1 / NATURE, TECHNOLOGY, AND MAN

1.1 / INTRODUCTION: THE PLAN OF THE BOOK

The pace of human life during the last half century has been very intense. The human race has experienced violent ups and downs of fortune, and has been exposed to unprecedented challenges. The world has become smaller and smaller, and yet the extremes of prosperity and poverty are wider than ever. There is an increasing tendency to make daily life safer, but never have we been exposed to graver risks than those which face the world today.

This book will attempt to give a bird's eye view of the economic aspects of our human adventures during these last fifty years and the prospects of eventually overcoming our difficulties.

The arrangement of the subject matter has been suggested by the methods of economic science, but more particularly by the ways in which it is used for planning. The brief titles used throughout the book may need some further explanation here. Part I presents an economic analysis of the events of the past fifty years. Part II discusses the future course of events which may be expected if current economic policies remain unchanged. Part III suggests changes in world policies which might help to solve some of the difficult problems we face.

In Part I the analysis has been split up into three chapters according to the traditions of economic science. Chapters 1 and 2 describe political, social and technological changes[the non-economic phenomena]. The resulting changes in the economic structure are described in Chapter 3. The non-economic phenomena or «data» are divided into two types. Chapter 1 describes the ones which are beyond government control while Chapter 2 describes those phenomena which can be controlled by governments and therefore can be used as the means of economic policy.

Part II opens with a discussion of the lessons to be learned from the experience of the last fifty years: what was unforseen, to what extent was the course of events better or to what extent worse than we had expected?

Chapter 5 tries to make a forecast, keeping in mind the non-economic factors now at work.

The title of Part III [Planning the Future], must not be misinterpreted as a specific plan. This part deals with what seems to the author to be the most desirable policies for the near future – with his excuses for daring to undertake such an ambitious task. The sub-division of the subject matter into aims [Chapter 6] and means [Chapter 7] has also been inspired by the theory of economic policy.

Reflecting the global nature of today's problems, the reasoning is presented in terms of international concepts throughout the book. The three main geographic areas which make up today's world will be indicated by the terms West, East, and South, following Lloyd G. Reynolds' suggestion. East stands for the communist countries and South for the developing nations.

1.2 / NATURE: THE DISCOVERY OF NEW RESOURCES AND THE EXHAUSTION OF OTHERS

1.21 / *The Oldest Factor of Production*

In economic science the concept of nature or land as a factor of production covers a wide variety of resources made available to us by nature. City people are hardly aware of the fundamental role still played by these resources, except perhaps in periods of war. Enormous quantities of agricultural and mining products are continuously moving through the pipelines of the economic machine, providing the material basis of all other products.

Many of these raw materials have been known to man for centuries. The earth from which they emerge has something unchanging about it [although this is only apparent], and this may explain why land is so seldom «in the news». Yet a thorough account of economic development cannot be given without also describing what happened to natural resources. It is true that many natural products become available year after year in about the same way and in roughly the same quantities. But some important changes have occurred in what nature makes available to us.

1.22 / *New Oil Fields and Natural Gas Wells; Exhausted Coal Fields*

Some examples of important changes in natural resources will be discussed in this section. To be sure, we are only aware of what is already known to us, and much of the surface of the earth is still unexplored. The discovery of natural resources is a continuous process which has only just begun in many

countries. In the last decade important new reserves have been added to the ones previously discovered. On the other hand, the known reserves of other types of resources have definitely declined. Still others have greatly increased in value because of the new uses which can be made of them. We will discuss some examples of each of these changes.

Not only are ever larger areas of the earth's surface being explored by geologists, but also the depth of drilling and mining operations is steadily being increased. The most important examples of new discoveries, no doubt, are the petroleum fields in the western part of Asia, the so-called Middle East. Very important deposits have been discovered in Saudi Arabia and Iraq, not to mention the small states of Kuwait and Bahrein, and the development of these oil fields is changing the faces of these countries. Related discoveries are the recent finds of natural gas in France, Italy and Holland. Other important examples are the deposits of bauxite uncovered in Latin America and Africa. Iron ore deposits have been equally important in influencing the economies of some of the newly developing countries such as Venezuela.

Among the examples of a gradual depletion of previously rich resources, the mining areas in southern Belgium and the northern part of France are outstanding. The resulting problems of regional unemployment and the shifting of occupations are among the most important ones now being studied by the European Coal and Steel Community.

1.23 / *Uranium, Rubber and Cotton*

There are many examples of changes in the value of natural resources as a consequence of technological development. A spectacular example is the one of uranium, a key commodity for the production of nuclear energy. Unfortunately there are also a few examples of the opposite phenomenon, i.e. value reduction as a consequence of competing industrial raw materials. Rubber is a famous example. Before and during the second world war synthetic rubber was developed to such an extent that serious damage was done to the economies of such countries as Indonesia and Malaya. Similarly, the use of cotton has been decreased by the competition of artificial fibres, to the detriment of the incomes of Pakistan, India, Egypt, Brazil, Mexico, and others. Wool and silk producers have had the same experience. Other examples are the replacement of timber by plastics, and metals by cement.

