pessimism, natural and social forces, commodity and money influences, prices and costs. Consequently every *simple* explanation of the business cycle must be incomplete and therefore false. On the other hand, however, the theory would be lacking in form and superficial if it sought to give equal value to all the forces influencing economic phenomena. A classification of these forces is the more indispensable since some of them stand out as those which can claim the rank of a real cause while others subside into the background as forces which either only give the first impetus (which would remain ineffective without the " causes ") or provide the frame within which the " causes " unfold their effect. A satisfactory explanation has therefore three tasks: to enumerate the initiating forces, to establish the real causes of the cyclical movement, and to describe the mechanism of the movement through boom and depression. The first problem has been solved by reference to discoveries, natural and political events, changes in sentiment, and all the other circumstances which may give the first impulse to a boom. As regards the second problem which consists in tracking down the ultimate causes of cyclical movements, the choice can only fall on the monetary factors which were described in the preceding section. The last problem can only be dealt with by describing those processes which—reinforced by the dislocations in the distribution of income and in its expenditure, by changes in the structure of prices and costs, and by psychological and technical factors—culminate in the fluctuations in the scale of investment. The explanation in favour of which we have decided may be denominated a *monetary over-capitalization theory:* this sidetracks the futile dispute as to whether the monetary causation predominates over the non-monetary causation or *vice versa.*

This theory gives us the following schematic description of the cyclical process: In the depression, stocks are cleared, both house-

holds and business firms have held off their demand for goods for a long time, funds of money capital have accumulated and have caused the rate of interest to fall, the diseased parts of the economy have been cut out, elements of waste are eliminated, production costs generally are lowered. After the forces have in this way gathered in readiness for an economic boom, an impulse emerges from somewhere which releases the disposition for the increase of investment. This disposition grows by its own force to ever greater strength, partly out of psychological grounds and partly by reason of economic compulsion. But this increase in investment would not be possible if the economic system were not fed with additional credits proceeding by way of a relatively low interest rate. The over-capitalization made possible by credit expansion finally disrupts the equilibrium of the economy. It does not always end in a crisis but invariably ends in a depression during which by the painful process of recession and reconstruction a new equilibrium gradually establishes itself from which a fresh boom takes its start.

All these considerations lead to the conclusion that the theory of cycles and crises is essentially a theory of the boom. Once the boom and its real mechanism has been explained the explanation of the crisis and depression follows by itself. There is nevertheless still room for a special *theory of the depression* in so far as it may in certain circumstances acquire an independent character. This is the case when the depression acquires an obstinacy and an intensity which can no longer be designated as the mere reactions to the preceding boom, when it loses its real economic function of " readjustment " and degenerates into a process of economic contraction magnifying itself by its own force. To understand this, the depression must be conceived as a period in which the falling off of the will to invest, the fall in prices and costs, and the striving of the banks to write off their bad debts and increase their liquidity unite in a process of reciprocal reaction which leads to a shrinkage of the volume of credit and of production along with a glut of goods (deflation). This shrinking process can in certain unfavourable circumstances proceed further than the measure necessitated by the liquidation and readjustment function of the depression, and involve the economic system in a cumulative process of stagnation which lasts so long as the " slack," in the form of reserves of productive resources, cost reductions and savings, arising out of depression, is not utilized for new investment. The primary depression which represents the necessary reaction of the economy to the disturbance of equilibrium by an excess of credit creation may be followed by a secondary depression whose real causes are to be sought in

the circumstance that an independent and economically purposeless secondary deflation develops out of the unavoidable deflation of the primary depression. If in the primary depression the poison of the credit inflation is discharged, then in the secondary depression the new poison of the deflation penetrates the economic body. Undeniably the world has recently witnessed this second phase of the depression. The primary depression had fulfilled its economic function of readjustment but until quite recently the powers of self-healing which should now come into action had failed to appear and their place had been taken by a new further shrinkage.

If we wish to make use of the knowledge we have acquired about the causes of cycles and crises to explain the *present world economic depression*, then the first thing that we must realize is that the present depression is the result of a combination of the most varied factors and only this combination explains the unexampled acuteness and stubbornness of this the most severe of all depressions yet experienced.[4] The origin of the depression is to be sought, like that of every former depression, in the over-investment of the preceding boom caused by credit expansion, so that to this extent it can be fitted into the historical rhythm of cyclical movements. The main seat of this unhealthy economic expansion was the United States whose credit expansion has already been described. From here the credit expansion spread over the whole world supported substantially by the monetary policy of the Bank of France and the Bank of England. Germany took part in the international credit expansion mainly *via* enormous imports of capital. These gave the incentive there also to an investment boom in which there lay a special danger, enhanced by the loan policy of the then Reichsbank President Schacht, by the fact that the foreign credits had the increasing tendency to take short-term form. If we want to go still further back, it is the World War and the destruction that it left behind it which must be designated as the ultimate great driving force behind this strenuous exertion of the nations as this enormous wave of the last investment boom may be described.

On the one hand, the war destroyed an enormous amount of the capital wealth of the world and, as a consequence of decidedly short-sighted peace treaties, it disturbed the world economic equilibrium. On the other hand, besides speeding up technical progress, it stimulated men through necessity, economic pressure, and impoverish-

[4] The best analysis of the present depression is now to be found in Professor Robbins' brilliant monograph *The Great Depression.*

ment, to develop their economic energies to the furthermost limits. So long as this stimulation lasted, the disturbance of equilibrium due to the war and the peace treaties was more or less suspended in its effect, being superseded by the hectic activity in making good the war destruction. But the ultimate collapse was bound to be the more terrific: the structural strains and disturbances brought about by the war combined their sinister effects with the unavoidable reaction to the boom, the latter in its turn being largely created by the same war. So there stands over the present world economic crisis with all its misery and destruction the shadow of the World War: it is essentially only a continuation of the atrocious drama which began in August 1914, and perhaps nothing has contributed so much to its aggravation as the circumstance that the world is to-day more distant than ever from real political and economic peace and that the harassing fear of new political adversities, in a moment when the consequences of the last war are shaking the stability of our social system, is paralysing the economic forces all over the world.

We repeat: in its essence and in its outcome the depression in the United States and in Germany—the two main seats of the depression—derived from the unhealthy economic expansion which was in turn caused by developments in the money and credit system. In accordance with the height of the investment wave the depression would have been severe even if no further aggravating circumstances had been present. But such circumstances happened to supervene to a disastrous extent.

As fate would have it, this economic depression coincided with an unusually severe agricultural depression which shook the agriculture of all areas and hit cereal-growing with exceptional vehemence. On top of all this there came all kinds of harmful State interference (tariffs, valorization, wage-manipulation, subsidies, &c.), reparations and other huge political debts, the carrying too far, both in tempo and in extent, of rationalization, disturbances in the mechanism of the international monetary standard, the dislocation of world markets through Russian dumping, wasteful expenditure by governments, the decrease of the elasticity of the economic system through the growth of monopolistic elements of every kind, and, finally, that cumulative aggravation of the depression of which we have already spoken.

CHAPTER V.

TRADE-CYCLE POLICY.

§ 18. The Effects of Crises and Cycles.

Under trade-cycle policy we understand the totality of all measures by means of which it is sought to remove, or at least to mitigate, crises and cycles. There are here two questions involved. The first is, *should* we combat crises and cycles? and the second, *can* we combat them? It is evident that the first question must be answered before the second, and the answer to this question depends on how we judge the effects exerted by crises and cycles in the economic, social, and financial sphere.

It will seem to many strange, and will be considered sheer academic pedantry, that we should even raise the question whether we *ought* to counteract the phenomena of economic fluctuations by suitable means, at a time when not so long ago the recovery from the depression with its ever-growing destruction stood unchallenged on the peak of all desires and endeavours. In fact, it is very widely held to be a proposition needing no further proof that economic fluctuations are to be regarded as an evil which should in all circumstances be combated. But this attitude tends to overlook the fact that the boom belongs to the cycle just as much as the crisis and depression, and it ignores, moreover, the fact that the boom constitutes the fertile soil on which the crisis and depression are raised. If we think that the crisis and depression should be combated, then we must be prepared to sacrifice the boom in the same measure as we want to modify the later reaction. Thus, instead of its being a matter of course, we are obviously faced with a serious problem of weighing up against each other the assets and liabilities of the whole cyclical process.

The discussion finally reduces itself to the philosophical resignation that a price must be paid for everything in this world. If we want to have the acceleration of economic development which takes place during the boom, we must be ready to pay the price of the later reaction with its losses and social misery, and if, conversely, we want to avoid this reaction (crisis and depression), then we must renounce the period of accelerated economic advance. The ultimate dilemma is this: Do we prefer calm and steadiness or a quick tempo of economic progress? Comfortable stability or discontinuous outbursts of energy? It is just the same as with our own mortality and other things which we cannot

change: we must face the fact that we have to decide between stability and expansion and that we cannot attain both at once. The final decision is a political one, that is, it is dependent on valuations which are subjective and have no universal validity. The task of science is to bring together all the considerations which are indispensable in making a final judgment.

In commencing with the positive functions of the cyclical movement, we may recall that we have already described it in a previous section as the form in which, in the capitalist economy, the economic development towards the perfection of the technique and organization of the apparatus of production and exchange typically takes place (see § 14). If—to vary slightly the celebrated words of the "Communist Manifesto" of Marx and Engels—"capitalism has first shown what human activity can accomplish," if "it has achieved miracles altogether different from Egyptian pyramids, Roman aqueducts, and Gothic cathedrals, and has carried out other expeditions than migrations and crusades," then it is the spasmodic outburst of the ardent spirit of entrepreneurship and its financing by a periodic credit expansion which has made capitalism capable of this incomparable historical feat. If, for example, we had waited for the construction of the modern railway network until the necessary means had been scraped together without a temporary speeding up of the economic process by inflation, then a railway journey would undoubtedly still be for us just as much a sensation as it was for our grandfathers fifty years ago. And what is true of railways is true also of all the other advances in technique and organization of the last hundred years: their swift diffusion always takes place in the framework of a boom on which a reaction invariably follows. The boom may be described as a period in which all the reserves of power of the economic system are mobilized for the purpose of accelerated economic progress. It is, so to speak, a periodic "Five Year Plan," and for a hundred years past it has anticipated the fundamental ideas of the concentration of investment underlying the Russian Five Year Plan.[1] The cyclical movement is, therefore, not the senseless consequence of capitalist libertinism, but a process with a quite definite positive function.

[1] It is a curious fact that in economic affairs the artifical things usually attract greater attention than the spontaneous ones, presumably because the latter are taken more or less for granted, but also because the artificial things are mostly done by dictatorial governments who know how to secure publicity for their activities. What Russia has accomplished through the Five Year Plan is really a trifle as compared with the spontaneous investment waves of capitalism and it is an open question what capitalism would have achieved in Russia under the same circumstances. While the Russian reconstruction was astonishing the world, the reconstruction of the devastated areas in France, for example, went on almost unnoticed.

This positive function is somewhat concealed by negative effects which are representative in their totality of the price we have to pay for the speeding up of economic development. These negative effects cumulate in the crisis, or at any rate the depression, which actually takes its origin from the positive function of the boom. The latter thus brings in its train a period of economic losses all round, a shrinkage of the volume of production and trade inflicting on the majority of the population a grievous diminution of their general welfare. The diminution of wealth can, as the present depression very forcibly shows, reach such proportions that the impoverishment of large classes of the population shakes the foundations of the economic and political structure.

In the forefront of these unfavourable effects of cyclical fluctuations comes the effect on unemployment. Even the most zealous eulogist of the positive functions of the cyclical movement must admit that the alternation from over-work in the boom period to unemployment in the depression is a social evil of the worst kind. The trade cycle is, if not the sole, at least the main source of unemployment, that scourge of modern industrial countries.[2] How pernicious this is is only recognized to the full when we realize that it is not so much the average level of wages as the danger of unemployment and the uncertainty that it introduces into the economic future of the wage-earner, which is the real social problem of our time. In so far as a dampening down of cyclical fluctuations promises the diminution of unemployment, trade-cycle policy becomes one of the most important measures of social policy. This includes such measures as are intended, without influencing the cycle itself, to alleviate the economic, social, and moral effects of unemployment. These will be dealt with separately in a later section.

Unemployment is a reflection of the monetary and material losses and the general contraction of economic activity which characterize the crisis and depression. Corresponding to the dismissed workmen, there are the closed workshops, the rusting machines, a mass of failures and bankruptcies with all the human tragedies bound up with them, the redistributions of incomes and wealth (in proportion to the dimensions of the boom) which take place irrespective of guilt or merit. Finally, there is a series of more remote effects

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[2] The problem of unemployment is beyond the scope of this book. From amongst the extensive literature on the subject we may mention : W. H. Beveridge, *Unemployment, A Problem of Industry*, new ed., London, 1930; A. Mahr, *Hauptprobleme der Arbeitslosigkeit*, Leipzig and Vienna, 1931; H. Clay, *The Post-War Unemployment Problem*, London, 1930; A. C. Pigou, *The Theory of Unemployment*, London, 1933.

among which special attention may be drawn to the decline in the figures of marriages and births, the rise in the death-rate, the fall in the standard of living, the increase in criminality, and, lastly, the intensification of social and political unrest. The net result of all these phenomena of the crisis and depression is that a large part of the economic ground gained in the boom has to be given up in the depression. Indeed, it may even happen, as the present depression bears witness, that through the convergence of all the most unfavourable circumstances the general economic level falls far below the position that had been reached before the commencement of the last boom.

The cycle has especially important effects on *national budgets*.[3] It will be obvious that the boom must tend to increase exchequer receipts (particularly the yield of taxes that are especially sensitive to the cyclical movement) corresponding to the increase in the volume of production, trade, and income, while in the crisis and depression they fall. The expenditure side also is not unaffected by cyclical fluctuations. During the boom there is a steady fall in certain classes of expenditure, especially social expenditure, but this is counterbalanced by other expenditure and by the fact that in this period of increasing national income, increasing exchequer receipts and optimistic public feeling, the Government and Parliament usually manifest a very liberal spending mood which leads not only to the using up of the original surpluses but often even to State borrowing. We shall later show that this inflation of expenditure by State borrowing during the boom is just the opposite of a rational cycle policy.

In the depression the reverse takes place: on the expenditure side the slight tendency to an automatic fall through the reduction in the prices of materials bought by the Government is very much more than surpassed by such increases in expenditure as arise from the tasks falling to the lot of the State in the depression (unemployment relief, assistance to the banks, &c.). But since exchequer receipts fall off in the depression, the Government now seeks to maintain budgetary equilibrium by reducing any expenditure that can possibly be dispensed with, and so far as the reduction in expenditure is insufficient, it tries to tighten up the tax screw. The reduction of expenditure and increase in the burden of taxation are, however,

[3] On this see: F. Neumark, *Konjunktur und Steuern*, Bonn, 1930; H. Fick, *Finanzwirtschaft und Konjunktur*, Jena, 1932; J. Lescure, *Des Crises Générales et Périodiques de Surproduction*, 3rd ed., Paris, 1923, pp. 288-296; H. Dalton, *Unbalanced Budgets*, London, 1934; H. Laufenburger, "The Interplay of Taxation and Economic Fluctuations," *Index* (Stockholm), May 1935.

elements which accentuate the depression so that the budgetary policy during the depression sets up a vicious circle in which the budgetary crisis and the economic crisis become increasingly intermingled especially as the budgetary crisis is a new source of pessimism and lack of confidence. Eventually a point is reached when even the severest retrenchment and the most vigorous screwing up of taxation can no longer ward off a deficit and, despite the canons of budgetary equilibrium, recourse must be had even for ordinary regular items of expenditure, to State loans, or, where even this is no longer possible, to the printing press. This point approaches nearer with the progressive growth in the difficulties of maintaining exchequer receipts in face of the general economic contraction. The development in most countries during the present depression gives abundant proof of this, the most conspicuous example at the present moment being the case of France, Holland, and Switzerland.

The fatal interaction between financial crisis and economic crisis has been particularly noticeable in *Germany*. It is to-day generally acknowledged that it was an unpardonable mistake to allow the expenditure of the Reich as well as the States and municipalities to rise so high in the boom years (1927-1929) that the budgetary surplus after the stabilization of the mark was almost immediately transformed into a deficit, of which the chief danger lay in the increase in the floating debt. The way in which, from the point of view of financial technique, this to-day simply incomprehensible budget deficit in the main came about was that the expenditure in the extraordinary budget (public works programme) was enormously increased and it was not found possible to cover this expenditure out of the proceeds of loans. Thus Germany entered the depression with a budgetary position that was already undermined and from which the necessary consequences of a vigorous reduction of expenditure and an increase in taxation had not been drawn in time.

The continued difficulties of the Treasury put an excessively heavy burden on the money market while the political and psychological reactions of the financial crisis, which in spite of the ever-optimistic declarations of the Government could no longer be concealed, contributed their part also to the aggravation of the economic crisis. It should not be forgotten that it was the German financial confusion that determined the fatal political development of 1930, ending in the election of the 14th September 1930, which was so destructive of business confidence. In the later phase of the depression the Brüning Government made repeated and temporarily successful attempts—by emergency decrees of increasing drasticness—to maintain the budget equilibrium by retrenchment and the tightening up of the tax screw. But here also the fatal interaction between financial contraction and economic contraction manifested itself. And since under the German system of unemployment relief the increasing length of the period of unemployment threw a constantly growing section of the unemployed on to the local authorities for poor relief, the financial needs of the local authorities also rose to an ever more threatening scale. Despite

positively heroic efforts to preserve budgetary equilibrium, it proved an altogether impossible task to avoid a total budget deficit (of the Reich, the States, and the municipalities) running into billions.

It is difficult to see what more could have been done in Germany by way of retrenchments and tax-raising, and yet the result was that after a while a new budget deficit presented itself. It may be likened to the battle with the Hydra, two ghastly heads always growing in the place of the one cut off. It is a well-known fact that the drastic financial policy of the Brüning era—honest to be sure, and passively courageous but none too ingenious—paved the way for Hitler. Thus the ultimate outcome was that what—namely, an expansionist economic policy—should have been done wisely and with a skilled hand, was now done under political and economic conditions which were liable to exclude any chance of lasting success. This should be a lesson to all other countries, which, like France, Switzerland, and Holland, are at the present moment following more or less the same policy as Brüning, though it is to be conceded that the general economic and political conditions in these countries are different.

This high degree of cyclical sensitiveness of State budgets observed during the present depression, is the result of a rather recent development. If we look back at earlier depressions, it is remarkable how little the public finances have been affected. In England good examples are provided by the severe crisis of 1857, which left almost no trace on the budget, and the long depression of the 'seventies, which was even accompanied by budget surpluses which were so considerable that it was possible steadily to lower the income tax (from 6d. in the £ in 1872 down to 2d. in 1875). The reason for the change from those happier days to the present time is, of course, to be found in the fact that the percentage of the national income claimed by the State has tremendously increased, especially since the Great War, and this, in turn, is an expression of the strikingly increased importance of the State in all its activities and of the growth of interventionism in economic policy. As rough approximations, it may be said that the percentage of the national income claimed by the public authorities rose, from 1913 to 1928, in Great Britain from 12 to 25, in Germany from 16 to 28, in France from 18 to 24, in the United States from 8 to 15, and in Italy from 16 to 31.[4] It is obvious that the higher the percentage the more the State budget is bound to follow the fluctuations of the national income. The reasons for this are primarily two: firstly, with the growth in the size of the budget, recourse has more and more to be had to taxes with

[4] These and the other figures are quoted from E. Wagemann, *Zwischenbilanz der Krisenpolitik*, Berlin, 1935. It is worth noting that in Germany the percentage of the national income taken by public expenditure has risen during the depression to still higher figures (30 in 1930, 32 in 1931, and 35 in 1932), while the national income decreased at a precipitous rate.

a high degree of cyclical sensitivity (*e.g.*, turnover taxes, income taxes, business taxes, taxes on stock exchange transactions, taxes on luxuries, &c.), and, secondly, with the growth of the economic and social responsibilities of the State an increasing percentage of State expenditure is characterized by a high degree of (inverse) cyclical sensitivity, especially the expenditure on social relief and the like. Summing up, we may say that the growth of Etatism and Inventionism has given to the State budget an increasing degree of cyclical sensitivity, rendering it more and more dependent on the fluctuations of the national income and raising its importance as an integral part of the national economic structure. The gravest consequence of this at present is the fact that the course which the public finances, owing to their high degree of cyclical sensitivity, follow during the depression react in turn very ominously on the shrinkage of the national income on which for good or ill they also depend. Consequently the growth of the State, its power, and its continual interference has added tremendously to the top-heavy sensitivity of our entire economic system. To put it bluntly, capitalism has been made more unstable and more sensitive precisely by something very dear to the hearts of those who never tire of blaming capitalism for this.

We have still not completed the debit side of the account of cycles and crises. There has, finally, to be added the circumstance which was earlier rather neglected, but which has come into the limelight at the present time, that the phenomena of economic contraction of the depression give rise to State intervention which obstructs the economic system for a long time after the recovery from the depression. Thus modern protectionism in particular has resulted in large part out of protective tariff measures seized on in time of depression. It is always in bad times that the cry for separation from abroad and protective tariffs is loudest, and that this cry finds the most willing listeners among the Government, Parliament, and the public. If it is doubtful whether protective duties are the right way for any individual country to alleviate the crisis or at any rate its consequences, there is no doubt at all that if all countries follow this policy it only aggravates the situation. But this is invariably just what actually happens, giving rise to a new vicious circle which is the more thoroughly to be condemned since protective duties, once introduced, tend to have an extraordinarily tenacious existence. For this reason the present splitting up of the world economic system by tariff walls and import regulations which tower sky-high and a barbed-wire entanglement of foreign exchange regulations is per-

haps the most dangerous and most serious of all the effects of the depression.

The present economic depression shows in other spheres also, how, under the pressure of necessity, Government intervention is undertaken which changes the structure of the economic system so radically that the traces will still be visible long after the depression itself has been overcome. We need only to think of the important changes which the banking system has experienced under the measures of State support in Germany, Italy, and Austria, and we are still far from certain that the present depression will not call forth still further structural changes which will shake the capitalist system to its foundations. Without doubt the present depression is unique in every respect, but it shows in particularly striking fashion to what cataracts one may be driven if one leaves the cyclical stream to run its course.

If we sum up the result of all these considerations, it might turn out, in spite of due account being taken of the positive function of the cyclical movement as the great motive force of economic development, that so soon as the cyclical fluctuations overstep a certain level the evil far outweighs the good. Since, as things are, we should not raise our hopes of a dampening down of cyclical fluctuations too high, there is no reason why the apprehension that we may possibly destroy the machinery of economic progress should hinder us at the outset from weighing up and recommending measures of trade-cycle policy. The much greater and more pressing care is the opposite: that we may not succeed in finding the correct and effective means of freeing the capitalist system from those disturbances which constantly threaten its existence and hinder the full development of economic welfare of which it is capable. This is the biggest and most difficult task facing economists. We cannot give its solution here, but can only indicate the direction in which with our present-day knowledge this solution is probably to be sought.

§ 19. The Bases of Trade-Cycle Policy.

In the preceding section we described as trade-cycle policy all those measures with which it is sought to remove, or at least to smooth out, cycles and crises, and there was included under this general formula the discussion of the effects of crises and cycles. As a starting point for this discussion, such a general formula was both suitable and necessary. It remains now to determine more precisely what the concept of trade-cycle policy signifies.

The aim of trade-cycle policy, as we have up till now conceived

it, was the elimination or the damping down of the trade cycle as a whole so as to remove the conditions under which new economic depressions and their losses continually arise. This is, indeed, the main and most comprehensive objective of trade-cycle policy, but it is not its only aim. In addition there are two narrower aims which in times of depression like the present push the former more comprehensive one into the background. The question of how we can control the cycle as a whole habitually occupies only a small circle of people, because still few are aware that the crisis and depression must be explained as part of the cycle as a whole and that their real cause is to be sought in the preceding boom. The majority want to sip the " sweet nectar " of the boom without also swallowing the inevitable " bitter medicine " of the depression, and believe that we can allow ourselves all the extravagances of the boom only to declaim later in the depression against the economists because they can give no recipe which can be applied to render the consequences of the extravagances ineffective. As against this it cannot be too often emphasized that the combating of the depression must take place in the preceding boom and that once an over-investment has been allowed to develop in the boom we cannot evade the depression and must accept it as a necessary reaction to restore equilibrium. It would be radically wrong to combat this reaction by means of new injections of credit inflation: this would only postpone and make more difficult the final recovery of the destroyed economic equilibrium. In spite of all this, trade-cycle policy is never so popular as in the actual time of the crisis and depression.

The tragedy of this situation is that, just when the disturbing consequences of the cycle descend upon us, all that the economist can in general recommend is patience and confident waiting for the ultimate recovery from the depression, and he must give emphatic warnings against the thousand and one projects for escape which are wont to be conceived in this time in the brains of more or less fanatical reformers. The rôle into which the economist is thrust is an extremely thankless one. For a generation which has become accustomed to the State's intervening in all cases of economic difficulty or distress does not like to be told that, in face of an economic crisis, we are in no better position than a doctor who, if he does not wish to be a quack, can, in the case of an internal malady, do nothing else than rely on the powers of self-healing of the body, strengthen them, and make their way easier.

This is sufficient, however, to imply that, even in times of depression, it is possible to adopt prudent measures aimed at

accelerating the recovery from the depression by seeking to strengthen all those forces which eventually bring the economic process back to its normal course. Generally speaking, the measures suited to this will be of a negative kind and will be directed towards ridding the economic process of obstacles and frictions and towards reducing the amount of State intervention instead of increasing it. The present depression shows, however, that there are cases where positive measures as well may be apt. Such is the case when the depression has entered the phase of the secondary depression. The nature of the problem here involved has already been explained in the preceding chapter. It is around this question that the current discussion on trade-cycle policy is centred, while trade-cycle policy in its stricter and more comprehensive sense of the control of the cyclical movement has at the same time assumed on the whole a more academic character. For some countries, however, the recovery has now already progressed so far that trade-cycle policy in the latter sense is gradually gaining in immediate practical importance.

Lastly, a trade-cycle policy in times of depression may set itself a final, still more modest aim and may content itself, so long as the way out of the depression cannot be found, with making the social and financial consequences of the economic recession as little felt and therefore as bearable as possible. In particular the giving of relief to the masses of unemployed is a task which must be carried out somehow even if no direct remedy for the depression is discoverable, and the same applies in certain situations to the supporting of large banks on the verge of failure. These are merely symptomatic measures or palliatives, and considering their modest aim it is doubtful whether we should include them under trade-cycle policy. The real problem of these symptomatic measures lies in the fact that, while the necessity of mitigating measures is undeniable, it is equally undeniable that there is a danger that they may create new frictions and obstructions, making more difficult and delaying the automatic healing process. It has, for instance, to be carefully considered whether the shortening of working hours, which is demanded in many quarters and by which the unemployed would be transformed into short-time workers, does not mean a new economic obstruction making the recovery more difficult. The system of unemployment relief also gives rise to a similar dilemma. The proposal for the shortening of working hours is, moreover, an example of the widespread lack of understanding of the merely symptomatic character of a measure and the tendency often to mistake what is only an

attack on symptoms for an attack on causes. On the other hand, it must be acknowledged that a mitigation of the consequences of the depression lends support at the same time to measures that are directed towards the real overcoming of the depression by keeping the unemployed from disturbing outbursts of despair or protecting the economic system from the incalculable consequences of the breakdown of a large bank.

Three kinds of measures of trade-cycle policy can thus be distinguished:

1. Measures for controlling the cycle as a whole.
2. Measures for overcoming the depression.
3. Symptomatic measures.

This is the division which we shall follow in our more detailed analysis.

References: M. B. Hexter, *Social Consequences of Business Cycles*, Boston, 1925; D. Thomas, *Social Aspects of the Business Cycle*, London, 1925; J. Soudek, *Die sozialen Auswirkungen der Konjunkturschwankungen*, Bonn, 1929; A. C. Pigou, *Industrial Fluctuations*, London, 1927, part II; A. Müller, *Oekonomische Theorie der Konjunkturpolitik*, Leipzig, 1926; J. R. Bellerby, *Control of Credit*, London, 1924; A. B. Adams, *Economics of Business Cycles*, New York, 1925, chap 11; R. G. Hawtrey, *Trade Depression and the Way Out*, London, 1933; E. Wagemann, *Economic Rhythm*, New York, 1930; L. Mises, *Geldwertstabilisierung und Konjunkturpolitik*, Jena, 1928; A. H. Hansen, *Economic Stabilisation in an Unbalanced World*, New York, 1932; R. Bachi, *La politica della congiuntura, prevenzione e attenuazione degli effetti delle crisi economiche*, Rome, 1929; Paul H. Douglas, *Controlling Depressions*, London, 1935.

1. Measures for Controlling the Cyclical Movement as a Whole.

§ 20. Credit Control.

The exposition in the previous chapter of the causes of crises and cycles should have made it clear why in the course of the discussions of the last decade on the possibility of trade-cycle stabilization the means of credit control has increasingly pushed its way into the foreground and has found a steadily growing number of adherents. If it should prove possible so to regulate the volume of credit as to nip in the bud any tendency to over-investment, then we should, indeed, have got hold of the cyclical movement by the roots. So the utmost of what is possible in the field of trade-cycle stabilization would be reached if the banks were to place sharp checks at the right time on the credit expansion of the boom. This would mean first and foremost an early and vigorous raising of the rate of interest. Once this comparatively simple idea of credit control had been expressed, it very soon awoke in many countries, and especially in England and the United

States, extravagant hopes of a millennium of the " cycleless economy " and it also gave a new importance to the credit policy of central banks. It was believed that at last we had the key of the door to " eternal prosperity " in our hands. The circumstance that this enthusiasm was followed by the most severe of all economic depressions has displaced the enthusiasm by extreme scepticism and has seriously discredited the idea of credit control. Nevertheless, the bitter experiences of the depression should not lead to the conclusion that the idea of credit control has in the least lost in importance. The American crash was in reality due, as we have already shown, not to an excessive but to an insufficient and wrongly directed control of credit. The experiences only go to prove that there is no more urgent task for the economists of all countries than to show how the repetition of such a disastrous credit and economic expansion as the most recent may be prevented in the future by a more rigid and more carefully thought-out credit control. They prove also, however, that this task is much more difficult than had previously been assumed—indeed, that the difficulty seems almost insurmountable.[5] All problems relating to a trade-cycle policy based on credit control can be seen from two main points of view: from the point of view of the aim, and from the point of view of the means, of such a policy.

So far as concerns the *aim*, the question is one of determining the criterion to be followed in regulating the volume of credit. It was thought formerly that this question could be answered simply by the requirement that the control of credit should stabilize the general price level so that trade-cycle stabilization would be synonymous with *price-level stabilization*. This supposition must, however, be rejected on two grounds. The first is that the concept of the general price level is extremely vague and we cannot even speak of a very approximate determination of the average price level. Every index number is to a certain extent arbitrary: the selection of the commodities that are to be included, the choice of the weighting, the base from which the index starts, and, lastly, the mathematical processes applied, are all arbitrary, and it is

[5] From among the spate of literature on the subject of credit policy and the trade cycle may be cited : J. M. Keynes, *A Treatise on Money*, London, 1930; J. R. Bellerby, *Control of Credit*, London, 1924; A. Schmitt, *Kreditpolitik und Konjunkturpolitik in Theorie und Praxis*, Jena, 1932; L. A. Hahn, *Kredit und Krise*, Tübingen, 1931; D. H. Robertson, *Banking Policy and the Price Level*, third impression revised, London, 1932; D. H. Robertson, " Theories of Banking Policy," *Economica*, June 1928; G. D. H. Cole and others, *What Everybody Wants to Know about Money*, London, 1933; R. G. Hawtrey, *The Art of Central Banking*, London, 1932; " Monetary Policy and the Depression " (Royal Institute of International Affairs), London, 1933; and the aforementioned writings of F. A. von Hayek. *Cf.* also the present writer's article " Kredit und Konjunktur," *Jahrbücher für Nationalökonomie und Statistik*, March-April 1926.

consequently to be feared that the calculation of the index number, in face of the extreme importance which it would acquire for the carrying out of a stabilization policy, would become an object of a struggle between parties and pressure groups.[6]

The decisive factor is, however, that the stabilization of the price level is far from guaranteeing any stabilization of the cycle and may, indeed, in certain circumstances as was explained above (§ 15), only aggravate the evil. A stable economic system is not an economic system in which everything stands still but a system in which there is a continually moving equilibrium. Consequently the keeping constant of any single factor may lead to the most dangerous dislocations as was most recently the case in the United States. The criterion of the general price level thus fails completely. Better no credit control at all than one based on this treacherous and dangerous criterion! If the stabilization of the general price level through credit control—or by any other monetary means such as that of the " compensated dollar " proposed by Irving Fisher[7] —does in no way guarantee the prevention of an over-expansion of the economic system and therewith the maintenance of equilibrium which is sought, the same applies to similar criteria that have been proposed (the level of employment, the volume of production, the movement of commodity stocks, &c.).

Just recently the question of what is to be the aim of credit control, if it is to rid economic activity of the ups and downs of disturbances of equilibrium, has been considerably clarified. This has come mainly from the recognition that what we must aim at is not to stabilize the purchasing power of money by adjusting the volume of money and credit to changes in economic data, but that we must replace the ideal of stable money by the ideal of *neutral money*, that is, a money which exerts no influence on the structure of production and prices.[8] It would have been equivalent to such a policy of neutral money if, recently in the United States, no attempt had been made to compensate the tendency to a fall in prices, coming from the side of production,

[6] See G. Haberler, *Der Sinn der Indexzahlen*, Tubingen, 1927, and also the same author's " Die Kaufkraft des Geldes und die Stabilisierung der Wirtschaft," *Schmollers Jahrbuch*, 55th year, 1931.

[7] Irving Fisher, *The Purchasing Power of Money*, 2nd ed., New York, 1922.

[8] *Cf.* Hayek, *Prices and Production;* D. H. Robertson, " Theories of Banking Policy," *Economica*, June 1928; Koopmans, " Zum Problem des ' neutralen ' Geldes," *Beiträge zur Geldtheorie*, edited by F. A. von Hayek, Vienna, 1933; G. Haberler, *op. cit.;* A. Mahr, " Neutrales oder wertstabiles Geld? " *Weltwirtschaftliches Archiv*, July 1933; Bilimovic, " Zum Problem des ' neutralen ' Geldes," *Zeitschrift für Nationalökonomie*, VI, 1935; A. Cabiati, " La moneta ' neutrale ' in un libro del Dr. Hayek," in his book *Crisi del Liberismo o errori di uomini?* Turin, 1934; " Economic Reconstruction," Report of the Columbia University Commission, New York, 1934.

by a policy of credit expansion. This would have prevented that credit expansion through which those responsible, in the belief that they were pursuing the ideal of stable money, let loose a gigantic boom and its consequent depression.

How to shape a monetary and credit policy which attains this objective of the neutrality of money is a question whose elucidation is at present only in its beginnings but which, following on the explosion of the price stabilization dogma brought by the world depression, forms one of the major tasks of present-day monetary theory. So much is, however, already clear that a neutral monetary policy must involve a much stricter preservation of the constancy of the amount of money than does a policy of stabilizing the value of money; we may even say that, contrary to all the traditional ideas of the necessity of an " elastic " monetary system, the keeping constant of the quantity of money must be the rule and the alteration of its quantity the exception. What are the exceptional cases which permit and even necessitate this alteration of the volume in the interests of the neutrality of money is a question which we cannot attempt to answer here. At all events, it is evident that the problem is an extremely difficult one, but perhaps some practical way out might be found by regulating the volume of credit in future in such a way as to stifle every tendency to a sudden and excessive increase of investment activity. The movement of investment activity will thus probably become the sole utilizable criterion of future credit policy if the latter is intended to be an effective tool of the stabilization of economic activity.

The current discussion on the concept of " neutral " money as contrasted with stable money unfortunately suffers from certain dogmatic and scholastic tendencies which are perhaps largely due to the attractive antithesis between those two terms. In reality, it is possible to exaggerate the contrasts between these two goals of monetary policy. For it can hardly be denied that most of the advocates of stable money also aim at a sort of neutral money. What they want is to get rid of inflations and deflations, *i.e.*, of monetary disturbances of the economic process. So far there is no difference between the advocates of neutral money and those of stable money. Both want money to be neutral. Only the means they advocate in order to attain neutrality of money are different, because their conception of the neutrality of money is different. For this reason the antithesis of neutral money and stable money is rather confusing and not quite fair towards the stable-money school, but as it is now generally accepted no attempt has been made in the text above to replace it by another terminology. The great merit of the neutral-money school lies in the discovery that, under certain circumstances, a stable money may not be neutral, *i.e.*, in the case when a general lowering of costs due to technical progress tends to lead to a lower price level

without deflationary effects. As a practical issue, this may generally be rather an exceptional case, but it is actually a case which has been of the greatest importance in the immediate past. To stabilize the purchasing power of money under circumstances such as those in the United States from 1926 to 1929 is not to neutralize money but to make it a very disturbing factor. This is the one substantial result of the whole discussion, but beyond that everything is highly controversial. In other words, the neutral-money school is able to demonstrate in a special case, which is of the greatest importance in modern conditions, what neutral money is *not*, but as to what it really is this school has not arrived at any definite conclusion. The concept of neutral money is a very useful one because it circumscribes the ideal aim of any rational monetary policy and also because it may prevent the latter from falling into serious errors, but it would be shutting our eyes to the realities if we were to ignore that it does not as yet provide any definite rules upon which monetary policy could be based. In this the old stable-money policy was obviously superior, as it did at least provide a rule of thumb for practical purposes. There is no need, therefore, for the Neutral-Money School to look down superciliously on the Stable-Money School, the less so since there is a great danger that their exultation over the discovery of the phenomenon of a relative inflation (the American case of the last boom) may make them blind to the possibilities of monetary disturbances brought about by *deflation*. That is just what is happening at the moment. We should expect that the advocates of neutral money, in order to live up to their ideal, would vigorously demand a re-expansion of money and credit at the present moment of the most destructive deflation, but, inconsistently, not a few fail to do so.

Added to the difficulties of finding the correct objective of credit control, there are the equally serious difficulties of finding effective *means* for successfully carrying it out. To estimate these difficulties, we must first realize that the bulk of modern credit money is created by the private competitive banks. Linked up with this is the question by what means, and in what degree, can these banks be induced to follow a different credit policy than formerly. It is evident that nothing much is to be expected from mere exhortations to the private banks when we reflect that bank managers are motivated by the object of making the largest possible profits, so that any single bank can hardly proceed differently from the banking system as a whole. If the banking system as a whole adopts an expansive policy in the boom, any single bank which was to proceed in the opposite direction would be driven out of business. Each bank waits for the others to make a start, with the natural consequence that nobody makes the start while there is still time. Conversely, in the depression the same situation stops any single bank from undertaking a credit expansion so long as the whole banking system has not come out of the period of contraction. In face of this state of affairs there is no other alternative than to steer the banking system in the desired

direction by a superior authority. This superior authority is the central note-issuing bank which regulates the quantity of cash (to-day mostly bank notes) in existence through its credit policy.

For this purpose it has three tools at its disposal. The most important is the raising or lowering of the *discount rate* (discount policy). Since the dampening down of cyclical fluctuations through credit control depends on a timely attack on the expansionist tendencies setting in at the beginning of the boom, the manipulation of the discount rate as an instrument of trade-cycle policy would mean that the central bank would have to raise the discount rate earlier and more vigorously at the beginning of the expansion of credit and investment than has hitherto been the case when discount policy served primarily to defend the reserves held against notes. This has been very pertinently expressed by Hawtrey in the oft-quoted sentence: "So long as credit is regulated with reference to reserve proportions, the trade cycle is bound to recur." Now discount policy is, in spite of its far-reaching effects (especially on commerce and speculation), far from being an instrument of universal application suited to all situations. In fact the effectiveness of discount policy is rather limited and this applies to the case where a restriction of the amount of credit (restrictive discount policy through the raising of the rate of discount) is in question as well as to the case where a credit expansion (expansive discount policy through the lowering of the rate of discount) is desired.

A lack of complete effectiveness of discount policy in the first case may lead to the adoption of the very drastic means of *credit restriction* by which the central bank does not leave the determination of the amount of credit to the automatic functioning of the discount rate but fixes itself the maximum amount of credit it will give and distributes it according to a certain rule (credit rationing). The credit rationing necessarily bound up with the restriction of credit introduces a qualitative control of credit quite apart from the merely quantitative control which the central bank exercises through its discount policy. In this way the central bank regulates not only the total quantity of credit but interferes at the same time with the application of credits and so takes on a planning function, a function which it is quite unsuited to assume since it would mean its becoming the central organ of a quasi-socialistic economy. It is usually explained that the distribution of credit is made according to "the economic needs of the community," a notion which is extremely popular at the present time, but to which we must object that it gives only a description and not a solution of the problem. For these reasons alone the

method of credit rationing is to be rejected in principle and should, therefore, only be applied in emergencies because it introduces an inflexibility into the economic system which may have the most dangerous consequences and may make banks which are inwardly sound unable to meet their obligations. Nevertheless, credit rationing is the rip-cord which may yet save the situation even when the safety valve of the discount policy fails. A further method of credit control available to the central bank are the so-called "*open market operations*" which consist in the central bank's regulating the amount of credit it supplies through the purchase and sale of various kinds of securities. By purchasing securities it increases the amount of central bank money and by selling securities it decreases the amount. Although this instrument of credit policy is not foreign to the European central banks either, it has in recent years been operated systematically and on an especially large scale in the United States by the Federal Reserve System.[9] It is important in the present moment, when the question is not one of restricting but of expanding credit, because it indicates to the central bank a way of augmenting the measure of credit expansion that can be achieved by a mere lowering of the discount rate (a measure that has recently shown itself to be very small). It should be noted here that the question of what are the effective means by which an expansion of credit can be secured represents a special problem which we shall treat later when we deal with measures for getting out of the depression.

In addition to the credit policy of the central banks, there is one other instrument of credit control consisting in the policy of *varying deposit reserve requirements*. Such a policy would mean that the banks would be forced by law to hold a minimum reserve against their deposits and that this minimum would be varied in accordance with the credit policy pursued by the central bank. Raising the reserve requirement, for example, would be tantamount to the central bank's raising the discount rate or selling securities. This instrument of credit control has not yet been tested by practical experience, but it seems hardly questionable that it promises to be fairly effective in regulating the volume of credit, even in cases where the discount rate does not work satisfactorily.[1]

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[9] Since 1932 open-market operations have been one of the main instruments of the expansionist policy of the Bank of England, and since 1933 also of the Reichsbank.

[1] Such a policy has to be distinguished from the long-established American practice of protecting the security of bank deposits by minimum legal reserve requirements. The object of this is to regulate the liquidity position of the banks while the measure envisaged in the text above is intended to regulate the volume of bank money in accordance with the phase of the business cycle. The reserve percentage in the former case is fixed while in the latter it is variable.