1.24 / *Erosion*

One serious and widespread form of exhaustion of natural resources is

erosion, which is the gradual loss of the fertile upper layer of the soil by the action of wind and rain after deforestation. In the thirties the United States became aware of the tremendous losses to the economy caused by widespread deforestation and by other types of shortsighted use of natural resources. Government agencies were created in order to protect the nation's wealth against them. We now have many examples of erosion from other regions of the world as well. Turkey is an interesting case. A quick increase in population led to deforestation far beyond the safe margin and to overgrazing of the natural meadows by expanding herds of goats, with similar consequences. Reforestation is one way to check soil erosion, and it is being practised increasingly by national governments.

1.25 / *Improvement of Plants and Animals*

Changes in the value of natural resources can also occur as a result of deliberate attempts to improve the qualities of plants and animals. This is a boundary case between investment and research activities which will be discussed later in a more general context. This process of melioration or improvement is now widely practised, and the role it has played in the increase in the standard of living in the past fifty years has been a major one. Better strains of wheat, cotton, sugar cane, potatoes, fruits of all kinds, and flowers have been discovered and cultivated. In some cases these new varieties have revolutionized the methods of agriculture.

Similarly, better cattle, sheep, and chickens have been developed which yield increased quantities and improved qualities of meat, milk, wool and eggs. In the fifty years immediately behind us the productivity of even this oldest of production factors has improved continuously, and new opportunities for further productivity increases are emerging without interruption.

1.3 / TECHNOLOGY: A STORMY DEVELOPMENT

1.31 / *Introductory*

For a long time now nature has not been the sole source from which man derives his well-being. One must go back very far in history or visit very remote areas in order to find man extracting the goods he needs from nature with his bare hands. Powerful allies have been created by man to help him in this endeavor. These are called capital goods and consist not only of machines, tools, buildings, and the means of transportation, but also of stocks of raw materials and semi-finished products. Together these constitute the im-

pressive industrial system operated by man for the purpose of production.

It is one of the results of economic thinking that we now emphasize the fact that capital goods are stocks. Adding to these stocks [the act of investment] is a very important act in our struggle to achieve a better life, since it enables us to produce more in the future. The relationship between the stock of capital goods and the volume of production will be discussed later in section 4.32.

In this chapter we are going to discuss another aspect of capital goods, that is the technological one. Capital goods are always the embodiment of certain inventions or techniques devised by the human mind. This was so for the wheel, and continued to be so for the coach, the train, and the tram or trolley-bus. It was so from the spade to the bulldozer, from the spinning wheel to the automatic loom, and from the slide rule to the electronic computer. The collective human mind not only remained active throughout the past fifty years, but became increasingly imaginative, dynamic, and searching. At an accelerating speed, and with increasing organization and direction, it poured out a vast array of new tools, machines and processes, changing the face of the modern world in a frightening process which is now almost beyond human control.

In this chapter we are going to discuss a number of examples of technological development, looking at them first from the common man's point of view, and then commenting on them in the economist's fashion. No attempt will be made to give a complete picture. On the contrary we will try to give only an impression. Both the choice of our cases and the subdivisions of the subject matter are somewhat arbitrary. First of all we are going to discuss a few important changes in consumer goods and services which have occurred during these last fifty years. Next, some new methods of production or new uses of capital goods will be considered in a general way, and some comparisons will be made of the different stages of development of the various regions of the world.

1.32 / *New Products: Rayon, Plastics, and Washing Machines*

Let us first look at the changes which have taken place in the home of the average consumer in the countries of the West. How many of the goods he consumes have been improved, how many new ones have been added! Think for example of the wide choice of cereals we have now. Today's margarine is a serious competitor for butter. Today's youngsters would not think very highly of the milk that we, the older ones, drank. Our struggle with our

parents against having to drink it with the «skin» on top is completely unknown to them! Innumerable varieties of new canned foods have become available and a new variety of «can opener» cooks has been created. Fish fillets have ended our troubles with fish bones.

In the field of clothing, artificial fibers have contributed enormously to our comfort. It started with rayon, which made available to everybody the shine of silk. It continued with the development of many kinds of light clothing, hole-proof socks, and washable no-iron shirts and dresses which have incomparably lightened the task of the housewife. Think how hard our grandmothers had to work!

A wide variety of durable consumer goods has been acquired by almost everyone during the past fifty years. At the same time electric lines and gas and water mains have been extended into so many rural areas where once wood, coal, and the pump were the rule. The vacuum cleaner was revolutionary. It was followed in quick succession by radios, washing machines of many types, television and refrigerators. Of course our American friends have even more household gadgets to show.

Let us also think of the changes which have been made in the houses themselves. An increasing number of the citizens of the West, even the ones with more modest incomes, are now living in colourful, modern-style appartments instead of their former dull and ugly dwellings. In some cases, however, their tastes have failed to develop as rapidly as their houses have!