It should be noted, however, that this instrument of credit control is essentially a *repressive* instrument for checking the boom, while it is of not much use as an expansive instrument for stimulating recovery. It is obvious that it could alleviate the depression only if it effected a lowering of a legal reserve minimum which had already existed before the depression; there is no sense in starting with this kind of credit policy during the depression. But even then it would hardly make the banks more disposed to increase their credits, and as for the problem of finding enough borrowers it offers no solution at all. Thus we are again brought face to face with the problem of how to bring about an expansion of credit if the necessary inclination towards new investment is lacking. It is the old problem that it is easier to prevent a horse from drinking than to make it drink. We may conclude, then, that the chief value of this instrument of credit control lies in its use as an instrument for checking a progressive credit expansion even when the less drastic measures, especially the discount policy, do not bring satisfactory results.[2] Thus it might have been very useful during the recent American boom. As an interesting fact, it may be mentioned that in Germany this instrument of credit control has been recently added—by the Reich Credit Law of 5th December, 1934—to the *instrumentarium* of the Reichsbank, and in the United States also similar measures have been widely discussed.

The list of instruments for regulating the volume of credit is not yet exhausted. There remains the final possibility of a *Compensatory Budget Policy*, *i.e.*, a policy of varying public revenue and public expenditure in such a way as to exert a regulating influence on the total volume of credit. But as this is a rather roundabout method of credit control and is usually considered from a different aspect, we shall leave its discussion to the next section.

§ 21. Compensatory Budget Policy and Other Measures.

Among the measures which are proposed alongside credit control for the smoothing out of cyclical fluctuations there is one that deserves special attention. This is the proposal that the State should so conduct its taxation and spending policy as to secure an evening out between good and bad times. This proposal is usually given the narrow formulation that the State and the public bodies under its domination should as far as possible postpone their orders

[2] The policy of varying reserve requirements against deposits has been discussed above only as an instrument of the (quantitative) control of credit for mitigating cyclical fluctuations. Its appraisal from this point of view does not exclude that it may be exposed to serious doubts in other respects, especially as it may dull the sense of responsibility on the part of the banks.

to private industry from the time of the boom to the time of the depression. This formulation is, however, too narrow to convey the full significance of the idea. The emphasis should be laid not so much on the time distribution of the orders as on the fact that the State pursues a restrictive financial policy in the boom and an expansive financial policy in the depression, that is, that in the boom it retrenches expenditure, keeps revenues high, and accumulates reserves, while in the depression it consumes these reserves and also resorts to borrowing.

Since the public sector has, as we have seen, swollen to such large proportions as compared with the private sector of the national economic system, it would seem not unwise, so long as we accept this change of proportion between the two sectors, to connect the public sector with the circuit of economic activity in such a way as to make the manipulation of the public sector instrumental in counterbalancing the movements of the private sector. This is, in short, the idea of a *Compensatory Budget Policy*.[3] Such a policy has both a quantitative and a qualitative side. A *quantitative* Compensatory Budget Policy means that the State regulates the *total* of its expenditure and revenue in accordance with the phase of the business cycle so that during the boom phase expenditure is restricted and revenue expanded with accumulating reserves as the consequence, while during the depression just the opposite policy is pursued. This implies that the State also acts as part of the national credit structure in a sense contrary to the behaviour of the private sector, that is, reducing its indebtedness during the boom and augmenting it during the depression and thus continually shifting to and fro from a debtor to a creditor position. The ultimate effect of such a quantitative Compensatory Budget Policy would be a regulation of the volume of credit, and this indirect method of credit control would seem to be very promising, as it apparently combines comparative smoothness with a high degree of efficaciousness, though this is not to say that it is immune from serious objections. The *qualitative* Compensatory Budget Policy, on the other hand, is not concerned with the total of revenue and expenditure but with the qualitative composition of the total, *i.e.*, with the variation in the different *kinds* of revenue and expenditure. By shifting the weight of taxation and of expenditure now in this and now in that direction the State can, of course, do a great deal to give encouragement or discouragement wherever it deems it

[3] This policy is the main idea behind the "Compensatory Economy" which W. Lippman has very ably described in his recent book *The Method of Freedom* (London, 1934), as the only way out of the awkward alternative between *laissez-faire* and planned economy.

desirable in order to regulate the flow of economic life. Pre-eminent in this respect is the regulation of those taxes which exert a specially strong influence on production and enterprise (business taxes, turnover taxes, stock exchange taxes, &c.). The introduction or augmentation of these taxes during the boom appears to be a useful means of restraining hectic buoyancy, while their reduction or abolition can do much to stimulate production and enterprise during the depression.

The idea of the Compensatory Budget Policy offers, then, a new principle of public finance, which may be called the *cyclical principle of public finance*, and may be added to the time-honoured list of our text-books. It is obvious that with the enormous growth of the public sector of the economic system and in view of its close interconnexions with the private sector the State has assumed new responsibilities in its financial policy beyond those which are described by the old canons of Economy, Justice, Certainty and so forth. The present depression has witnessed, in the first experimental trials with the new principle in many countries, signs of the States having become awake to these new responsibilities. It remains to be seen, however, what will happen during the next boom when the State is supposed to show the less popular reverse side of the expansionist budget policy of the present moment.

On the whole, there is no denying that the idea of the Compensatory Budget Policy merits favourable consideration. But, on the other hand, it will be wise to refrain from too dithyrambic enthusiasm. The present writer cannot help but feel rather uneasy at the idea of enlarging the responsibilities of the State to such an extent as to entrust it with the regulation of the business cycle by a means which raises not only general problems of State administration but also special political, social, and economic problems of budgetary policy where the State and the political institutions connected with it usually appear at their worst. This idea of a glorified budget policy is, of course, infinitely superior to the idea of economic planning proper since it would not meddle with the inner functioning of the free market, but even then it raises grave difficulties. Is the wisdom of the State so much superior to that of the private sector that it will make no mistake in diagnosing the different phases of the cycle and in deciding when to restrict and when to expand? If even central banks are known to be not infallible, will not those persons, parties, pressure groups, and institutions that are responsible for the budget policy, fall even much below the rather modest standard of the central banks?

Another grave danger already hinted at is that this principle is very apt to work one way only. It is, indeed, extremely likely that those responsible for the budget will eagerly relish the pleasures of expansion during the depression but be rather reluctant to undergo the mortifications of restriction during the boom. This danger might be diminished by the restraining influence of the debts incurred in the preceding depression, but grave doubts still remain. In view of these and other possible objections, it seems to be advisable not to dogmatize. In general, no efforts should be spared in order to reduce the present overgrown size of the public sector to reasonable proportions so as to render our economic system, from this side also, less top-heavy than it is to-day. For the rest, of course, the idea of the Compensatory Budget Policy should not be ignored but should be rather considered as one useful principle among others, without making it the dominant principle of trade-cycle policy. A special case is presented by the present depression where in some respects an expansionist budget policy would seem to be one of the most useful instruments for overcoming the deadlock.

If it is a sound proposal to manage the budget (including the budget of the public insurance schemes, especially unemployment insurance) in such a way that there is an accumulation of reserves, the question arises what to do with these reserves.[4] The point is that they must be sterilized somehow if a checking (deflationary) effect is to be attained. Otherwise there is great danger that this sort of budget policy might make things even worse by adding to the monetary forced saving, which is the concomitant of the boom, the additional investment facilities of authoritarian forced savings. This would surely happen if the reserves were to flow into the capital or money markets so as to lower the rate of interest there and widen the possibilities of over-investment. The simplest way of avoiding this would be to keep the reserves in cash hoards. But there is a definite limit to the extent in which this method would be practicable. A slightly less efficient but more practicable method would be to hold the reserve funds as demand deposits and to leave them untouched until the advanced depression. This would be conducive to blocking up the banking system during the boom while the mobilization of such deposits would have an expansive influence during the depression. After what has been said earlier in this book (p. 123n.) on the functioning of the banking system, these

[4] A detailed and well-balanced treatment of this question may be found in Professor Hansen's paper " The Flow of Purchasing Power " in the Report of the Columbia University Commission on Economic Reconstruction (New York, 1934, pp. 210-237).

conclusions will be readily understood. Leaving demand deposit accounts idle amounts to *hoarding credit money*, and making them active amounts to *dishoarding credit money*. If the public sector is to be made a compensating part of the credit cycle, working for restriction during the boom and for expansion during the depression, the thing to do is to make the State an inactive " creditor " on a large scale during the boom and an active " debtor " on a large scale during the depression.

One of the fatal characteristics of the last boom was that in many countries the governments did just the opposite of what would be expected from a rational budget policy of the kind indicated above. Most conspicuous in this respect were the errors made in *Germany* up to the time of the present depression. It was precisely during the preceding period of economic expansion that the German budget was continuously being expanded by increased expenditure, alleviation of taxes, enlargement of public indebtedness, and the using up of reserves accumulated after the stabilization of the mark. On top of this, a large programme of public works was executed during the very same period of economic expansion. The worst part of it was the public building programme consequent on the rent-restriction policy under which the building market had largely been taken over from the private sector by the public sector of the economic system. The result was that, whereas before the war building activity had usually reached its peak in the later stages of the depression and had thus exerted a mitigating influence, it now reached its peak during the boom, so that the general economic expansion was enhanced and little was left over for the subsequent depression. This has been an experience which shows the danger of enlarging the public sector and diminishes our faith in the compensatory capacity of the State. A similar error was made in Germany (and elsewhere) with regard to unemployment insurance, very little being done to build up reserve funds for the subsequent depression. The continuous increases of insurance contributions which then became necessary during the depression were, of course, an extremely unwelcome addition to the forces making for depression. As an interesting incident it may be recalled that it was the parliamentary struggle over a trifling increase of the pay-roll contribution which overthrew the last parliamentary government in Germany in the spring of 1930. Taking all in all, we may say that, if we want to know how public finances should *not* be administered from the point of view of the trade cycle, we must turn to the budgetary policy of Germany during the last decade. On the other hand, however, we can plead for extenuating circumstances in the case of Germany, since the economic conditions in that country were so peculiar at the time that it was extremely difficult to pursue a policy that was anything like rational.

Turning now to other measures of business-cycle policy, we may say at once that the success of *direct interferences with the structure of production, costs and prices* aimed at the mitigation of the trade cycle is extremely dubious. What are the real facts of the case should have been amply proved by the circumstance that the most severe of all depressions has descended upon us just in a moment

when capitalism has been disfigured by an excess of interferences of all kinds (protective duties, price stabilizations, subsidies, wage regulations, restrictions on immigration and emigration, restrictions on the movement of capital, &c.) until it is practically unrecognizable, and the power and number of monopolistic formations have reached a hitherto unknown peak. It is all so palpable that we should speak not of a " crisis of capitalism " but a " crisis of interventionism." Any attempt to smooth out cyclical waves by measures of this kind can only effect the opposite of what is intended and increase the confusion.

Until not very long ago it was the fashion in many quarters to look upon the spread of large *monopoly organizations* (cartels, trusts, concerns, trade associations, &c.) as one rather promising instrument for smoothing out the trade cycle. Were not the excesses of competition largely responsible for the wild fluctuations of economic activity, and was not " orderly marketing," " organized business," and " elimination of wasteful competition " the way to domesticate capitalism into a manageable and well-harnessed animal? This was surely the way in which the more lyrical economists saw it, but it must be emphatically said that the hopes set upon the stabilizing influence of monopolistic organizations have proved rather ill-founded in the light both of reasoning and of experience.[5] For it is obvious that holding certain prices rigid is not identical with economic stabilization but more likely to be detrimental to it, since, to take the case of the depression, the downward movement of the uncontrolled prices is thereby accentuated, and since stability of prices in certain industries means instability of production and employment. It is almost a common-place to-day that the growing lack of elasticity of our economic system has made the trade cycle not more, but decidedly less, controllable, but it is almost equally a truism that this development is largely due to the spread of monopolistic organizations on all sides.

A further point familiar from earlier discussion in this book is the fact that monopoly profits are very liable to lead to faulty investments since they are likely to be invested in the corporation's own plant, even if the profit accruing therefrom is lower than the interest which would be gained by investing them on the capital market.[6] Thus it is just the spread of monopolies which has made a not inconsiderable addition to the forces making for over-invest-

[5] *Cf.* J. Dobretsberger, *Freie oder gebundene Wirtschaft? Zusammenhang zwischen Konjunkturverlauf und Wirtschaftsform*, Munich, 1932; H. Lieser, *Kartelle und Konjunktur in ihrer wechselseitigen Beeinflussung*, Vienna, 1934.

[6] *Cf.* p. 106.

ment and, consequently, disequilibrium. Though it would be an exaggeration to hold monopolies responsible for the present crisis, our appraisal of the possible contribution of industrial combinations to the problem of stabilization must end in the conclusion that, in contrast to popular views which still tenaciously linger on and embody themselves in the present world-wide passion for organization and regimentation of industry, the growth of monopoly organizations is apt to intensify the boom and to delay the recovery. It means faulty investment of capital on a huge scale, and it means lack of elasticity of the whole structure of prices and costs. For this, perhaps, no better example could be found than the case of *Germany* where, as is well known, monopolistic development has always been especially strong, aided to a large extent by German tariff policy[7] and by the German talent for administration and organization.[8] Careful and impartial investigations have shown that in the period prior to the present depression the tendency of over-investment was most conspicuous in the great monopoly industries, especially in the iron and steel industry, which has, mostly by self-financing, built up a plant with a productive capacity far in excess of any reasonable estimates of potential demand. The cement industry also has been a much-discussed example of over-expansion. Later on in the depression, it was really a disaster that the German monopolies in the most essential raw materials and half-finished products did not adapt their price policy sufficiently to the changed circumstances, so that there arose a wide disparity of movement between the free (competitive) and the fixed (monopolistic) prices which has been so detrimental to the elasticity and adaptability of the economic process during the depression. Let us repeat then that Monopoly Capitalism or State Capitalism is not more stable that Competitive Capitalism but decidedly less so. Therefore, it would seem that it should be an important part of any rational programme of trade-cycle policy to break up the monopolistic and interventionist rigidity of our economic system instead of enhancing it.

This also involves the total rejection of the idea that *protectionism* might be a suitable method of economic stabilization. It is really impossible to imagine how tariffs could be conducive to combating the real cause of booms and depressions, *i.e.*, over-investment financed by credit expansion. The existence of a tariff is a datum for the economic system of a country which will be assimilated after a while in a manner likely to reduce the wealth of the country concerned, but how it is to

[7] *Cf.* W. Röpke, *German Commercial Policy*, London, 1934.
[8] *Cf.* H. Levy, *Industrial Germany*, Cambridge, 1935. See, however, the present author's review of this book in *Economica*, February 1936.

have a greater influence on the real causes of the trade cycle than other economic data remains a secret of the tariff-enthusiasts. On the contrary, it is to be feared that, by reducing the mitigating influence of international economic relations, it might enhance the severity of national disturbances of economic equilibrium. Another question is that of the influence of the introduction of *new* tariffs or the *increase* of old tariffs. These belong to the long list of random factors which might influence the real causes of the trade cycle in a direction incapable of being predicted in advance. Therefore, it is not *a limine* impossible that the introduction of new tariffs or the increase of old might be some help in overcoming the depression (see § 26).

It will not be out of place here to apply the foregoing conclusions to that type of economic system which, under the name of *Corporativism* or its terminological equivalents, is held in many quarters to-day to be the superior form of economic organization which promises to bring stability, justice, smoothness, intelligent co-operation, and, in short, all-round happiness.[9] The curious thing about Corporativism is that, in spite of the verbose literature on this subject, nobody seems to be able to tell us exactly what it really means—a fact which is closely related to a further fact, *i.e.*, that the subject of Corporativism plays a prominent rôle in countries where the totalitarian character of the State (Fascism) makes any real discussion wellnigh impossible. Indeed, the confusion on this subject is amazing, and it is still more amazing to find that very few seem to notice it. To any sober mind, however, it should be clear that Corporativism may mean one of two mutually exclusive things.

In the one case it means genuine economic self-government executed by the different branches of industries organized in great corporations after the pattern of the mediæval corporations and guilds. In this case it is an extremely dangerous thing breaking up the national economy into a positive anarchy of uncontrolled pressure groups, and also a thing which, as a general principle of organization seems rather impracticable under modern conditions. Corporativism, in this sense, was tried in Germany immediately after the war as a sort of socialistic makeshift, but among those who know something of the experiences with the autonomous economic bodies created at that time there can be no possible divergence of opinion as to the utter and deterrent failure of this system. It was a hot-bed of corruption and of arbitrariness on an unprecedented scale. If capitalism is economic anarchy without chaos, then this system of genuine Corporativism is economic anarchy with chaos at its worst, and as such it is, of

[9] *Cf.* the author's article "Fascist Economics," *Economica*, February 1935.

course, absolutely useless as an instrument of economic stabilization.

In the second case the State imposes its authority on this idyllic economic self-government, and then Corporativism is not genuine but is just another word for a heavily monopolistic-interventionist society adorned by collectivist phraseology. So far as the economic side is concerned, the innovation is purely terminological in character, a statement which, nevertheless, is not meant to imply that this *terminological economic policy* may not be very useful from a propagandist and political point of view. It is obvious that it is this meaning which Corporativism has in totalitarian countries to-day, since it would be preposterous to assume that the Fascist State would be willing to yield a single atom of its Absolutism to really autonomous corporations. The Italian Government certainly did nothing of the kind in creating the Corporazioni. As a careful study of the legal foundations of the Corporazioni shows, every care has been taken to bring all possible activities of the corporations under the strictest control of the State. It is evident, then, that in the case of a Fascist country it is quite inappropriate to speak of a Corporative State, since it is not the State that is " Corporativo " but the Corporation that is " Statale." Consequently, the whole thing amounts, to all intents and purposes, to a wholesale cartellization of the national economy aided by all kinds of government intervention and subjected to strict supervision by the State. In accordance with what has been said above on Monopolism and Interventionism with reference to economic stabilization, it seems clearly impossible to look upon Corporativism as a useful instrument of stabilization. In fact, the economic situation to-day in countries which have adopted either Corporativism or some other form of glorified cartellization is much worse than that of many other countries without it. In so far as the N.R.A. Codes in the United States also involved universal cartellization, enforced and directed by the State, it seems safe to say that they have contributed to confusion rather than to recovery and stabilization.[10]

As for the ultimate possibility of economic stabilization by the aid of a *Planned* or *Socialistic Economy*, enough has been said on this subject on an earlier occasion[1] to make clear the uncompromising attitude of the present writer.

[10] It is important to note that present-day Austria, guided by the sociological teachings of modern Catholicism, is making use of the corporative principle in a quite different and very interesting manner which, by largely confining it to the moral and political sphere, precludes the dangers indicated above.

[1] pp. 73-75.

§ 22. Trade-Cycle Policy and the Gold Standard.

Up to this point no attention has been given to the question of whether a trade-cycle policy on the lines depicted in the preceding paragraphs can be conducted on a purely national scale or whether it will encounter international complications which are apt to limit the possibilities of a national policy. It is this international aspect of trade-cycle policy which will be considered in this section.

It must be said at the outset that there do exist international complications which need very careful examination. The central question to be asked in this connexion is how far a trade-cycle policy conducted on a national basis is compatible with the Gold Standard and a policy of stable exchange rates. In answer to this question, the dominant school of thought, which owes most of its influence to the writings of Mr. Keynes, holds the view that we have to face a clear alternative between, on the one hand, a policy of internal economic stability and, on the other, a policy of stable exchange rates or, practically speaking, the Gold Standard, save for the case that the policy of internal economic stability coincides exactly with a corresponding trend abroad. If, the argument runs, the world as a whole is marked by boom conditions, with prices rising and the volume of money and credit expanding, the individual country in question must follow suit in order to observe the rules of the Gold Standard and to offset the heavy inflow of gold. On the other hand, if the world is passing through the depression phase with prices declining and the volume of money and credit contracting, the individual country cannot refrain from following the same course if it wants to maintain the Gold Standard and the stability of the exchange rates. In both cases it is assumed that the country is compelled by the rules of the Gold Standard to adopt a monetary policy different from that which it would like to adopt in order to smooth out the trade cycle. This doctrine has perhaps done more than anything else to spread the present distrust of the Gold Standard since, faced with the alternative, people have become more and more convinced that internal stability is, on balance, preferable to external stability.

As a matter of fact, there are to-day not a few theorists and politicians who seem to believe that the future will belong to that type of monetary system in which the goal of stable exchange rates will, in principle, be subordinated to the goal of stable prices and, consequently—though the inference is doubtful—of stable economic conditions at home. They believe, therefore, that the Gold Standard is dead as a door nail and that it will be permanently replaced by a frankly national monetary policy, in spite

of the occasional lip-service they pay to the ideal of the Gold Standard and its theoretical virtues. Thus a sort of monetary autarky would be the model of the future as a corollary to the commercial autarky, and all this in the sacred name of Stabilization. Parallel with this goes the work of economists who tell us that the virtues of stable exchange rates are much overrated, and that the world does not sacrifice much in letting them fluctuate as they will. This whole trend of thought which is, in the opinion of the present writer, very dangerous, has, of course, been tremendously strengthened by the experiences of the present depression when it seems, to most people, strikingly obvious that no country can escape the alternative choice either of leaving the Gold Standard or of letting the depression take its sombre course. In face of this development, it seems highly necessary to scrutinize very closely the *Doctrine of Alternative Stability* which underlies this attitude.

In the attempt to define our own attitude, we shall begin by separating out that part of the ground which is uncontroversial. All parties agree that the alternative choice in question does not exist if the national credit policy runs parallel to the international trend of credit policy. If it is in the interest of national economic stability to expand credit, no collision with the Gold Standard is to be feared as long as this policy is in harmony with the international course of the trade cycle, and *vice versa*. So far, the awkward alternative does not exist, and the question arises as to whether it might not be possible to ensure a greater degree of international conformity by the much-heralded co-operation of central banks or by some international monetary scheme.[2] We shall not enter here into this very intricate question, but shall rather direct attention to another point which seems to be somewhat neglected in the current discussion of this problem. We must not lose sight of the fact that the international course of the trade cycle—the world "conjuncture"—is not something hovering above the earth and falling down from the sky on all countries at the same time. What actually happens is that it begins somewhere and is subsequently transmitted to the rest of the world, and it is the mechanism of the Gold Standard by which it is primarily transmitted. Suppose that in one country a boom begins to develop, then, through the effect of an adverse influence on the balance of payments, gold will be drained away to other

[2] A detailed treatment of this question may be found in Mr. Keynes' *Treatise on Money*, vol. II. *Cf.* also E. Hantos, *Die Kooperation der Notenbanken*, Tübingen, 1931.

countries where, in accordance with the working of the Gold Standard, the increase of the gold reserves will give rise to credit expansion and thus create a boom there too. We have then two phases, in the first of which the outflow of gold accompanies a strain on the balance of payments and on the exchange rates so that the cyclical situation comes into conflict with the exchange situation, whereas, in the second phase, the effects of this process in the other countries tend to ease the tension so that the conflict automatically creates the forces which lead to its own eventual elimination. Stated thus, it is, of course, really too good to be true. We hasten to add, therefore, that several conditions must be fulfilled if this automatic self-adjustment is to work. If this were not so, we should obtain the absurd result that the course of the world " conjuncture " could be changed at any moment by any country.

But that the automatic self-adjustment really works under certain circumstances is proved by the experience that a turn of the cycle always starts in a particular country or in a particular group of countries though it may be transmitted rather quickly to other countries. If we want to ascertain the circumstances under which this process of automatic adjustment comes into action, we are led to a special problem of particular interest. For our present purpose it may be sufficient to remark that the effecting of the " ignition " depends not only on a certain minimum size of the country starting the movement and of its gold reserves, but also on a certain susceptibility on the part of the other countries where the non-monetary conditions of a cyclical turn must be already to some extent fulfilled. An example which, unfortunately, has assumed great importance at the present time may elucidate the meaning of this statement.

Suppose that in the spring of 1933 a *spontaneous* recovery had set in in the United States, it is hard to believe that this would have put the American Government before the alternative either strangling the recovery or of going off the Gold Standard. On the contrary, there is no doubt that in this case the aforementioned mechanism would have come into action: at first we should have got a certain pressure on the dollar exchange and, consequently, a certain outflow of gold, but by transmitting the cyclical impulse to the rest of the world the outflow of gold would have stopped itself automatically after a while. This would have had the further consequence that the American recovery would have obtained strong support from the course of events abroad, not to mention the heaven-sent opportunity of the World Economic Conference

in London where the American Government could have made a strong and effective appeal to the other countries to further the expansive tendencies on the basis of the Gold Standard. There is not the slightest doubt that in this case we should have to search in vain for any alternative between the Gold Standard and an active trade-cycle policy. Exactly the opposite is true, since leaving the Gold Standard would have been positively detrimental to the process of economic recovery. The mechanism of the international transmission of the cyclical impulse being destroyed, the American recovery would have been left without the necessary support from the international economic recovery. Allowance must be made, of course, for the possibility that the economic expansion in the United States might have reached dimensions incongruous with the size of even the American gold reserves so that from this point onwards the Gold Standard and the national economic expansion would have become incompatible with each other. The situation in the United States at that time was, however, quite unique as the enormous gold reserves made possible a degree of economic expansion which would probably have been sufficient for the " ignition " not only in the United States but for the rest of the world as well. At all events, there was no harm in trying it. By taking the precaution of going off gold, the American Government would have resembled a man who, intending to go on a sailing-cruise, starts by plunging into the water in order to anticipite the risk of getting wet in the very remote case that the yacht might capsize.

In assuming that the economic recovery in the United States would have come spontaneously in the spring of 1933, we have so far spoken of a hypothetical case. This assumption was made in order to facilitate the understanding of the process and to bring home the fact that we are not dealing with extravagant guesses but with self-evident truths. The essential point, however, is that it makes absolutely no difference for the matter under discussion if the recovery did not come spontaneously but came as the result of deliberate policy. Everything we said, therefore, applies without any alteration to the actual case of the American policy since the beginning of the Roosevelt administration, and there is hardly any need to add that by doing the unnecessary and harmful thing of abandoning the Gold Standard, this policy has become the outstanding example of the fatal consequences of the Doctrine of Alternative Stability. The abandonment of the gold dollar by the Roosevelt administration must, indeed, be viewed as one of the most disastrous acts on record of any government

and any country in recent times, disastrous both for the country itself and for the rest of the world.

Important as this reasoning is in certain cases, it can only narrow the scope of the problem of alternative stability but not do away with it altogether. If the forces of self-correction explained above do not work adequately, we are really faced with the question of whether all that a country has to do, in order to protect its economic stability against the troubling influences caused by a change in the data of external equilibrium, is to make up its mind to let go the exchanges. We come here to the heart of the argument of the Doctrine of Alternative Stability. Oddly enough, it has not yet received as much critical attention as it deserves. It should be clear, however, that the burden of proof is with the adversaries of the Gold Standard since *prima facie* there seems to be no reason why it should be possible for a country connected up with the world economy to insulate itself against outside disturbances by mere manipulation of the exchanges. In other words, it is difficult to see how mere manipulation of the exchanges could make the course followed by the trade cycle within the country the same *as if there were no changes at all in the data of external equilibrium.* Without exchange manipulation, these changes would have necessitated an immediate readjustment of the internal economic structure (changes in the direction of production and changes of the prices of the factors of production).

Now there is no doubt that such a process of readjustment may be very painful and detrimental to economic stability, in extreme cases becoming even an unbearable strain on the economic and social structure of the country. There is equally no doubt that the immediate necessity of the process might be averted by a manipulation of the exchanges. Nevertheless, it would be wrong to suppose that there are no counterbalancing items or that the chain of reactions will stop at this point. On the contrary, it is obvious that in this case also the economic process within the country will not behave in the same way as if there were no change in the data of external equilibrium. In this case also further consequences and repercussions will ensue, and the next task must be to analyse their effects on internal economic stability.

An analysis of this kind would have to start from the statement that, by leaving the exchanges free, the immediate pressure emanating from the change of the international data would be diverted from the producers and diffused by a rather intricate process over the national economy as a whole. The cyclical effect of this roundabout process of diffusion cannot be expressed in any

general formula though there are good grounds for the surmise that in the short run the effect will be on the side of equilibrium rather than of disequilibrium. But as regards this point, we must again be on our guard against the all too common danger of thinking too much in mechanical terms instead of giving due weight to the decisive psychological factor. The ultimate effect of a policy of exchange instability will depend on the psychological reactions of those groups which really make up the economic process, *i.e.*, the entrepreneurs, the consumers, the savers, and the investors. It is extremely likely, however, that on the whole the psychological reaction to a deliberate lowering of the exchange rates will engender an unsteady trend of business. In this respect—and in many others—a policy of bringing the exchange rate down to a new level of stability with one stroke will do decidedly less harm than a policy of continuous and erratic exchange fluctuations. It is more than probable that it is here that the main reason for the many disappointments of the New Deal is to be found. The prejudicial effect of unstable exchanges on the psychological disposition of the dominant groups is, without doubt, capable of being compensated by a large monetary expansion, but it is quite possible that this compensating dose may have to be made so strong as to cause the exchanges to fall further, thereby starting a vicious circle which might perfectly well end in a fully-fledged inflation of the pernicious kind. This danger becomes the more real because the international disturbances made inevitable by this development are apt to bring forth new conditions of instability and, finally, because the disappointment in the first results of this kind of trade-cycle policy is likely to lead to desperate experiments in economic planning which, adding to the confusion, augment the need for inflationary compensation. All this is again illustrated by the American example. In other words, an active policy of recovery, if combined with a policy of unstable exchange rates, may possibly only become effective after dangerous overdoses of monetary expansion which are tantamount to real inflation with a host of new disturbances following suit. It *may* be so, but, of course, it *need* not be so as the English example amply proves. Even in the case of England, however, it will be wise to postpone the final verdict and to wait and see what will be the ultimate effects of the disastrous chain of international disruptions which started in 1931.

Though we have not arrived as yet at any definite conclusions the foregoing analysis will have at least made it clear that the

alternative between stable exchanges and internal economic stability is far from being exclusive and unequivocal. The " conjuncture " of a country connected up with the world economy is likewise connected up with the " conjuncture " of the world economy, and no monetary manipulation, much as it may mitigate and even neutralize for a while the immediate consequences, can do away with it.

There is one further point in the Doctrine of Alternative Stability which deserves critical examination.

The essence of this doctrine is the supposed conflict between exchange stability and internal business stability in the qualified sense made clear earlier in this section. When we come to ask the reasons for this conflict, we shall be told that it is the behaviour of the internal price level, consequent on the given cyclical phase, which endangers the exchange stability. If it is intended, for example, to bring about a recovery by credit expansion—the actual case to-day—the recovery will, according to the doctrine in question, be identical with a rise of the general price level which, in turn, is supposed to be identical with a certain pressure on the exchanges. Formulated thus, the intricate problems involved in the doctrine become clear at once, for it is a twofold identity which it supposes; the identity of a cyclical upswing with a rising price level and the identity of a rising price level with sagging exchange rates (for the national money), and of these two suppositions the one is just as problematical as the other. The point which is common to both cases is that the correlation which undoubtedly does exist, is allowed to cover up the existence of a fairly wide margin within which the process of recovery is able to move without raising the price level, and also the price level without raising the foreign exchanges. The whole mechanism works with a good deal of " play," and so far as this is the case no incompatibility exists between the Gold Standard (stable exchanges) and an active policy of recovery. It is easy to imagine cases where the margin is large enough to allow a dose of credit expansion sufficient to give a complete turn to the trade cycle, a case demonstrated above by the recent American example.

Tackling first the problem of the *supposed identity of the upswing with a rise of the price level*, a reference to earlier passages of this book will convince the reader that this popular idea is, in this peremptory form, quite untenable. It is again the ghost of the " *price-level complex* " that is crossing our road, and we may exorcize it once more by stating that the trade cycle is not primarily a price-level phenomenon, since the economic process adjusts itself to the ups and downs of the trade cycle not only by price alterations but also by quantity alterations. Moreover, it is possible to favour by deliberate policy the adjustment made by quantity alterations (" Mengenkonjunktur " in the German terminology) and to repress the adjustment made by price alterations (" Preiskonjunktur "). This applies especially to the case of the secondary depression which was treated at length in § 16 of this book, to which the reader must again be referred. A marked rise of the general price level consequent on an inflationary credit expansion is the necessary pre-requisite of the boom ending in the subsequent crisis,

but no rise of that kind is necessary in order to put an end to the depression by reabsorbing the idle reserves of productive capacity and man power. The contrary view rests on a confusion of the *compensatory credit expansion* necessary for overcoming the depression with the *inflationary credit expansion* responsible for the later boom. As the example of the New Deal shows, any attempt at overcoming the depression by spasmodic efforts at raising the price level is only apt to give a misleading and dangerous turn to trade-cycle policy. In so far as the Gold Standard hinders these attempts so that there does arise a real alternative between this kind of trade-cycle policy and the Gold Standard, it means that it places difficulties in the way of an ill-advised sort of trade-cycle policy, which is hardly a reason for regret. We may conclude, then, with special reference to the present situation, that a clear alternative does not exist between the Gold Standard and a compensatory credit expansion, but only between the Gold Standard and an inflationary credit expansion. In other words, the Gold Standard is an unequivocal hindrance to a trade-cycle policy which, by driving the boom to the boiling point by inflationary credit expansion, is itself liable seriously to endanger economic stability, whereas there probably exists a rather wide margin in which a compensatory credit expansion compatible with the maintenance of the Gold Standard can take place.

Turning now to the second assertion that a *rise in the price level* will exert a certain *pressure on the exchanges*, it will be clear to anybody familiar with the theory of international trade that this argument of the Doctrine of Alternative Stability bluntly assumes the familiar purchasing-power parity theory of foreign exchanges.[3] Consequently, the Doctrine of Alternative Stability, or what is left of it after the foregoing analysis, holds good only so far as the purchasing-power-parity theory is valid. Even the more orthodox adherents of this theory, however, will admit to-day that it is only valid subject to a greater or smaller coefficient of deviation which interrupts the strict causal relation between the movement of the internal price level and the exchanges and creates a rather wide margin of indeterminacy. If, for example, the upswing actually leads to a rise of the price level, it is possible that the pressure on the exchanges to be expected from it may be either compensated or accentuated through a change in the coefficient of deviation, and it would have to be carefully examined whether the upswing itself may not influence the coefficient in the one or in the other direction. It is probable that such an influence does exist. Its exact nature, however, will surely vary with the economic structure of the country concerned. If we take the case of the highly industrialized countries which are dependent on large imports of raw materials, it is to be assumed that the upswing will change the coefficient against the country for a while since the increase in industrial activity will raise the imports of raw materials without an immediate compensation through a corresponding rise of the exports of finished goods. A particularly good example of this lag between the movement of imports and exports in the first stage of the upswing is the case of Germany. It means that in this case the upswing presents, whatever the circumstances, a short-run exchange problem which is usually solved by gold losses or by short-term foreign credits. In this case also the abandonment of the Gold

[3] For a fuller and critical treatment see G. Haberler, *The Theory of International Trade*, London, 1936, and B. Whale, *International Trade*, 2nd ed., London, 1934 (more elementary).

Standard is a rather dubious device. But it must be admitted that there are a number of difficult problems waiting for a closer examination.

Let us now try to summarize the results of our analysis. We found that the Doctrine of Alternative Stability turns out on closer inspection to be rather vague and, stated in peremptory form, absolutely incorrect. It is not true that we always have a clear choice between internal economic stability and exchange stability. In all cases there is a certain margin which has to be examined very carefully before we can give any definite verdict. It would not even be an overstatement to say that in most cases a stable exchange policy is not only compatible, but actually complementary with a policy of internal economic stability. One of the many inferences from this statement is that the case for the Gold Standard is much stronger than commonly presented. Most advocates of the Gold Standard seem to accept the Doctrine of Alternative Stability and to defend the Gold Standard only by pointing to the other great advantages which can be set against the alleged disadvantage implied by the said doctrine. In my opinion, the Gold Standard would, in most cases, be worth even this price, but the point of our analysis is just that we actually get a heavy discount on this price. In my conviction, this discount is, on the average, so large as to make the case of the Gold Standard absolutely irrefutable. In other words, there is a margin of compatibility, though this will not usually be so wide as to make the Gold Standard compatible with *any and every* sort of business-cycle policy, the case most likely to bring the Gold Standard into conflict with the trade-cycle policy being that of a deliberate boom policy. As for this latter case, it will be conceded by everyone that this sort of incompatibility is entirely in line with a rational trade-cycle policy, since to hold the boom in check is directly in the interest of economic stabilization. It would be much more sensible to blame the Gold Standard for exerting its checking influence on the boom insufficiently or too late, and this is, indeed, one of the most serious cases of any conceivable incompatibility between the Gold Standard and a rational trade-cycle policy. What is a country to do if, in time of an international boom, it wants to check the boom within its territory and still cling to the Gold Standard? This really seems to be a dilemma incapable of solution, since a country which checks its own boom in the face of an international boom will find its gold reserves rising and will thus be forced either to expand credit again or to "sterilize" gold, which is equivalent to an infringement of the rules of the Gold Standard. Though in-

reality the dilemma will rarely be as clear-cut as this, it has to be admitted that it raises another problem of grave importance.

Much has been made in this connexion of the American experience during the last boom. It is said that the Gold Standard would actually have compelled the United States to expand credit to still greater dimensions than they actually did if they had not deliberately sterilized a part of the heavy inflows of gold during this period. The insinuation is that a more orthodox adherence to the Gold Standard would have engendered a still greater inflation and, consequently, a still worse collapse. This blow to the Gold Standard, however, is not as deadly as it seems since the situation was vastly more complicated than this view implies. Firstly, it is not true that the recent American boom was accompanied throughout by rising gold reserves. On the contrary, from the spring of 1927 until late in 1928 the American gold reserves were actually declining. Secondly, the working of the Gold Standard was heavily obstructed by the American tariff policy together with Reparations and Inter-allied Debts. Thirdly, what inflow of gold into the United States there was, was closely connected with the fact that Great Britain, at that period, did not observe the rules of the Gold Standard by a policy of contraction which should have been expected under the circumstances then prevailing. " So long as Great Britain, the centre tending to lose gold, was not contracting, the other centres were under no obligation, according to ' the rules of the Gold Standard game,' to expand " (Robbins).

§ 23. Summary.

What is the precise result of our investigation into the possibilities of a rational trade-cycle policy aimed at mitigating the cycle as a whole? The answer is neither unduly optimistic nor patently discouraging. Since over-investment financed by credit expansion is at the bottom of the cyclical disturbances of economic equilibrium, it should certainly not be an impossible task to hold credit expansion within reasonable bounds in spite of the manifold difficulties discussed in the preceding paragraphs. To bring this about, the various methods of credit control and the Compensatory Budget Policy seem to be useful instruments though neither can be applied according to cut-and-dried rules. Much experimentation will still be needed in order to find out that technique of trade-cycle policy which will be the most smoothly working and, at the same time, the most efficacious one. So far as the present stage of experience and discussion allows provisional judgments, it seems that the policy of varying deposit-reserve requirements and the Compensatory Budget Policy are to be considered as valuable and promising additions to the technique of trade-cycle policy.

Of at least equal importance is the problem of the criterion according to which the instruments of control are to be applied. The reader cannot have escaped the impression that the problem of criteria involves the gravest difficulties, as is evident in the

current discussion on neutral money *versus* stable money and on the interpretation to be given to these ambiguous terms. These difficulties can be solved best by remembering that it is the phenomenon of over-investment which is at the root of the trouble so that investment statistics will provide the best guide for the policy of control. Whenever the volume of investment climbs suddenly to the heights experienced in the United States during the last boom, it is high time to apply the brakes no matter what is happening to the price level. This seems to be the only practical solution of the problem of criteria available at the present stage of the discussion.

But the difficulties do not end here, and two other problems have to be considered, the one being the problem of *the workability of a rational trade-cycle policy under the limitations of the Gold Standard*, and the other the problem of *the prospects of a rational trade-cycle policy from a political or practical point of view*. As for the first problem, the analysis of the last section showed that though it cannot be entirely brushed aside it seems less real than is commonly supposed. Since the experiences of the last years have proved that a stable world monetary system is an indispensable prerequisite for the working of our economic order, it is reassuring to know that the monetary standard which achieves this most important end does not exclude a fairly reasonable degree of rational trade-cycle policy. An irreducible remainder is, however, left, in accordance with the sad philosophy that we cannot have everything, that every asset is balanced by a liability, and that not all sufferings on earth are capable of being cured.

As regards the second problem of the prospects of a rational trade-cycle policy from a *political* or *practical point of view*, something has already been said on it in connexion with the Compensatory Budget Policy. Let us repeat, then, that to know that a boom must be stopped in time in order to avoid disaster is one thing, but to get it done by those responsible for the trade-cycle policy is quite another. Rational trade-cycle policy is certainly not planned economy, or it ceases to be rational. It means steering the course of the entire economic process without infringing upon the working of the mechanism of the free market, but it has that in common with economic planning that we entrust the government or its equivalent with enormous power of economic control without any real guarantee for the wise use of this power. *Quis custodiet custodem?* Who plans the planners? And do all the enthusiasts of trade-cycle control clearly realize that it would make the course of the entire economic process a political issue with

all the grave implications of this word? The old economic system of the Victorian age, which is now such an easy target for mockery, had at least that one great virtue that it was practically foolproof. Its very *laissez-faire* character, which now causes people to recoil from it in horror, had the great advantage that it was not at the mercy of wise or foolish governments or constituencies, and there can be no doubt that the latter is much worse than being at the mercy of the whims of a competitive market economy.

Though we cannot go back to this old economic system, it is well to remember its virtues in this respect so that we may see the difficulties of the present economic system in a more realistic and less romantic light, and may also draw the logical conclusion that it would be wise to restore, as far as possible, the resilience of our economic system and its faculty of automatic self-adjustment, and to restrict the field of deliberate control to the utmost minimum. This is one of the main reasons why the complete restoration of the Gold Standard with all its prerequisites is absolutely essential. In order to see this clearly, we have to recall that one of the greatest practical difficulties of a rational trade-cycle policy lies in the fact that it will be a rather arduous task to put through a restrictive policy during the boom when everything is going at its best and everybody is talking about a " new era " of permanent prosperity. Mild inflations are always vastly more popular than even mild deflations, especially with those who are pulling the strings of government. Therefore, the automatic safety brake provided by the Gold Standard has to be considered as an indispensable part of our economic machinery if we want to be safe against real disaster. We do not even trust the locomotive engineer enough to forgo automatic safety appliances, in spite of the fact that there are no personal economic interests of his at stake, and that his own personal safety depends on his sense of responsibility. How much less can we do without automatic safety appliances in the case of governments whose affairs are conducted in an atmosphere not entirely free from personal economic interests, and whose leaders are responsible only " before God and History," writing their memoirs if anything has gone wrong! It is desirable that all planners, all popular writers on the " end of capitalism," and all despisers of " orthodox " economics should take this to heart, and as far as the policy of trade-cycle control shares some of the dangers of economic planning, here is a lesson also for the more enthusiastic advocates of monetary management.

There is still another reason for damping the enthusiasm for any of the schemes of economic stabilization which are so popular

nowadays. It is the inherent nature of these schemes that they are conceived more or less mechanically. Invariably the idea is to set up a framework of external economic conditions capable of bringing harmony into the economic process. Important as this may be, it must not be forgotten, nevertheless, that, in the last analysis, economic life is dependent on the psychological attitude of countless individuals, and the trade cycle also is, at bottom, a psychological phenomenon. Now the danger, which must not be overlooked, is that any deliberate and duly advertised policy of economic stabilization might exert an adverse influence on the psychological attitude of the individuals, by giving a treacherous feeling of security provided by the omniscient State and by inducing the individuals to recklessness. The fact that, during the last boom, there was never more talk about economic stability than just at the time when the temerity nursed in this very atmosphere of overconfidence was sowing the seed of the worst crisis tells its own tale. Thus we might venture to give voice to the paradox that it is in the very interest of economic stability to be rather sceptical about the possibilities of economic stabilization. Let us not promise more than the absolute minimum of everything that is warranted, let us not talk away all the dangers and difficulties that are to be envisaged—then, perhaps, something might really be achieved.

A last word of warning must be said on the subject of trade-cycle policy. Such a modest view of the possibilities of trade-cycle policy as that expressed in the text is apt to convey the pessimistic impression that the economist seems not very helpful in suggesting a solution of the problem of how to avoid a recurrence of the last disaster. If that is so, what about the prospects for our whole economic order? Is not trade-cycle policy the last vestige of hope we have for saving it from utter condemnation? The answer is a very emphatic no. The reason is very simple.

If a wrong trade-cycle policy in the proper sense of the term had been alone responsible for the present depression, it is hardly conceivable that it would have been anything like so severe and long-lasting. The whole complicated causation of the present depression is unimaginable in the absence of a number of factors which have nothing whatever to do with wrong acts of trade-cycle policy: the Great War with its host of disastrous economic consequences, the Peace Treaties with their political and economic partitions, Reparations and Inter-allied Debts, the Great Inflations, State intervention in defiance of all wisdom and reason, the illogical tariff policy of the United States and its equivalents in other

countries, the reckless management of public finances, the political upheavals of every description, and so on all down the list. It is not easy to see how *any* trade-cycle policy, be it the wisest and most rational one, could have coped with the situation thus created, or, indeed, how any other economic system could have endured the terrible strain.

Just as we must fight against the very bad habit of treating our system of economic organization as a scapegoat for all errors of economic and general policy, so we must not expect trade-cycle policy to expiate what economic or general policy have sinned. A rational trade-cycle policy in a world of enormous irrationalities can hardly attain its ends. If the economics and politics of the world were more rational, the whole subject of crises and cycles would be decidedly less pressing and important. Thus we arrive at the conclusion that the best trade-cycle policy would be the rehabilitation of wisdom and reason in every act of economic and general policy, and we should let trade-cycle policy in the proper sense of the term take care of the rest. Even then it would be too much to expect the complete disappearance of cyclical fluctuations, but perhaps it is not too extravagant to hope that what is left of booms and depressions would not be much above the minimum which is at once both tolerable and rather indispensable for a certain speeding-up of economic progress.

2. Measures for Overcoming the Depression.

§ 24. Interference with the Structure of Prices and of Production (Restriction).

Turning now to the measures which are proposed for overcoming a depression, we come to a question which brings us face to face with the most pressing difficulties of the day, and which can also best be treated from the standpoint of this present-day problem. We are dealing here not with the question discussed in the previous section of how the waves of the cycle can be smoothed out and future crises prevented by stemming the boom at the right time, but the question by what means the existing crisis, once it has come about, can be overcome. Unused human and material factors of production are available in abundance, but the inducement to bring them back into the flow of production is lacking. It follows that everything depends on somehow producing this missing incentive. Before the war this came about in the later phase of the depression of its own accord from the situation which gradually set in on the different markets, and there was nothing to prevent us from assuming, indeed everything con-

strained us to assume, that it would be the same again this time. It may be said that " it must stop raining some time," but the discomforting and dangerous thing about the last depression was that this time it lasted such a terribly long time, much longer than corresponded to the objective economic conditions. The focal point of the whole question is thus whether and by what means the revival from the depression can be speeded up.

This gives us the rationale of State intervention but does not tell us the point of attack of such intervention. As regards this, there is a considerable variety of opinions. First of all, there are two schools which are in an almost irreconcilable opposition to each other. The one hopes for the overcoming of the depression through measures of liquidation and adjustment whose task it is to lower prices, costs, and incomes, either in particular or in general, while the other school expects that the end result of such a policy of liquidation and deflation will be an aggravation of the depression and recommends instead expansion.

To the first of these schools—we shall call it for convenience sake the *restrictionist* school—there belong those who hold the firm belief that the last crisis, even in its later devastating stages, must still be regarded as the inevitable reaction to a vast credit expansion, a reaction which has been unduly prolonged over several years and tremendously intensified by a great number of other factors, as, for example, various long-run economic tensions and political conflicts, certain degenerative tendencies of the capitalist system, and the lack of general economic elasticity caused by interventionism and monopolism, and untimely attempts at dodging the inevitable repercussions of the boom period. This school leans towards the *laissez-faire* outlook, severely condemning every attempt to shorten the allegedly salutary processes of liquidation and adjustment and vehemently urging the removal of all that stands in the way of the adaptation of the whole structure of prices and costs to the lower economic level demanded by the crisis. Its members do not deny that the crisis is characterized by a terrific process of contraction, very complicated in nature, and they may even reluctantly go so far as to apply the term " deflation " to this process. But they warn us that the phenomenon of deflation owes its origin to random and independent causes and they regard it as the inevitable manifestation of liquidation and readjustment. They beg us to rely on the well-founded hope that even this crisis will at the proper time give way, more or less spontaneously, to a new period of recovery, and that this will occur when the situation is ripe, *i.e.*, when the crisis has fulfilled its purgatory mission

and universal confidence has once again been restored. All that we can do, according to this restrictionist school, is to facilitate this mission by all possible means, leaving no stone unturned in the attempt to create a fresh atmosphere of confidence. There seems to be nothing for it but to go patiently through with the crisis unto the very end. Prices, costs, and incomes must be lowered over and over again, in accordance with the steady decline in the economic level; and at the same time State expenditure must be severely restricted, and if there is no other way of balancing the budget, taxes must be raised. Liquidation, adaptation, restriction, then, appear as the main features in the programme of this school of thought, which may be said to have been the dominant attitude in Germany under the Brüning Government and, in a less strict form, to be still the theory underlying the present economic policy of the countries of the Gold Bloc (France, Holland, and Switzerland).

The second school—we will call it the *expansionist school*—is not quite so easy to define since it contains a number of varieties ranging from a radical Left of wild monetary schemes to a conservative Right of well-dosed and carefully controlled credit expansion, and equally varied is the diagnosis of the present situation given by the adherents of these different subdivisions. The more moderate form of the expansionist theory may be summed up as follows: The present crisis is to be fundamentally and primarily regarded as a *cyclical crisis*, *i.e.*, as the inevitable reaction of credit expansion and accumulation of capital in the leading countries during the last boom period. When regard is had to the unprecedented scale on which credit expansion and investment of capital had taken place a very painful reaction was to be expected. But had it not been for an unfortunate coincidence of various accidental factors, there would have been nothing to prevent the emergence in due course of a new equilibrium. These accidental factors which play such a prominent rôle in the more popular explanations of the crisis, and need not be repeated here, are responsible for the fact that a distinct degeneration of the crisis set in. Consequently, we have to distinguish between a primary and a secondary phase of the crisis, the latter being characterized by a vicious circle which constantly interferes with the attainment of a new equilibrium. We have, then, the *cumulative process of recession* which has been described at greater length in § 16 of this book. In view of this development, the policy recommended by the restrictionist school seems only to make the vicious circle worse. The only sensible thing to do, according to the expansionist school, is to stop the

circulus vitiosus and to turn it into a *circulus salutaris* in which recovery may gain force by its own momentum so that the cumulative process of recession will be replaced by a cumulative process of recovery. The way to bring this about is *expansion* in a sense which will be explained more fully in the next section.

As for the respective merits of these two schools, enough has been said in the course of this book, especially in the section on the secondary depression (§ 16), in order to make clear the position of the present author. With due allowances for necessary refinements and modifications, there seems to be rather strong evidence of the general superiority of the expansionist point of view. Considering the great importance of the subject, however, it may be useful, even at the cost of some repetition, to add some further remarks on the pros and contras of the restrictionist viewpoint with special reference to the experiences of Germany.

In order to form an opinion on the policy of deflation and liquidation it must be first recognized that every depression is a depression of profits occasioned by the fact that the price curve and the cost curve cut. The immediate consequence is that a proportional fall of prices and of costs—including, especially wages—would be a completely ineffective measure, while a price fall below the fall in costs would only augment the disparity between prices and costs. So the idea that was openly and seriously pursued for a long time in Germany that the equilibrium of the economic system could be re-established by a general lowering—by say 20 per cent. —of the whole price, cost and income level is superficial in the extreme. The level would have certainly fallen all along the line, but nothing would have been done to improve the disparity between prices and costs. Indeed, there is a danger that this essentially purely nominal measure may lead to a still further upsetting of the equilibrium since the difficulties of the transition from one level to the other throw new sand into the economic machine and add to uncertainty and nervousness. This effect is so much the more probable since the policy of general cuts—if it is to be carried out systematically—makes interference with existing contracts (long-term employment, delivery and loan contracts) inevitable and thus gives a destructive blow to the moral and psychological bases of the economic system which must plunge it deeper still into the depression. With the thoroughness and systematicness characteristic of the Germans this policy was carried to its extreme limits by the Fourth Emergency Decree (of 8th December 1931) of the Reich Government so that it looked as though the country which had established the world record for inflation was now striving to

reach the summit of achievement for " deflation," only with the difference that this new attainment was held by many people at the time to be a thoroughly praiseworthy accomplishment. The present writer made no secret at the time of his opinion that—contrary to what these circles believed—the policy of all-round cuts in the advanced stage of the depression was mistaken. His view was that so long as this policy was not resolutely cast aside there would not only be no chance of an economic revival but that a further progressive decline of economic activity was certainly to be expected. The further course of the German depression under the influence of the policy of all-round cuts has confirmed this opinion in every respect. The prophecy that the cuts would lead to a constantly increasing contraction of economic activity, to a progressive aggravation of the financial difficulties and therewith to an ever more self-denying heroism of emergency decrees, unfortunately turned out to be true—for reasons which are obvious if we keep in mind what has been said at a previous juncture (§ 16) on the cumulative process of the depression.

Those who, in spite of this, still spoke, until quite recently, of a necessary process of readjustment of the economic system, and would therefore have liked to shape all public trade-cycle policy accordingly, forgot that the depression all over the world had long since passed the stage where the adjustment and " cleaning up " necessary for the revival is accomplished. The depression had long since become devoid of every necessary function and was therefore without sense. It had in fact deteriorated into a process of murderous and ferocious destruction. It had led to the irritating paradox that vast possibilities of production and a constantly increasing poverty of the masses were standing side by side, the only explanation being that the forces which normally connect up production and consumption in our economic system into an harmonious whole had stupidly misfired. A further process of cleaning up seems to give proof of its own justification by the fact that in the course of this process more and more firms collapse and thus provide new tasks for the work of cleaning up, but it is the continuance of this process, the continual contraction of economic activity, which is responsible for mowing down firms in ever quicker succession. The " cleaning up " fanatics resemble people who are clearing a forest of dry wood—a thing that is highly commendable and gives light and air to the living trees—but who in order to speed up the work set fire to the dry trees. The unfortunate result then is that the fire spreads to the healthy trees,

drying them up beforehand by the rising heat of the forest fire. The further the fire spreads the more dry trees there are, but it is the fire that dries them up and so makes them ready for cleaning out. And it may be imagined that our forest workmen would still assert entirely in good faith that it is still a " cleaning up " fire—by the side of which we may rub our hands in grim satisfaction—and not a raging forest fire!

It is not only the idea of a necessary " cleaning up " which lies at the back of the policy of cuts but also the widespread feeling that previously we have been living beyond our means and must now reaccustom ourselves to poverty and a simple life. The ascetically inclined even welcome the depression in so far as it helps us to relearn the virtue of self-denial, and at the same time the sentiment gains ground that those who still allow themselves this or that pleasure are obviously behaving out of keeping with the spirit of the age. Fewer and fewer people dare to display their wealth, and this new style of living eventually becomes the fashion. Tendencies to level up incomes which are more often based on vague sentiment than on calm consideration are combined with the puritanical wave. Almost every country, it seems, has at some time during the last depression gone through a period of being plagued by this puritan bad conscience about " too much spending " and the cry for a " drastic reduction of expenditure all round." In Germany the atmosphere was thick with it during the chancellorship of Brüning, and the British " Economy Stunt " of 1931-32 seems to have amounted to the same thing. At the present moment the French are similarly afflicted.

Now it is undoubtedly correct that in the period before the crisis there was not the right proportionality everywhere. Not only the State but also many individuals—especially the middle classes —were living beyond their means. But to draw from this the conclusion that the whole standard of living must be lowered if we want to return to healthy conditions is premature. Is the present situation characterized after all then by a scarcity of goods instead of by an overflowing abundance of them? Are we not almost suffocating under the increased productive capacity which has been created by the progress in technique and organization of the last decade? Is not recovery from the depression synonymous with getting rid of the surplus of goods and productive capacity? Can a further reduction of consumption really be the way out? The ascetic eulogizing of self-denial and thrift as great and timely virtues is thus, contrary to the popular view, pernicious, since it

results in demolishing a productive system which is adjusted to the production of an exceedingly abundant supply of goods.[4]

It is more difficult to prove unequivocally the error of another notion bound up with this same train of ideas, a notion which commences by claiming the necessity of increased capital accumulation and arrives thus at the recommendation that there should be a restriction of consumption and a lowering of income. It is clear, however, that it must be incorrect when we recall the earlier discussions of saving and investment (Chapter IV, page 97 ff.) and the real dynamics of the depression (Chapter IV, page 119 ff.). Economically considered, saving means the releasing of means of production, and the services of labour, for the production of future goods.[5] Now nobody will deny that such a freeing of the means of production had taken place during the last depression to a great extent, only, unfortunately, these factors of production which had been set free were not being applied to the production of future goods, and the result was that the whole economic process. and with it the volume of money savings, was contracting. What was lacking then was not savings—in the sense of reserves of productive capacity available for the re-expansion of the economic system—but investments which would make use of these reserves and thus produce a rebuilding up of the shrunken economic process, accompanied by an automatic increase in the accumulation of money capital. A policy which pursues the aim of increasing

[4] It is pleasing to find that the "Economy Stunt" has been rejected on the same lines by the late Professor Cannan, in his customary pungent manner, in his paper on "Too Little Saving," published in his book *Economic Scares*, London, 1933. "It is no advantage to society," says Professor Cannan, "to do without flowers unless it is to get something better instead. The flower-gardeners at present give society flowers and receive in return the bread and beer and other goods and services on which the money they get in exchange for flowers is expended by them. If they are told that they can leave off producing flowers because society has resolved to 'economize,' but that society will continue to pay them as much as before, nothing will happen so long as they live and continue to receive their pensions in idleness except that society will have no flowers. Evidently there is no sense in the advice, 'Dispense with flowers,' unless it is to lead to something more really desirable being produced in their place. Here lay the fatal objection to the great Economy Stunt. There was not the slightest reason to suppose that there was any need to redistribute the forces actually in employment. The preachers of the Stunt revelled in denouncing this, that, and the other employment as unnecessary or unimportant, but always completely failed to say what were the more necessary and important employments into which the persons and machinery now employed in what they said were unnecessary or unimportant ways should be drafted. . . . What was wanted was not to change the employment of the actually employed, but to re-employ the unemployed in their old work or in something substituted for it" (pp. 79-80). Professor Cannan rightly draws attention also to the important point that the expenditure for consumption is less likely to be influenced by this propaganda than the expenditure for capital goods, so that it tends to deepen the gap between investments and savings which, as we saw, is the prime cause of the secondary depression.

[5] *Cf.* the present author's little book *Die Theorie der Kapitalbildung*, Tübingen, 1929. He has again great pleasure in noting that the argument above runs parallel to Professor Cannan's reasoning in his paper on "Too Little Saving."

savings leads to a continued shrinkage of the national income and is therefore self-frustrating. If we were to make the start of the economic recovery dependent on the economic system's being sufficiently enriched with money capital provided out of savings beforehand, if we were to pursue a policy stubbornly directed towards raising the amount of savings at all costs, we should as things are at the time of a secondary depression be promoting the permanent duration of the depression.

There still remains the question whether it would not be helpful if we were at least to lower the level of wages. It is now beyond all doubt that the wage level was raised too high in many countries in the course of the last boom and that harmful effects have followed. Accordingly, we have to recognize the necessity of making the regular apparatus of wage adjustment again flexible. There is agreement on this question even among the labourers. Here, again, there is thus nothing to be said against the re-establishment of the elasticity of the labour market if it is earnestly accompanied in like measure by the restoration of elasticity in other spheres in which State intervention and monopolistic formations have produced immobility. It is quite another question whether in the last phase of the depression the lowering of the general level of wages is a measure suitable to preparing the way towards economic revival. This question must be answered in the negative so long as the " slack " created by the cut in wages does not give an incentive to the revival of activity in other parts of the economic system. So long as this is not the case, all cuts lead only to an aggravation of the depression since they cause a falling off in demand without putting any new demand in its place in other spheres. In other words, pursued within the framework of a restrictionist policy and without simultaneous measures of expansion, wage-cutting is liable to aggravate the depression. Considering the level of wages which has now already been reached, it is anyhow very doubtful to-day whether a general lowering of wages —which only had a function as part of a trade-cycle policy so long as it was connected with a policy of expansion—is any longer needed in order to secure the necessary " play " for a revival of economic activity.

The final question is whether a restrictionist policy might not be based on considerations of *external equilibrium*, that is, of the foreign exchange situation. We propose to deal with this question in the next section in connexion with the possibilities of an expansionist policy.

§ 25. Expansion: Its Nature and Significance.

It cannot be the purpose of this section to go into a monotonous repetition of the description of the nature of the secondary depression which is such as to call for expansion as the logical remedy instead of restriction. It is to be feared, however, that to leave matters there would promise little hope of advancing the embittered discussion between the restrictionists and the expansionists beyond its present unsatisfactory point where both schools are lined up against each other like the Montecchi and Capuletti. Or to use another simile: The restrictionist school may be compared to a well-meaning and experienced mother, who, standing no nonsense, accepts the diagnosis that her patient is still suffering, even after long years on a sickbed, from the effects of his debaucheries and feels it her duty, for fear of a fatal relapse, to harden her heart against his desire for plenty of food. According to the expansionist school, on the other hand, the lamentable condition of the patient has no longer anything to do with the debaucheries of the distant past, but is the result of a dangerous edema brought about by a long process of undernourishment. Both diagnosticians, standing by the bedside of the poor patient, are fervently protesting that the patient will be killed, the one being accused of luring him on to fresh debauchery, the other of leaving him to die of hunger—in spite of the intentions of both being the best in the world.

Though the expansionist school is, in the natural course of events, everywhere gradually gaining the upper hand, and modifying fairly perceptibly the stern attitude of the restrictionists, it is still a matter of urgent necessity to stop the scientific warfare between the two schools, with its reciprocated abuse of "sadistic deflationists" and "foolhardy inflationists," and to work for a reconciliation that will be something more than a weak compromise.

With this end in view it should be pointed out that each school comprises a variety of opinions and that the most satisfactory solution of the whole problem will be found in a judicious combination of all that is essentially sound on both sides. And so we are finally compelled to realize that the division into two schools is rather clumsy and superficial and hinders a better understanding of the problem. To begin with, it should not be denied that the restrictionists are absolutely right in their diagnosis of the primary crisis and in their opposition to premature attempts at re-expansion. And it seems certain that their general attitude will once again become extremely sound when the circle has swung round and a new boom of an inflationary character is in sight (which may come

sooner than it is expected to-day). Furthermore, the majority of expansionists cannot but offer their sincerest approval of the restrictionist's insistent demand that the machinery of our economic system should be cleared of the cartloads of sand which, in the form of tariffs, price-fixing, subsidies, valorization schemes, foreign exchange control, manipulation of wages, monopolism, &c., have been so liberally thrown into it during the last decade.

All this goes to show that the advocacy of a policy of expansion is not inconsistent with that of a policy of readjustment, which wise expansionists will indeed favour. Expansion and readjustment are not only compatible with each other, but must be combined if the best possible result is to be assured. On the one hand, there is no great chance of successfully combating the manifold interventions and economic rigidities unless the economic pressure is being relieved by expansion and the first signs of recovery are being felt; the opposite course means putting the cart before the horse. It is just the atmosphere of hopeless depression where an economic policy thrives which plunges deeper and deeper into the muddy depths of interventionism and tears our economic system into pieces. The lamentable failure of the late World Economic Conference in London (1933) with its great and very laudable efforts in preaching a reasonable commercial policy is one of the outstanding proofs of the truth of this statement. In fact, it is not too much to say that expansion is necessary to save capitalism from complete decay and give force to the struggle against the hysteria which is all too prevalent a feature of the present time. On the other hand, expansion is extremely apt to lead to a dangerous development unless it is combined with a number of restrictive and liquidating measures.

The greatest confusion of all, however, in the issue between restrictionism and expansionism has been created by the completely erroneous, though very popular, notion that advocacy of expansion means advocacy of a drastic rise in the general price level (reflation). The reader will by now have become sufficiently familiar with this "price-level complex" to understand why Expansion is not to be interpreted as Reflation. This interpretation is the more dangerous since it is very apt to lead to the still less defensible notion that Expansion is to be interpreted as Devaluation. It is true that it is impossible to imagine a business revival without an expansion of credit. That is what the restrictionists need to realize. But it is easy to imagine—and this is what many expansionists need to realize—a business revival without a perceptible rise of the general price level. Moreover, it is to be

feared that if a higher general price level is the objective, business-cycle policy may be led into the maleficent belief that going off gold and lowering the external value of the currency is a good way to achieve this goal. This is exactly what has recently happened in the United States. There is no reason whatsoever why the Americans should have tampered with the external value of the dollar to bring about a marked recovery, and there is every reason why they should have refrained from doing so in order to save themselves and the rest of the world a great deal of unnecessary trouble.

Evidently, the policy of expansion—by which is meant an effective expansion of credit, leading to an expansion of the volume of production, incomes, and demand—can be carried fairly far without bringing about a marked rise of the general price level because, at this stage of the depression, it will be a compensatory credit expansion and not an inflationary one. It is expansion—or re-expansion—that is wanted, not reflation. There is only one serious objection which might be raised here. The advocates of reflation might point out that a mere policy of re-expansion seems incapable of solving the urgent problem of *general over-indebtedness*, and that, for this reason alone, a sharp rise of the general price level is indispensable. There is no denying the fact that the general over-indebtedness constitutes a most urgent and grave problem which must be solved in one way or another to pave the way to recovery, but it can hardly be said that reflation presents the only or even the best solution. It is only one among a number of other solutions and is far from being the most recommendable of these.

The *first* solution is to do nothing and to let things take their natural course. In this case, we leave the task of bringing the volume of debts down to the level of the contracted volume of production, prices, and incomes to the institution of bankruptcy or to individual debt settlements. Though this is the normal solution corresponding to the inherent nature of our economic system, the depression is, in most countries, too far advanced by now to make this course feasible, quite apart from considerations of social justice. There is no sense any more in aggravating the depression by this rough and cruel method. The *second* solution is the all-round relief of debtors by legal reductions of the rate of interest or of the amount of the debt itself. This compulsory method is the ultimate consequence of any determined policy of deflation (restriction), *i.e.*, of a policy aiming at regaining equilibrium solely by the contraction of costs. It is hardly necessary

to say, however, that it is a very crude and mechanically working method which, by causing disturbances on the credit markets, is liable to retard recovery and, by scaring borrowers, to work ultimately against the very interests of the debtors even. A very deterrent example of this was the deflationary policy of the Brüning Government in Germany. The *third* solution is reflation, *i.e.*, the reduction of the real value of the burden of debts by a lowering of the purchasing power of money. But this also is a very clumsy and inorganic method very much inferior to the *fourth* solution of re-expansion, *i.e.*, of making the burden of debts again bearable not by raising prices but by augmenting the volume of production and turnover so as to adjust it to the large volume of indebtedness. It must be admitted that the problem of agricultural indebtedness has special features, but this is the concern of a constructive agricultural policy which should not be allowed to push the business-cycle policy off the sound road of re-expansion rather than reflation as it has done in the United States.

So we see that the expansionist *can* and, as I think, *must* join whole-heartedly with the restrictionist in his stand against reflation, and, consequently, the restrictionist should learn to differentiate more carefully between his adversaries and to realize that most of his polemic efforts are wasted on propositions which are attacked just as much by a number of expansionists. What has been said, from an expansionist point of view, against reflation applies *a fortiori* to *devaluation.* Since this notion plays such an important rôle in the current discussion on the right method to combat the depression, some additional remarks may not be out of place.

As regards the usefulness of devaluation in combating the depression, two different ideas have to be clearly distinguished. The one idea is that the devaluation of the national money may itself be an efficient instrument for abating the crisis; the other is that it may be an indispensable prerequisite for credit expansion.

Regarding the *first* idea, it is not always made clear how the devaluation of the currency can work the miracle of putting an end to depression. The reasoning underlying this idea is for the most part a particularly confused set of half-baked notions about some causal relationship between the internal purchasing power of money and its foreign exchange value. A sober examination of the problem shows that there are only two possibilities which can give any grounds for the expectation that the devaluation of the currency would be an effective remedy against depression.

The first is that it might restore the external equilibrium of a

country and thus give a new impulse to economic activity. It cannot be denied that, under certain circumstances, devaluation might be a rather smooth way of restoring the external equilibrium of a country, though a number of factors are to be reckoned with which are liable to exert a disturbing influence. There are other ways of doing it which are at least worthy of consideration, but there are certainly cases where, on balance, the method of devaluation might be defended as the least evil. England, the Dominions, the Scandinavian countries, and Finland might be cited as examples, and there can hardly be any doubt that after the majority of the countries have devalued, devaluation may be a practical way of restoring external equilibrium for the few gold-parity countries which are still left. But apart from this special problem of the present moment, we are faced here with a very difficult dilemma. For, on the one side, devaluation will work the more safely the greater and the more important is the country or the block of countries which puts it into practice, while the devaluation of the currency of a " country " like the unhappy city of Danzig, is a real tragedy tinged with comedy.

On the other side, however, the greater and the more important is the country the more disastrous will be the effect on the world as a whole. This is precisely what the break in sterling did. Undoubtedly, England could afford to devaluate its currency together with the Empire, but we must remember what a terrific shock it was for the whole world to find that even the pound and the Bank of England were no more the proverbially solid rock. All lenders and investors became scared. Nothing, it seemed, could be trusted any more except gold, and thus the effect on the whole world of the devaluation of the pound and the other currencies was an all-round international contraction of credit and a general scramble for gold. Gold, as the last anchor of confidence, rose in value everywhere, which was equivalent to a further decline of prices measured in gold, and then with the breakdown of the machinery of international credit the formidable Juggernaut of sky-high tariffs, quotas, exchange control and clearing arrangements was set in motion. The devaluation of the pound and later of the dollar, consequently, meant nothing less than further deflation for the rest of the world with its inevitable repercussions on England and on the United States. We may be ready to grant England every possible excuse, but it should be clear that what the world needs now is a complete rest from monetary shocks and a gradual return to the normal.

The second possibility that devaluation may work *per se* as an

effective remedy against depression is still less real. It rests on the idea that, even if there is no external equilibrium to be restored, devaluation may act as a stimulus to economic activity by raising the internal price level. This idea is a very muddled one, because if the external equilibrium of the country had not been disturbed and there is no increase of the volume of money and credit taking place simultaneously with the devaluation, how can devaluation raise the internal price level? The one chance is that it may create the *belief* in a permanent rise of the price level and thus, by a sort of shock tactics, really give rise to a speculative boom characterized by rising prices.[6] But as long as there is no real expansion of credit—which has, however, a slight chance of being evoked by the speculative boom—a dangerous reaction is bound to occur sooner or later. This is exactly what happened in the United States during the first year of the New Deal until a real expansion of credit was started.

So much for the idea that devaluation *per se* would be an efficient instrument for abating the crisis. Let us see whether the case for using *devaluation as a prerequisite for credit expansion* is any stronger. Here we are touching upon a question which has already been dealt with at greater length at an earlier stage of the discussion (§ 22). We repeat, then, that the need for devaluation could arise only if the policy of expansion were to bring about a rise of the price level and a disturbance of the balance of payments. It would be wrong, however, to suppose that anything like this is necessarily bound to happen. It is a common error to mistake the compensatory credit expansion, which is necessary for stopping the depression, with the inflationary credit expansion of the boom period and to forget that the former draws on the unused productive reserves which correspond to the deficit of purchasing power engendered by deflation. It is not easy, therefore, to see why a tendency towards rising prices should be expected. It is even possible that the fuller use of the productive resources might tend to lower prices. Allowance must be made, of course, for cases where it would not be wise to rely on this hope or where the actual level of prices and costs is too high compared with the competing countries. Even in these cases, however, it would not be necessary to depreciate the external value of the money since it would still be possible to cope with the situation by lowering wages. It is true that, without a simultaneous policy of expansion, wage-cutting is almost certain to aggravate the

[6] It has to be noted that, in the absence of a considerable expansion of the volume of money, it will not be easy to prevent the exchange value of the currency from going up again unless devaluation starts a flight of capital from the country.

depression, but as part of a policy of expansion it might not only fail to do this but might even become an indispensable condition for real success. It can be argued, moreover, that it might be easier to lower wages in the atmosphere of a buoyant programme of expansive reconstruction than in the drab atmosphere of a melancholic programme of restriction and retrenchment, the more so if the workers are confronted with the uninviting alternative of devaluation. In all this, regard has always to be had to the fact that whether a simultaneous policy of lowering costs is really necessary depends on the special circumstances of every country.

As a last point, it might be argued that the policy of expansion may possibly jeopardize the stability of the foreign exchanges by evoking distrust in the future stability of the currency and thus causing a flight of capital. This is certainly a point which is of no little importance, and every care should be taken with regard to it in the technical execution of the policy of expansion. On the other hand, however, there is certainly a good chance that what there is of a tendency in this direction might be compensated by the confidence-inspiring effect of a decline in the number of unemployed, bankruptcies, or political riots. It should not be forgotten, in this connexion, that the recent attacks on the countries of the Gold Bloc were able to gain strength only on account of the growing distrust in the economic and political future of those deflation-ridden countries. Furthermore, it is to be observed that in countries where the banking system is closely connected with industry as in Germany, Switzerland, and Austria, the crisis in the sphere of production immediately impairs the position of the banks, spreading distrust among their depositors and thus putting a strain on the balance of payments. There comes a moment, therefore, from which time onwards a policy of expansion on the basis of the Gold Standard encounters growing difficulties instead of being made easier by the lapse of time. On the other hand, it is to be surmised that a recovery in the sphere of production, by thawing frozen industrial assets and thus improving the position of the banks, acts in the direction of reducing any danger for the Gold Standard that might come from this quarter. Summing up this argument, we may conclude, then, that it is very questionable whether devaluation is a necessary prerequisite for carrying through a policy of expansion. On the contrary, it is highly probable that it will introduce a dangerously disturbing element, for reasons which need not be repeated here.

Despite his unsparing efforts to explain the rationale of expansion, the author cannot overcome the uneasy feeling that there may

still be people who vigorously decry expansion as inflation. They are so obsessed by the fear of inflation that every enlargement of the volume of money and demand, no matter under what circumstances it occurs, is characterized by them as inflation, and all such expressions as "expansion" or "reflation" are, in their eyes, nothing else but a terminological smoke-screen to disguise the invariable policy of inflation. Now, the present author has every sympathy with the fear of the terrible scourge of inflation, and during the Great Inflation in Germany he was among those economists who spared no effort to divert the monetary policy of the government from its catastrophic course. That was a time for sounding the alarm-bell. During the last boom also, there was every reason to worry about inflation, and it is more than probable that after the present depression there will again come a time—perhaps very soon—when it will behove the economist to be on the look out for renewed inflation. But there has never been a more inappropriate time to worry about inflation than the present depression when the world is suffering from the worst case of the opposite evil, *i.e.*, deflation, and it is doubtful whether the devastating effects of this deflation do not actually surpass the devastating effects of the worst inflations. Are we really to believe that there is no middle course between the "arctic hell" of deflation and the tropical heat of inflation? Is it arson to kindle a cosy fire in a freezing room? Of course, there is always the danger that we may set the house on fire, but is it not pathological pyrophobia to leave the fire in the stove unkindled by reason of such a remote danger? If the scaremongers had their way, we should apparently have to submit to an unlimited degree of economic contraction, and if deflation had been driven so far that the last bank note were to disappear from circulation it would be "inflation" to put it back into circulation again. I am not in the least scared by the fact that expansion does mean an enlargement of the volume of money and credit, and ardently hope, moreover, that it will be so, since it is the only way to get out of a depression. In the present situation not to want an increase of circulating media is simply tantamount to not wanting recovery. Consequently, if recovery should unexpectedly set in spontaneously, the same logic demands that it should be strangled deliberately.

Thus there is no getting away from the fact that recovery *is* expansion, and the only point to be discussed is whether we should wait until it comes spontaneously or whether we should do something to bring it about deliberately. And, finally, how often must it be repeated that at the present

moment credit expansion, drawing as it does on the unused reserves of productive capacity is a compensatory one, and that it will become inflationary only when recovery has developed so far as to absorb all those reserves? In saying this, one must be quite aware that the danger of inflation may, after a while, become a real one. Neither is it to be denied that a crude form of the policy of expansion might harbour some danger in this direction, *i.e.*, if it is carried through in a manner and under circumstances which make the attempts at " ignition " unsuccessful. But it is possible to exaggerate these dangers since wherever a policy of expansion—with the possible exceptions of Germany, Italy and Japan—has been launched, no real symptoms of inflation have as yet become noticeable. The big inflations after the war have left, moreover, such a powerful impression on the contemporary mind that most people seem to underrate the time which usually elapses before inflation grows to any perceptible dimensions, just as it is common to underestimate the enormous elasticity of our economic system. Therefore, it is well to recall how long it took even in Germany and under the most adverse circumstances before the first signs of inflation became visible during the war.

Resuming the general trend of the exposition on the nature of expansion, we note that it is neither reflation nor devaluation nor —least of all—inflation. In all these respects, it is certainly not what most of the adversaries of expansion imagine it to be. But still less is it *Planning*. To confuse a policy of expansion with Planning shows exactly the same lack of discrimination as that which leads people to believe that there is an exclusive alternative between internal or external stability (the Doctrine of Alternative Stability) or between deflation and inflation. This general lack of discrimination with its crude mental patterns is really one of the great curses of our times and cannot be too strongly attacked. No progress is to be hoped for unless we cease to think in terms of these crude alternatives with their futile polemics. This is what is most badly needed in the discussion of the issue between *laissez-faire* and Planning. A policy of expansion is certainly not *laissez-faire*, but is it therefore Planning?

Let us start with attempting to give a clearer definition. The term " Planning " no doubt owes much of its present popularity to the fact that it is being used more and more in a sense which covers almost every conceivable activity of the State in economic policy. Since some sort of activity on the part of the State is demanded by almost everyone to-day, the looseness in the use of

the term "Planning" is very useful for advertising it and for coaxing the masses into the belief that the world is headed towards Planning. The term itself is very helpful in carrying through this cunning manœuvre since it is difficult to imagine any act of economic policy which does not involve some sort of a "plan." Even the imposition of a protective tariff is based on a preconceived plan of the structure of production of the country in question, but obviously it would be absurd to say that a protective tariff means Planning. The same is true in the case of the construction of public roads or State railways, and even the public works which are so popular nowadays as a remedy against depression hardly constitute a planned economy. Most cities have been built according to some sort of plan, and the monetary and financial policy of many countries has also assumed more and more the character of regulative measures which take into account the course of the entire national economy.

If all these things are "planning," then the term becomes absolutely meaningless. We should then have had planning since the dawn of history, for economic life has always been subjected to certain rules and collective influences. And then, of course, capitalism would be a Planned Economy too, since the legal and institutional framework of this economic system also has been created in the light of systematic reasoning involving a preconceived idea of the competitive economy as a whole. Capitalism has been deliberately "planned" as a system which needed no further Planning. We conclude therefrom that if the term is to retain any meaning at all it must not be applied to an economic policy characterized by a "plan," for that is true in the case of any economic policy, even in that of economic Liberalism whose plan it is not to "Plan." Therefore, it is not the "plan" as such which characterizes Planning but a certain method of executing it, *i.e.*, the method which is the contrary of that of the competitive market economy. While the latter is based on the complicated interaction of spontaneous decisions of all groups on the market, it is the essence of Planning to replace this mechanism of spontaneous reactions by commands from above and to hand over the all-important decision as to the allocation of the productive forces of the community to the office of a governmental department.

All this goes to show that the term "Planning" is extremely misleading, and badly in need of being replaced by some other term such as will really express its contrast to the market economy. Perhaps "Office Economy" would not be bad,

or " Command Economy," or even " Red-tape Economy."[7] But if we keep to the term " Planning " we should not tolerate any vague use of this word and must demand that it be strictly reserved for denoting an economic policy which replaces the mechanism of the free market by governmental command. Planning in this sense must be distinguished from such kinds of intervention as are in accordance with the inner structure of our economic system (*conformable intervention*), which leave intact the market mechanism itself and attain their objective not by contravening the rules of this mechanism but by making use of them. To this type of conformable intervention there belongs the traditional tariff policy, as contrasted with a policy of quotas, clearings, or exchange controls which present examples of *non-conformable intervention* or Planning.[8] Sunday-rest regulations are again a case of conformable intervention while price-fixing is an example of a non-conformable intervention. A good test of whether or not an intervention belongs to the non-conformable category (Planning) is the well-known fact that measures of this kind are liable to start a chain of repercussions necessitating more radical acts of intervention until we finally arrive at a Collectivist Economy pure and simple, a fact which is well illustrated by the experiences with the policies of fixing maximum prices, especially in house rents after the war, and by the present trend in international commercial policy. Partial Planning, therefore, tends to develop into Total Planning by its own motive force.

It is clear then that for trade-cycle policy the choice is not between *laissez-faire* and Planning but between *laissez-faire*, a conformable trade-cycle policy and Planning. The *laissez-faire* case can be discarded as impracticable since it is obvious that something has to be done to overcome this depression and to prevent the recurrence of another. There remains the choice between a conformable business-cycle policy and Planning. Here at last we have a clear alternative which we cannot escape: either we want to overcome the present depression by setting again in motion the normal mechanism of reactions of the market economy or, if we think that we must have recourse to Planning, we must recognize

[7] The same reasoning applies to the popular contraposition of " Profit Economy " and " Want-satisfying Economy " which is equally illogical. Our present economic system is also essentially a want-satisfying economy since profit depends on the degree in which the wants of the consumers are being satisfied. In calling our competitive market economy a " Profit Economy " we denote the special method of satisfying wants. It would be logical, therefore, to speak of the socialist form of want-satisfying economy as " Office Economy " or " Command Economy." Whether wants are better satisfied by the method of Profit Economy or by that of Office Economy is a separate question.

[8] *Cf.* especially G. Haberler, *Liberale und planwirtschaftliche Handelspolitik*, Berlin, 1934.

that we have to replace the entire mechanism of the market economy by collectivist Office Economy. We must make up our minds as to the direction we are taking and not count on the possibility of an easy compromise. If we recoil, not without justification, from total Office Economy we have to realize that the success of whatever we may do depends on the reconstruction of the mechanism of the market economy. First of all, we must know that, whether we like it or not, we are dependent on the entrepreneurs and their optimistic mood, that we must not drive them to exasperation and at the same time be surprised that recovery will not come. Not only, then, is judicious activity in combating the depression compatible with forgoing any idea of Planning, but, on the contrary, combining it with Planning is a sure way to compromise any success of an active policy in combating the depression. It must be clearly understood that the whole philosophy of expansion is based on a framework of economic reactions which would be destroyed if a country embarking on such a policy should at the same time try to remodel its economic system on socialistic or—what is closely related to it—on autarkistic lines. The experiences especially of Germany in recent years seem sufficiently to prove that a policy of expansion eventually stultifies itself if it disturbs by all kinds of non-conformable intervention the mechanism of economic reactions which it is calculated to resuscitate. Again, the disappointments of the New Deal in the United States must be largely imputed to the same cause. All the wails over the shortcomings of the competitive system and all the vague yearning for the better organization of production cannot get away from the fact that, as long as we do not take the foolhardy plunge into the total Office or Command Economy, all measures of Planning are liable only to hinder recovery. The importance of this statement is not impaired by the other fact that our competitive market system (" capitalism ") possesses such an incredible vitality and such an astounding elasticity that it can digest a considerable number of obstructions before it succumbs. It is, indeed, hard to kill, but some countries have already come quite near to the breaking-point.

It is from the same point of view that we must treat the present tendencies, noticeable in many countries, to subject the volume of production and the establishment of new plants to a strict governmental control.[1] When there is over-production and unused productive capacity, would it not be sensible to order a reduction of

[1] An excellent treatment of this question may be found in Professor Robbins' *Great Depression*, *loc. cit.*, chap. vii.

output and to prevent newcomers from invading overcrowded industries? Not at all. Leaving aside the special case of the restriction of agricultural production, it may be said unhesitatingly that this revival of the medieval principle of *numerus clausus* is a very short-sighted interference with the dynamic forces of our economic system which should be stimulated instead of being strangled. If there are enterprising persons to-day who have enough optimism and courage to undertake new investment we have every reason for rejoicing, for that is just what we need in the interests of recovery. They should be encouraged instead of being intimidated, even if they *are* uncomfortable competitors for the old-established firms and a danger to vested interests. If the State does not leave it to individuals to decide whether one line of production is to be preferred to another it kills the economic reactions on which we must rely in our hopes for recovery unless the State takes over the complete control of the national economy. And the fear of a misdirection of investment? This is again one of those economic scares based on a narrow and static view of the economic process. Capitalism is an economic system which, when its dynamic forces are in full swing, can afford to sow its seeds on barren ground, and the best way to bring those forces into full swing is to let capitalism sow its seeds. The waste of misdirected investment during the secondary depression is a trifle compared with the additions to the total wealth concomitant with recovery, and it is just those experimental investments which are usually essential for turning the tide. The development of capitalism is unthinkable without faulty investments, and perhaps most of us would not have been born were it not for the stormy growth of the productive forces brought about by recurrent waves of experimental investments, directed at one time towards railways, at another towards electrical or other lines of investment. To fight against the whole of this illiberal spirit of jealous narrow-mindedness and of thinking in terms of the *status quo* instead of in terms of potentialities is not the least important part of the philosophy of expansion.

The issue between *laissez-faire*, a conformable trade-cycle policy and Planning may be summed up as follows. In certain circumstances, it is just as wrong to rely on the natural respiration of economic life resuming automatically as it is wrong to club it to death and then to make attempts at replacing the natural organism by an artificial one made of tin and wire. Both the uncompromising Liberal and the Planner—each is wrong where the other is right, and right where the other is wrong. The uncom-

promising Liberal is right in his recommendation to stick to the essential principles of our competitive market system, but he may be wrong in relying on the automatic mechanism of this system for overcoming the secondary depression; the Planner is right in demanding an active policy against depression, but irremediably wrong in suggesting Planning as the right method. Why not combine what is right on both sides? Why should it not be possible to agree on a policy of reanimating the natural respiration? That is just what the policy of expansion will do so long as it is strictly confined to conformable intervention.

To avoid any possible misunderstanding this section may be concluded by the remark that the conflict between the expansionist and the restrictionist school gives way when a spontaneous recovery really begins to develop. Since the artificial measures advocated by the expansionists are to be merely a temporary makeshift for a spontaneous recovery there is no point in insisting on them when the latter is already under way.

§ 26. The Technique of Expansion: Some Recent Experiences.

The essence of the *technique of the policy of expansion* conceived in a manner explained in the last paragraph consists in compensating deflation by re-expansion in a way which anxiously avoids interfering with the process of the market economy. No uniform prescription can be given for achieving this end. The technique of expansion must be adapted to the special circumstances of each country, without any dogmatic views on the invariable merits of this or that method. In milder cases, there may still be a chance of stimulating *private* initiative by various measures of a " provocative therapy," combining a " cheap money policy," aided especially by a vigorous Open Market Policy, with special incentives to new investment (*e.g.*, tax exemptions for installing new machinery or for building purposes, propaganda, new tariffs for special industries,[2] or—still better—opening new outlets for exports by diminishing tariff barriers). The case of Great Britain

[2] Though there is still as much reason as ever for condemning protectionism of any kind it can hardly be denied that the use of tariffs as an equilibrating instrument during a depression cannot be dismissed as *a priori* unsound. During this period—but only then—it may serve two purposes. Firstly, it may help to restore the external equilibrium of a country without having recourse to devaluation and too much wage-cutting. Secondly, a little protection here and there may give a stimulus to new investments as was remarked above in the text. In this case, the Free Trade argument is not quite convincing since the social loss brought about by protection may be more than compensated by the social gain derived from the reduction of unused productive capacity. The whole problem has been widely discussed especially in England during recent years. *Cf.* : Beveridge, *Tariffs: The Case Examined*, London, 1931; Keynes, *Essays in Persuasion*, London, 1933, pp. 271-287; Robbins, *The Great Depression*, chap. viii; G. Haberler, *The Theory of International Trade*, London, 1936, pp. 259-273; Th. Balogh, " Löhne, Arbeits-

is the outstanding example of such a policy, but it is doubtful whether it would have been successful in many other countries.

Similar attempts in the United States under President Hoover and in Germany have clearly failed. If private initiative does not respond sufficiently to the incentives offered to it, so that the effect of " ignition " fails to appear, there is no other way than to complement this policy by *public initiative* in enlarging the volume of credit and demand. If the private entrepreneurs do not make use of the new credit facilities, in other words, if private borrowers are not to be found in a sufficiently large number, then the State must step in as an extensive borrower in order to make credit expansion really effective and thus to help drag the market economy out of its present deadlock. Or to use expressions employed earlier in this book: the public sector of the national economy has to be enlarged to make up for the contraction of the private sector and to start a process leading to the re-expansion of the latter. As soon as the re-expansion of the private sector is sufficiently under way so that the economic circuit, relieved of its torpor, is working again, the expansion of the public sector must be stopped and must even be turned into contraction if private expansion assumes anything approaching inflationary dimensions.

The general principle, then, of a policy of expansion by public initiative is to start credit expansion by using the State as the pioneer in starting up new borrowing in place of the scared entrepreneurs. Once this general principle is understood, it is only a technical question how to execute this programme. To this end two broad courses are open. The one is to bring about deliberately a regular budget deficit by the abolition or lowering of taxes or by raising expenditure or by both. The other is to borrow in order to finance large public works or, in other words, to create a budget deficit by expenditure of an extraordinary and special nature. Both methods have their advantages and dis-

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losigkeit und Zölle," *Weltwirtschaftliches Archiv*, October 1931; R. F. Harrod, *International Economics*, London, 1933, pp. 194-201.

To admit tariffs as a possibility in " provocative therapy " is not to say that it is a particularly recommendable one. Its worst side is that tariffs, once introduced, are very hard to remove. Furthermore, it will be difficult to keep this remedy within the very restricted limits where it does more good than harm. There are other and less dangerous methods than this, and it is quite arguable that a policy of public initiative is to be preferred to this method of giving encouragement to private initiative. Finally, the tariff method is applicable only if there were hitherto no tariffs or only very low tariffs. In cases where tariffs have already become the backbone of industrial monopolies, the interests of recovery will be better served by removing or substantially lowering them rather than by introducing new tariffs. In the opinion of the present author, there is always a strong presumption in favour of a policy of expansion by public initiative combined with a policy breaking up all kinds of market rigidities.

advantages which have to be weighed up against each other without any dogmatic preferences or political prejudices.[3]

The first method of deliberately creating a regular budget deficit appears especially advantageous if the budget deficit is brought about by abolishing or lowering those taxes which, as explained on an earlier occasion (§ 21), fall most heavily on production and enterprise (business taxes, turnover taxes, stock exchange taxes, &c.). In this way two birds would be killed with one stone. An expansion of credit would be effected as a result of the State's additional demand for credit, and at the same time a very strong stimulus would be provided to private initiative, causing an expansion of credit in the private sector also. This method thus presents an attractive combination of the policy of expansion by public initiative with the " provocative therapy " applied to the private sector. This is equivalent to saying that it has the great advantage of departing in the least possible degree from the normal behaviour of our economic system. Connected with this is the other appreciable advantage that it is most conducive to creating a psychological atmosphere of normalcy which gives little chance to all sorts of wild reformers of hysterically hailing the beginning of a " new epoch." Finally, this method has the merit of working promptly and without the need of a new and costly organization whereas it takes a considerable time to develop a programme of public works. On the other hand, it has the great psychological drawback that it does not sugar the bitter pill of a budget deficit. To cover regular expenditure by increasing public indebtedness seems to run counter to the most sacred principles of orthodox public finance. It takes strong nerves cold-bloodedly to stand the sight of such a budget deficit in all its naked horror, and most people perhaps would prefer to draw over it the merciful veil of public works. Whatever we may do to mitigate these fears, we have to accept them for the moment and to shape our programme according to them. This psychological drawback becomes especially important if the budget deficit has to be covered not by short-term advances but by government issues offered for public subscription. In this case it is to be feared that a mere budget deficit to be covered by these bonds will seem less attractive to the imagination of the public than public works. Shining automobile roads, water-dams or cleared slums look rather nice on posters inviting the public to buy government bonds while the mere gap between revenue and expenditure lends itself less readily to artistic propaganda. These

[3] *Cf.* R. G. Hawtrey, *Trade Depression and the Way Out*, new ed., London, 1933, pp. 126-144.

are some of the psychological points which have to be very seriously considered. It has to be kept in mind, moreover, that making an excusable exception of the principles of conscientious administration of public finances might render it very difficult later on to bring those principles back to the respect which they deserve. It is certainly extremely dangerous to make, even for a short while and under exceptional circumstances, the spirit of financial recklessness respectable—though in these times of the secondary depression there is nothing that is not dangerous, most of all the policy of letting things drift.

A rather interesting experiment with a very mild form of this method was made in Germany towards the end of 1932 under Chancellor von Papen. It was based on providing incentives for new investment by private entrepreneurs. These incentives consisted mainly of certificates to be given to business men in return for payment of those taxes which, as explained above, may be regarded as a direct burden on production, in the sense that their removal may be expected to react promptly on the willingness of entrepreneurs to undertake new investment. The certificates (*Steuergutscheine*) were to be redeemed at a later date, together with a certain agio, and they were made rediscountable at the Reichsbank so as to give them the character of negotiable paper of the most liquid type. What in effect the plan amounted to was that the most burdensome taxes (business taxes, turnover tax, &c.), while not actually being abolished, were transformed into liquid assets. The whole system was rather complicated, but its meaning can be summed up by saying that in the place of these taxes there was instituted a forced loan, the titles to which, thanks to the collaboration of the banking system, could be sold or employed as collateral. In other words, a certain amount of taxes were virtually abolished, but the financial burden of this abolition was temporarily shifted from the State to the banking system, which would expand credit to the corresponding degree. This assumed that business men would employ their certificates, not for paying off or consolidating old debts—improving their own liquidity thereby—but for making new investments in working or fixed capital. The behaviour of the entrepreneur of course constituted the real problem. While he might or might not respond to the stimuli administered to him, on the whole it appeared likely, at that time, that the degree of response would be insufficient to render the pull effective. The only result would then be an improvement of private balance-sheets and an increase of the public debt, without any visible alleviation of general economic conditions. For these reasons, the Papen Plan did not prove, indeed, a great success. The success would undoubtedly have been much greater if the government had had the courage to abolish the taxes in question without the roundabout way of the tax certificates. In this case a prompt expansion of credit would have been ensured, regardless of the uncertain behaviour of the entrepreneurs. For this reason it has been a very illuminating experiment.

The advantages of the first method are, to a large extent, the disadvantages of the second method (*i.e.*, the method of public works), and *vice versa*. It takes rather a long time to develop the

latter, and it gives rise to new and costly organizations. It must be considered as a further disadvantage of this method that it is very apt to create the impression of a marked departure from the normal behaviour of our economic system so that there is much unnecessary talk about Planning and the dawn of a " new era," though, on the other hand, it can be argued that it may be the least harmful diversion of the socialistic leanings of our times. A much discussed point is whether public works mean a waste of productive resources. As contrasted with the first method, it could be argued that in the case of public works we have at least something to show for the budget deficit, or, to put it in another way, public works might be said to bridge the gap between saving and investment by raising investment instead of decreasing (or wasting) saving. There seems to be some misunderstanding here, however. The difference in the primary effects of the two methods must not be mistaken for a difference in their ultimate effect which is to overcome the depression by setting the normal circuit of economic life again in action and by equalizing saving and investment on the highest possible level of investment compatible with the volume of voluntary savings. The fact that in the case of public works the primary (" pulling ") effect is connected with the construction of public roads or other things is really not so important since the first method also will give rise to new investments, which may perhaps be more in accordance with the preference scales of the community. It is just this point which many adversaries of public works have in mind. It is, indeed, not always easy to find, in the necessary amount, projects for public works which can be defended as compared with the private investments evoked by the first method. This comparison as regards a possible waste by public works is an essential point. Compared, however, with the waste of doing nothing at all, any waste in executing more or less unnecessary public works appears rather insignificant. Consequently, the only people who are entitled to criticize the possibly wasteful character of public works are those who can suggest a better method of expansion. Compared with the first method, public works have the advantage that they represent a form of budget deficit which facilitates the task of abating the psychological shock of such a bold course and of letting it appear less reckless and adventurous, though there will be differences, in this respect, from country to country. A last point to be considered is whether the very fact that public works attack the problem of the economic deadlock from outside the private market system, might not, apart from its psychological drawbacks,

offer some advantage of a more mechanical character, since it transfers the starting point into a non-competitive sphere, perhaps avoiding thereby a good deal of primary friction.[4]

The conclusion to be drawn from this discussion of the two methods of public expansion is that their respective advantages and disadvantages are so much in the balance as to make it impossible to say beforehand which is superior. As a general rule, therefore, it seems advisable to combine both in the manner best suited to the special circumstances of each country. In both cases, it is an essential condition, however, that the government should raise the funds for its programme in a way which really ensures an expansion of money and credit. Nothing would be gained, therefore, if the funds were to come out of savings which would have been invested in any case. That is the reason why there is some doubt as to the usefulness of raising the funds by placing long-term issues on the capital market. This method would result in expansion only under one of two conditions. Either there must be bank advances to contractors or to the subscribers to the loans issued by the government, or, if this is not the case, the funds must come from hoards (including idle deposits) which would not have been invested save for the special attractions of the government issues. The prospects of the latter are not too bright since there is no reason why anybody who is prepared to invest should not have other almost equally attractive opportunities for investment. Idle money might be lured out to some extent, but as this must of necessity be rather small, only a fraction of the public expansion necessary for an effective " pull " can be financed in this way. The bulk, therefore, must be financed by short-term advances the technique of which will not be discussed here. This is, moreover, the method which exactly corresponds to the financial situation at the time of the advanced depression when an exceedingly low rate of interest prevails on the money market while the rate on the capital market remains relatively high. It seems, therefore, logical for a policy of public expansion to draw by preference on the easy money market instead of the still rather tight capital market. Repulsive as this idea must seem from the

[4] The effect of public works on general economic activity does not differ from any other form of credit expansion, as soon as the primary effect has really led to credit expansion in the private sector. There is, therefore, no need for a special theory of the secondary effects of public works. *Cf.* however : J. M. Keynes, *The Means to Prosperity*, London, 1933; R. F. Kahn, " The Relation of Home Investment to Unemployment," *Economic Journal*, June 1931; J. M. Clark, " Aggregate Spending by Public Works," *American Economic Review*, March 1935; M. Mitnitzky, " Economic Effects of Changes in Consumers' Demand," *Social Research*, May 1934; H. Neisser, " Oeffentliche Kapitalanlagen in ihrer Wirkung auf den Beschäftigungsgrad," *Economic Essays in Honour of Gustav Cassel*, London, 1933, pp. 459-477.

point of view of the normal principles of sound finance, there is, indeed, a special virtue, at this extraordinary period, in preferring short-term advances to long-term flotations for financing public expansion. The consolidating of these advances later on during the full development of recovery has the additional advantage of exerting a checking influence on the boom.

These, then, are the broad principles of a policy of expansion. It cannot be said too often, however, that complete success depends upon the skilful and considerate hand with which it is executed with a view to the special conditions of the country, its general atmosphere, and the mentality of the people. It must be combined with a general economic policy which, marked by circumspection and sober consideration for continuity, is susceptible of inspiring confidence and optimism. A riotous political atmosphere, regimentation, economic rigidity, monetary instability, cynical boasting of unorthodoxy in economics and politics, legal insecurity, and lack of respect for contractual obligations—all these and many other things are fatal for a policy of expansion. The combining of expansion with the breaking up of economic rigidities, the balancing of orthodox with unorthodox measures, a minimum of new constructions and a maximum of conservatism, should be the guiding principle for a wise policy of expansion.[5] The less we hear of " reconstruction " and " new epochs," the more we avoid creating the impression that we need a new money or credit system,[6] a new State, a new philosophy and newer and better economics, the greater will be the prospects of success. There is, however, a great danger in retarding the policy of expansion, for the longer we wait the more probable it becomes that the growing hysteria will finally result in a crude and reckless sort of expansion, if not in the complete upheaval of the economic and political structure of society.

While the success of a policy of expansion is fairly conspicuous in the case of Great Britain, of Sweden, of Australia and a number of other countries, there are some countries whose experiences are not so encouraging. Pre-eminent in this respect are the United States

[5] A good example of this judicious combination seems to be the recovery programme of Australia on which a competent authority (Professor Copland, *International Affairs*, January-February 1934) says : " It is not unreasonable to say that the success of the Australian plan lay in its neat balance of orthodox and unorthodox measures. Deflationary elements created confidence in the capacity of the governments to make necessary adjustments, the inflationary elements prevented these deflationary forces from causing further slackening of enterprise and laid the foundations for financial recovery, which always precedes economic recovery."

[6] For this reason we must be extremely distrustful of all the more or less cranky monetary schemes like " stamp money " and such like. *Cf.* the delightful paper by Mr. H. T. N. Gaitskell on " Four Monetary Heretics " in Professor Cole's *What Everybody Wants to Know about Money*, London, 1933.

and Germany. Though much has been said already on the recovery programme of these two countries on various occasions in this book, it seems pertinent to refer to them again in a more coherent manner.

Everybody who was convinced that the economic recovery of the world was to be expected predominantly from a policy of expansion in the great creditor countries, felt relieved when in the spring of 1933 the *Roosevelt Administration* seemed determined to launch such a policy. But from the beginning the effect was spoilt by the fact that the Roosevelt Administration, influenced by a set of particularly confused ideas, pulled at levers which brought disorder into the whole mechanism of recovery, almost up to the present day. This confusion was a twofold one. Besides confusing re-expansion with reflation (in the sense explained on an earlier occasion), the Roosevelt Administration made the second mistake of pursuing this wrong goal by an equally wrong means, *i.e.*, by abandoning the Gold Standard and depreciating the dollar, without going far, at first, in real expansion. Valuable time was lost in all kinds of monetary manœuvres for making the depreciation of the dollar really effective, while the opportunities of the World Economic Conference in London in the summer of 1933 were deliberately wasted. The inevitable reaction to the speculative boom brought about by the devaluation of the dollar gave rise, later on, to the familiar chain of more or less radical interventions which added considerably towards impairing the elasticity of the economic system and shaking the general confidence and optimism which were already undermined by the monetary instability. Small wonder that, in the face of these attacks on the mechanism of reactions of the American economic system and on the psychological attitude of the groups most important for recovery, the New Deal had a rather wavering success. It is rather a wonder, and altogether a credit to the vitality of American capitalism, that, in spite of these obstructions, a considerable measure of recovery has been achieved. But the great chance offered to the Roosevelt Administration in 1933 has been definitely missed. At that time it could have laid the foundations of a solid recovery and earned the gratitude of the whole world if it had combined a policy of effective expansion (by public works, lowering of burdensome taxes, incentives to new private investments, subsidies to farmers and other destitute groups, &c.) with a policy of adjustments in prices and costs and of staunch maintenance of the Gold Standard, ensuring by such a combination of boldness and confidence-inspiring conservatism the transmission of the igniting spark from the public to the private sector of the community. On the strength of the more encouraging development

later on, the danger that the unfortunate combination chosen by the Roosevelt Administration for its policy of recovery might eventually result in an enormous volume of public indebtedness and in the economic systems being made inflexible and unmanageable by interventionist ossification, seems to have been averted, but in the meantime untold harm has been done to the country itself and to the world as a whole. No better proof of these views could be found than the fact that recently a very hopeful recovery has promptly set in immediately after the obstructive parts of the N.R.A. policy were removed and the dollar brought to rest.

Owing to the lack of exhaustive and reliable information, it is very difficult to give any approximately exact account of the *German* policy of recovery, the more so since the political implications of this case are very apt to lead even the most unbiased observer astray. On the whole, it seems safe to say that the success of the Third Reich's policy of recovery was until quite recently much greater than most of its political adversaries believed, but also that it is not quite as great nor quite as certain as its representatives usually affirm. The error of the first group which has been in the habit of counting on an early breakdown of the German recovery programme is very interesting, as it throws some further light on general questions treated in the course of this book. The belief that the economic policy of the Hitler Government was heading for an early disaster reminds us somewhat of the well-known opinion, held by many people at the outbreak of the Great War, that the war could not last more than a few months. In both cases the enormous elasticity of capitalism was seriously overlooked. It is true that the greater part of the public expenditure of the Hitler Government has been unproductive and, looked at from the standpoint of its primary effect, even positively wasteful, especially the expenditure on rearmament. But, owing to the secondary effects of this expenditure and to the existence of large idle capacity and man-power, the result, surprising only to the superficial judge, was, up till recently, that the population had on the whole certainly not been made much worse off by it, though this result was largely obscured by the simultaneous process of depriving certain groups of the population of their means of livelihood for political reasons.

It is, therefore, not the programme of public works and the other stimuli connected with it that are to be blamed, nor the expansion of credit which is sometimes incorrectly called "inflation." Not that the Hitler Government embarked on a policy of expansion is the bad thing, but that it did so under circumstances

and by a combination of political and economic measures which gave small chance of ultimate success. Like the United States—but to a much greater degree and in a much more disquieting manner—Germany is an outstanding example of a rather ill-fated policy of expansion. It illustrates extremely well the truth of the statement that once expansion has become the subject of mass cries and mass discussions it is in great danger of being finally executed under the worst possible circumstances and in a crude and ill-considered manner. By creating a dangerous political atmosphere inside and outside of the country and by trying to remodel its economic system on autarkistic and heavily interventionist or even socialistic lines, the Government went far in destroying the framework of economic reactions on which the philosophy of expansion must be based.[7] On top of this the German Government evidently went further in expansion than would have been defensible even under better circumstances. Since there is, despite the great cost of public expansion, still little sign of private initiative having been aroused to the necessary extent, and since also there are small signs that the financial mechanism of the country has come any nearer to normal working order, expansion in Germany is still largely confined to the public sector, with small hope of any change for the better in the immediate future. Economic activity in Germany is still dependent to a large degree on continued public expansion, while it should be expected that, with the progress of the policy of expansion and with increasing activity in the private sector, public expansion would gradually become less important for the total economic activity. But with the public debt rapidly accumulating, it becomes pertinent to ask how long this course can be pursued.

In the case of Germany, there is a very real danger that the ultimate result of the experiment may consist of a gigantic volume of public indebtedness and of the economic system's being made inflexible and unmanageable by interventionist ossification. In spite of the opinion, widely held in Government circles, that the normal working of the German economic system, based on private initiative and the freedom of markets, is to be restored as soon as possible, Germany has become not less but more entangled in the web of artificial constructions and interferences. The most fatal flaw in the whole process is undoubtedly the foreign-trade situation. Even under the conditions prevailing before the new

[7] *Cf.* the author's "Trends in German Business Cycle Policy," *Economic Journal*, September 1933, where the development was predicted along the lines explained above.

régime, it was to be expected that a serious strain on the balance of payments would result from an internal business revival, engendering, as it does, increased imports of raw materials without a simultaneous rise of exports of industrial goods and without any appreciable reserves of gold or foreign exchange. To bridge this "import gap" Germany would have to rely for an intermediate period on foreign credits. Unfortunately, however, things took a fatal turn in two directions. Firstly, exports fell off at a catastrophic rate, owing to various reasons, among which the autarkistic tendencies of German Commercial Policy, especially in agricultural products, have been particularly conspicuous.[8] For years and years the warnings of the more far-seeing people against this trend had been ridiculed and decried by the advocates of economic nationalism, but the experience of the last years has been sufficient to turn this spirit of mockery into the greatest anxiety. At the same time, the wholesale cartellization of German industry as a solid by-product of semi-socialistic ideologies together with the enhancement of the cost of living by agrarian protectionism and with the devaluation of leading currencies increased the difficulties of German industry in competing on the world markets. While the "import gap" was widened by these tendencies, the chances of getting new foreign credits fell off, at least temporarily, almost to zero point. It is this desperate situation around which centres the greater part of the German difficulties at the present moment, and the manifold interventions to which they give rise are bound to react in turn very unfavourably on the internal conditions of economic recovery, as, *e.g.*, the heavy tax on industrial turnover recently introduced in order to create a fund for export bounties. Since the expedient of devaluation is also not without its drawbacks in the case of Germany, the prognosis for this type of a policy of expansion must, with all allowances for the elasticity of capitalism, be rather reserved.

It is well, however, to refrain from all the gloomy prophecies which are so current now in many quarters. Many of the unfavourable factors *might* possibly take a turn for the better in the immediate future. The credit embargo against Germany can and will not last for ever, and the change in this respect will be accelerated by an improvement of the external and internal political atmosphere. At the same time, it is quite conceivable, under

[8] *Cf.* the author's book on *German Commercial Policy*, London, 1934. It should not be forgotten, however, that the foundations of the autarky have been laid by former governments, and this not without assistance from socialist circles.

present conditions in Germany, that German protectionism might be modified in order to widen the export markets. All this may possibly be combined with a cautious devaluation of the mark preparatory to a reduction of exchange control.[9] When the situation in foreign trade has been improved in this way, there is good reason to believe that the internal market also will be freed from many fetters. That is not to say that all these things *will* happen, but they *may* happen, and then there would be a chance that economic activity in Germany might be stabilized on a rather high level. In the case of Germany, therefore, all prophecies are more or less futile, though it must be said that the prospects are becoming increasingly bad.

It seems fit to conclude this short survey with some remarks on the situation in *France* since it is a good illustration of many points of general interest. France was one of the last countries to be hit by the present depression, but the development during the last two years leaves no doubt that it has now entered the phase of the secondary depression with its familiar vicious circle and even with its political and social implications. France has now, roughly speaking, reached the stage of Germany under Chancellor Brüning when it became impossible to avoid a growing budget deficit, and it is very ominous that in France also the difficulties of budgetary policy are slowly undermining the bases of the parliamentary and democratic system. On the other hand, however, the economic and financial position of France is still so strong as to make a policy of expansion fairly easy, even perhaps without devaluation and abandonment of the Gold Standard. The French difficulties, therefore, are more of a psychological character. Public opinion in France has not yet awakened to the truth that the rather uninviting choice between Brüning and Roosevelt does not exhaust the possibilities, and that a middle course, consisting of a policy of expansion combined with a steady policy of monetary stability and of economic conservatism, offers the best chances of success. France is just the country where the general principles of a sound policy of expansion, as explained in this and the preceding sections, seem to be especially applicable. Even the extremely sensitive mentality of the French population towards everything with the faintest smell of economic "unsoundness"

[9] As regards Germany's chance of getting rid of its present system of exchange control, two points have to be reckoned with: firstly, the desperate foreign debt situation, and, secondly, the internal political pressure which, as it makes wealthy persons desirous of leaving the country, is incompatible with a free exchange market. A huge foreign loan of several billions of marks and a change of the political factor, therefore, appear to be indispensable prerequisites for any return to economic normalcy.

should not be an unsurmountable obstacle to a fairly skilful policy of expansion with some eye for "window-dressing." It seems that M. Flandin, when he was Prime Minister, had grasped the situation and the suitable means very well so that it was very unfortunate for the country that he was not allowed to pursue his policy. Under these circumstances, there is every reason to fear that the political convulsions accompanying the unchecked progress of deflation may, in France also, finally end in a crude policy of expansion as the result of exasperation and demagogy.

3. Symptomatic Measures (Palliatives).

§ 27. Unemployment Relief.

We understand by symptomatic measures all those measures to which recourse is had in the depression in order to mitigate its social and economic effects without serving to bring about recovery. To these belongs first and foremost the task of in some way providing for the masses of unemployed, a task which must be performed even if in itself it offers no direct solution for getting out of the depression.

This assistance to the unemployed may take the form in the main of enabling them to exist by giving them goods or paying them money (unemployment relief). This may come from sources in the nature of self-help (trade unions) or from private charity. Where this is inadequate or comes up against other obstacles, the State or the local authorities may take over the relief of the unemployed as is to-day the case in greater or less degree in all the countries of leading economic importance in the world. The public unemployment relief may take either the form of relief grants or the form of unemployment insurance.

The necessity of providing for the unemployed in some form or other is just as self-evident as is the limitation of the extent to which this can take place having regard to the fact (among others) that the relief should not be so high as to undermine the willingness to work. We must look on the unemployed workman as a man who is making his way along a lengthy and often quite impassable track towards the profitable re-employment of his labour power. It is a matter of course that on this journey through the wilderness he must be provided with the necessities of his travel, but these must, unfortunately, not be so liberal that they cease to spur him on towards the attainment of the ultimate objective. This is a principle which has been sadly sinned against in some countries in recent years.

There is still another and much wider aspect of unemployment-

relief which has an important bearing on economic stability. What I have in mind is the unquestionable fact that unemployment relief, much as it is demanded by social justice, political common sense, and simple charity, has the drawback of making the wage system more rigid. A wage level above the competitive market level, or regional maladjustments of wages, could not be maintained if the pressure of unemployment consequent on these maladjustments were not neutralized by unemployment relief. From this aspect, unemployment relief appears as a sort of " valorization " for human labour, taking charge of the storage of this " product " for the purpose of " orderly marketing." There is, therefore, no getting away from the fact that systematic unemployment relief tends to add to the rigidity and—so far as this rigidity is inimical to economic stability—also to the instability of our economic system. It must be said, however, that in times of enormous mass unemployment, such as accompanies the secondary depression, the rigidity of the wage system can no longer be considered as one of the major causes of depression and unemployment. The elasticity of demand for labour has by then so much decreased that in many cases even a wage approaching zero would not restore the equilibrium of supply and demand on the labour market; cases of a negative wage even are not altogether inconceivable in a period like this. It must be said, moreover, that it would be rather unfair, at this time, to attribute the rigidity of wages, to any appreciable degree, to unemployment relief. Unemployment benefits, especially in times of tenacious mass unemployment, can never be so high as seriously to damp the desire of every normal man to prefer any job at any reasonable wage to long-term unemployment. Accordingly, it is precisely in the period of tenacious mass unemployment that this objection against unemployment relief loses its force. Just at this time, unemployment relief appears as an almost unmitigated boon so far as this aspect is concerned. Needless to say, it is a very wasteful and objectionable policy as compared with a policy directed against the real causes of the secondary depression. It is an avowedly symptomatic measure. But if unemployment relief is financed out of funds which would otherwise have remained unspent or by an outright credit expansion, it may even exert a positively mitigating influence on the depression, though it could hardly be recommended as a deliberate instrument of public credit expansion.

As regards more normal times, it might be argued in favour of unemployment relief that, granted the creation or perpetuation of unemployment by this " valorization of labour," the labouring

class as a whole would nevertheless benefit by it so far as the combination of higher wages with some measure of unemployment resulted in a larger aggregate of wages than lower wages with little or no unemployment. To this it must be replied, however, that the benefit of the labouring class as a whole is an unreal entity unless the aggregate of wages is being " pooled " between the employed and the unemployed. Otherwise there is a very real conflict of interests between these two classes, and this conflict is apt to increase with growing unemployment. One way of pooling the total of wages is the more equal division of labour by shortening working hours. We shall return to this suggestion in the next section.

A very important question is whether unemployment insurance or unemployment " doles " are to be preferred. The first is undoubtedly superior to the second in so far as it is based on self-help and responsibility of employee and employer and does not degrade those who receive assistance into recipients of charity. Moreover " doles " mean a direct charge on the exchequer. On the other hand, there is the restraining fact that the experiences of all countries at the present time indicate a failure of the principle of pure unemployment insurance. This failure was unavoidable for two reasons. The first is that on account of the violence of the fluctuations on the labour market and the uncertainty of every forecast, the risk of unemployment escapes any estimate of the precision necessary for insurance, with the result that in times of need the unemployment insurance scheme is either thrown back on government contributions or, counter to the principle of insurance, must gradually reduce its payments and introduce the " means test." The second reason is that in the case of insurance against unemployment the occurrence of the event insured against is not independent of the conduct of the insured person so that insurance against unemployment comes critically near to insurance against fire in a country where arson is allowed.[10]

§ 28. Other Measures.

Everybody feels that the mere support of the unemployed is an extremely unsatisfactory form of unemployment assistance espe-

[10] For a fuller and more technical treatment of the problems and experiences of unemployment relief *cf.* : W. Beveridge, *Unemployment; A Problem of Industry*, new ed., London, 1933; A. C. C. Hill and I. Lubin, *The British Attack on Unemployment*, Washington, 1934; R. G. Elbert, *Unemployment and Relief*, New York, 1934; O. Weigert, *Administration of Placement and Unemployment Insurance in Germany*, New York, 1934; G. Colm, " Methods of Financing Unemployment Compensation," *Social Research*, May 1935; F. Wunderlich, " Insurance or Relief," *Social Research*, May 1935.

cially because of its demoralizing effects. It is consequently not difficult to understand that other methods should have been contemplated in order to lighten the lot of the unemployed, measures which amount to reabsorbing them in some way or other as working limbs of the society without having to wait until the end of the depression. Such measures include the following:

1. *Proportional sharing out of the amount of employment available.* The methods proposed for attaining this end are: (a) *the shortening of working hours* (spreading of the work) which would result in turning the fully employed workers whom it adversely affects and the unemployed workers whom it reabsorbs into short-time workers. This already takes place to a considerable extent spontaneously. So the question is only whether the extent of short-time working should be augmented by government force. The most radical proposal of this kind is the proposal for the introduction of the forty-hour week. It we want to judge these efforts rightly, we must realize at once that we cannot reject them in principle. The very fact that many entrepreneurs proceed in this way of their own accord partly in order to avoid dismissals and partly in order to be able to take on additional employees should bring us to the conclusion that the universal application of the practice is at least worthy of consideration especially if it appears that public relief to the unemployed to-day decides many employers no longer to utilize the method of short-time to the extent that was usual in former times, but to leave the care of the unemployed to the public authorities. The universal application of the principle is open, however, to grave doubts. As soon as it is clear that there can be no question of shortening working hours and then *compensating* this by wage adjustments (or only under the assumption that the productivity of labour is increased in which case the shortening of working hours as a palliative loses its sense) it is plain that it imposes a sharp reduction of earnings on those who were previously fully employed. The peculiarity of this reduction of earnings, however, is that in contrast to a general reduction in wage rates it brings no relief to entrepreneurs—on the contrary it causes expense and difficulties. That this is a dubious procedure is all the more obvious if we have to count with the possibility that a general reduction of wage rates must take place eventually. It has then the effect of demanding a considerable sacrifice from the employed workmen on behalf of their fellow-workmen in the same trade without its bringing the relief to the firms which is necessary in order to make them profitable.

This doubt must be given double weight if the proposal is one of

spreading the work by government force. It is not only the justified aversion to an increase in politico-social regimentation and a further strengthening of the power of social bureaucracy which speaks against it, but also the fear that it will be extremely difficult for the responsible authorities to judge competently the technical and organizational possibilities of executing the proposal, especially as conditions vary not only from industry to industry but also from firm to firm. Finally, one should not over-estimate the amount of employment that it will provide.

(b) *The suppression of "unwarranted double earning,"* a measure which is extremely popular and whose questionableness is very inadequately realized. Even the question as to what a "double earner" really is is difficult to decide. We must first know what a "single earner" is! How much is any one man allowed to earn? How much work may any one person do without becoming a "double earner" and a nuisance to society? What is the normal level? Everybody knows that these are absurd questions to which we can give no answer. But they serve to bring out the questionableness of the whole concept of the "double earner" and it appears that the attack on the "double earner" is tantamount not only to a punishment of hard work but also to the levelling up of earned incomes, to a "Bolshevism from below," to the suppression of the free disposition over labour, and therefore to a further approach to a "white ant" community. It should be carefully noted that it is only *earned* incomes that are concerned since in the eyes of the populace it is not the adding together of incomes but the adding together of more than one "job" that holds out the challenge to "double earners." A man becomes an alleged nuisance to society only by the fact that because he is more hard working than others he receives a higher income than others in the same class. But the man who receives an unearned income escapes this ex-communication by the people. He is left unmolested and this must be so as long as we do not want seriously to turn to Bolshevism all round. The poor devil who struggles then by the sweat of his brow to work his way above the poverty level will be pushed back into the grey mass of "single earners" while the levelling up of the great unearned incomes can only concern us theoretically from afar off if we do not want to explode the whole structure of society.

It is even more serious than this. If we are going to call "double earners" those who take away work from others by working "too much," it really makes no difference whether this extra work is done as a second "job" or within the

framework of the regular course of employment. The man who works hard simply becomes a " double earner " whose attention must be drawn—according to the opinion of the fanatical enemy of " double earning "—to the fact that his hard work is socially undesirable. For the same reasons it makes no difference whether the man who " takes work away " from others is an employee or whether he works on his own. Even a fruit-seller who sells more fruit than the average " takes work away " from others and prevents an unemployed man from having the wherewithal to keep himself. Ought we then to control the distribution of the quantity of work in the independent trades and how can we proceed to do this? We should arrive at the most absurd results, and, moreover, it is very doubtful whether any measures taken against " double earners " would be effective. What guarantee can we provide that the man from whom we take away one kind of work will not now apply his services, which have been released, in some other way which is possibly even more undesirable than the first? It is indisputable that there are ample opportunities for using these services elsewhere (household duties, working at home, gardening, repairing door-bells and wireless sets, &c.). Consequently the number of vacancies which would be created by such a measure is to be estimated at a very low figure. These doubts, to which we could go on adding, should prohibit any radical measures in this direction. This does not mean to say that regard should not still be had to circumstances of " double earning " in taking on or dismissing workmen.

2. *Productive relief works*, under which we understand all measures which are aimed at creating a demand for labour which does not spontaneously arise on the market. The fundamental principle on which they are based is that it is better to provide the unemployed with some kind of useful work than to leave them in idleness giving them relief payments and letting their labour power lie unutilized. This cannot, of course, apply to work which competes with normal production, and it must, moreover, be work that does not necessitate any great capital expenditure (digging!) since any extra amount over and above unemployment relief would reduce the available capital in the economic system and so produce unemployment somewhere else, except in the case where a credit expansion is undertaken which changes the whole aspect of productive relief works. In these circumstances the possibility of carrying out productive relief works is very limited especially as their total costs are, as a rule, not inconsiderably higher than the costs of the same projects when undertaken by private industry. Any real

relief to the labour market is, therefore, not to be expected from productive relief works. But some form or other of such works seems useful as a means of testing the willingness to work of those in receipt of relief.

3. *Compulsory labour service,* which has been advocated for a long time in many quarters for the purpose of keeping a part of the unemployed out of idleness. It means fundamentally the universal application of productive relief works and is consequently just as problematical as the latter especially as the compulsory labour service is intended to apply not only to the unemployed but also to the whole of the population in certain age groups. The measure is, moreover, open to the following main objections: difficulties in the organization and in the proper limitation of the range of persons included, interruption of the ordinary occupational training of those liable to service, the removal of labour from the work which corresponds to its occupational ability, its suitability and inclinations, and of which it has become an organic part in accordance with the requirements of society and the labour market, and, lastly, a disproportionately high expenditure on organization. Finally, the idea of forcing people (even those who have employment) to work at a time of a surplus of labour resources has something illogical about it.

4. *Land settlement.* One of the products of the unsystematic thinking about the problem of unemployment is the idea—which is widely supported because it appeals to deep-rooted instincts—that we should permanently transfer a part of the unemployed on to the land. The notion at the back of this is that it will be impossible ever again to get industry working at its full capacity. It assumes that industrial over-production is a permanent phenomenon for which the only remedy is a movement "back to the land." This notion is based on a very strange and quite inexplicable misunderstanding of the present situation, which is not characterized by the fact that the agricultural foundations of the economic system have turned out to be too small as compared with the industrial superstructure but quite the reverse. If there is any branch of economic activity which is faced by the prospect of a long lasting overproduction and chronic depression it is agriculture all over the world. A return to agriculture might have some sense if the agricultural countries *pari passu* with the advance of their own industrialization had continually decreasing agricultural surpluses to dispose of, but the actual fact is that they are stifling under these surpluses. If there is a tendency which even the most superficial consideration could not overlook, it is that the food requirements

of the world, with a decline in the rate of population growth and increasing productivity in agriculture, can be covered with an ever smaller amount of labour. When the world trade-cycle again turns upwards, the increasing purchasing power of the world will fall to the benefit of industrial products in far greater measure than agricultural products and it might happen that many of those who are to-day eager to settle on the land would turn their backs on the land with its toil, self-denial, and hardships and take up the new openings for employment in industry. Then the " reagricultural-ization " would change to " reindustrialization " an oscillation which is surely not very purposeful.

We should, indeed, do all we can to facilitate the way back to the land and the soil of those who have a keenness and love for agricultural life and who begin to despair of everything in the town as a consequence of their unemployment. Furthermore, giving smallholdings to industrial workers who cultivate them in their spare time is certainly desirable in order to give greater independence and security to the industrial workers and to make their existence less " proletarian." So far, land settlement is undoubtedly a means of, to some extent, alleviating the depression, but we must not be carried away by a romanticism which has no foundation in hard fact.[1] Before all, it must not be thought that we can in this way evade the task of overcoming the depression by the means which is proper and adequate to the system.

Finally, it must be said that a policy of land settlement may defeat its own purpose if it is connected with agrarian protectionism. The latter makes for unemployment in two ways: firstly, by damaging the export industries, and, secondly, by reducing the demand for those agricultural products of which the urban consumer will buy less when food is made dearer by agrarian protectionism. Those products with the higher elasticity of demand (*e.g.*, butter, eggs, meat, &c.,) are, moreover, exactly those which represent not only a higher nutritional value but also a higher labour value. The case is still worse when protectionism is especially high for grain production as in Germany. It is not surprising, therefore, to find that agrarian production in Germany increased, from 1925 to 1933, by 27% while at the same time the number of persons employed in agriculture decreased by 4%, to say nothing of the increase of

[1] Even in Germany where the policy of land settlement has been pursued with particular energy since the war, people have come to realize that land settlement can at best do no more than to diminish the drift to the cities and to give " subsistence holdings " to industrial workers. Ambitious hopes that land settlement might be a real cure for unemployment had to be abandoned. *Cf.* Christopher Turner, *Land Settlement in Germany*, London, 1935.

unemployment in the export industries brought about by the same policy.

5. *Labour Nationalism.* One of the worst consequences of a prolonged depression is the emergence of the idea that every foreigner who holds a job in the country is withholding this job from a native worker, thereby augmenting unemployment and making it necessary to dismiss him or to drive him out of the country. It is that same spirit of looking at the total work to be done as a fixed and definite quantity which, as we saw, manifests itself in the popular drive against everybody who has been lucky enough to snatch more than a proportionate share of the whole "labour pie." But in the case of Labour Nationalism this perverted idea is much aggravated by the fact that here it is the foreigner who is sneaking into the national sanctuary of those who have the privilege to toil. In this case, therefore, the common spirit of envying other people their "jobs"—which is itself closely related to a crude over-production theory—is allied with all the feelings which go with nationalism. It is small wonder then that it is nowadays so popular that it becomes not inapt to speak of *Labour Autarky.* This state of affairs is one of the most disquieting and even alarming things of the present time, and it is hardly less disquieting that most people give little thought to it. Not everybody seems to realize that the total number of foreigners living, and mostly working, in the civilized countries constitutes a real "nation of foreigners" equal in number perhaps to the inhabitants of England or Italy, and, what is more, that this interchange of men is not the least important part of our complicated economic system, to say nothing of its spiritual implications. Still worse, with the spread of Illiberalism in government there is a constantly growing number of emigrants who have been deprived of the citizenship of their native countries, so that, if this "Autarky in men" becomes general, they will simply have nowhere to go since there is no legal place for them on this blessed earth.

These objections of a more general character to Labour Nationalism as a palliative against unemployment are enormously strengthened by the fact that even as a mere palliative it seems very questionable. Quite apart from the fact that in many cases the foreign workers are specialists whose replacement by native workers would greatly damage the country, it is to be feared that to prevent foreigners from working would deprive the country of a great part of its most energetic and inventive persons, since those who go abroad are usually not the duller but the more enterprising

type of the inhabitants. But there is a still wider aspect of the matter which cannot be emphasized too strongly. It is the economic narrow-mindedness around the whole conception of a fixed and definite quantity of work to be distributed in equal shares, a conception the wrongness of which surely does not need to be proved once again at the end of this book. It constitutes the very impotence of an economic policy which is exhausting itself in accepting the " shortage of work " without the imagination and courage to see the *latent* possibilities of work and make them *actual* by restoring economic equilibrium. And it is the ominous alliance of narrow-mindedness, impotence, and Illiberalism which has made the atmosphere of the world so unbreathable in the last ten years. But it is never too late to learn that a brighter future is to be expected not from coercion but from freedom, not from regimentation but from individual spontaneity, not from autarky and war but from free international intercourse and peace, not from restriction but from expansion.

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