1.33 / *New Services in Transportation and Communication*

By services, the economist usually means a number of activities in the fields of transportation, communication, and the provision of energy. These include the services available to producers as well as consumers. Together they offer a wide array of examples of rapid technological progress.

In transportation the most influential and truly revolutionary change has been the development of highway transportation by motor vehicles. With the construction of new highways, vast regions have been opened up and brought into daily contact with modern life. Well-being in rural areas of the West has been increased correspondingly and the same process is underway elsewhere. The qualitative change in the motor car has also been remarkable. We need only remember how the 1930 model Ford looked to realize this. The important economic problem of the moment is whether the American motor car market is saturated, and if so what better product than the newest car model can be devised to tempt the American consumer.

The motor car's competitors after a long period of technological stagnation are finally moving forward again. Railway transportation has been improved by electrification, diesel traction, constant interval time tables, and the modernization of railroad car and station interiors. A remarkable sign of vitality in this field has been the P.C.C. tram car which was first produced for local transportation in the United States but is now being assembled in Europe as well.

The newest offspring of the transportation family [the airplane] has been developed almost entirely during the fifty years under review. Here again we find tremendous quantitative and qualitative changes, often stimulated by military objectives. One of the recent trailblazing innovations has been the jet engine. Air traffic has contributed more than anything else to making the world smaller. Government officials and business executives can now reach any capital in the world in one day.

In the field of communication, the radio and television were introduced. Every household in north-western Europe now has its radio and every second household has its television set. This brings the masses of the population in contact with all regions of the world. Among other benefits this has brought them the proper pronunciation of foreign languages, and also some modern ways of amusement which are not always a positive contribution to well-being.

Finally we must discuss energy. World consumption of electricity, petroleum, and natural gas was multiplied many times. Again this rapid development was stimulated by military needs. This is especially true of the newest form, nuclear energy, which is the most dramatic development in modern technology. Later on in this book its consequences will be discussed at some length.

1.34 / *New Methods of Production: Automation*

The consumer's contact with technological development is only superficial. It is only the last phase of the production process which reaches his home. The long chain of increasingly complex operations which raw materials and intermediate products undergo before taking their final shape are known only to the producers. Most consumers are aware of only the few industrial processes in which they are involved on their own job. Yet this highly complicated system has evolved over a relatively short period of history. The hand tools of the eighteenth century were replaced by simple machines, and the thousands of simple machines of the nineteenth century were replaced by the hundreds of thousands of infinitely more complicated ones which we have in our factories today.

During this period of rapid technological development, human inventiveness has been following the two main paths of mechanization and organization. Hand labour processes have been partly taken over by machines, but have also become more efficiently organized. Factories have become larger and larger, and yet employ fewer and fewer human beings. We are already accustomed to the idea that automation may eventually make even the last worker superfluous. Of course this is an exaggeration. Human supervision will always be necessary for several reasons.

Automatic production processes have made essential the development of extremely quick calculating machines and the feed-back mechanisms now produced by the electrotechnical or electronics industry. Their rapid development, accelerated by war demands, is another impressive performance of the human mind.

Increased speed, increased power and increased precision have been some of the main principles of the march of mechanization in almost all industries. Such has been the evolution of lathes, of spindles and looms, of knitting machines, of wood-working equipment and so on. To the layman the marvels of the human intellect are better displayed by such devices as packing machines, modern printing equipment and electric lamp automats, where the mechanism is more explicitly visible. But certainly computers with their memories, and ability to follow programmes are a new level of accomplishment.

Separate mention should be made of the chemical industry with its numerous ramifications. One of the most impressive successes of the natural sciences has been attained with the ability to make new materials at will with almost any combination of such qualities as elasticity, heat conduction, melting point etc. We are referring to plastics, which have widespread applications in household utensils, tools, building materials and so on.

1.35 / *Organization: from Traffic Lights to National Plans*

Apart from mechanization the improvement of work organization helps to increase production and hence well-being. Organization may be said to be the fitting together of the operations and the people necessary for a process, in space as well as in time. Looked at in this way, organization is also an element of a complicated set of machines and hence cannot always be separated from mechanization. Yet it applies to non-mechanized processes as well. It penetrates all of modern life, but more particularly productive action. Sometimes its devices are simple, sometimes very complex. In its simple forms we meet it in traffic lights or in off-season holidays; in selfservice-restaurants and super-

markets. Common facilities for the occupants of an appartment building are another fairly simple example. It has been an important element of production activities for centuries, and to some degree this has always been true; but in the last half century organization has assumed those systematic forms we all now know: work preparation, use of planning charts, routing of the production process and the corresponding organization of factories into specific departments handling orders, inventory, sales and personnel administration. By this means hundreds or thousands of simultaneous actions are coordinated. Factories are no longer the largest units to which the idea of organization is applied. Great concerns may coordinate the production of a hundred factories. National agricultural policy directs the actions of tenthousands of farms. National plans are a guide to the concerted actions of many branches of production.

1.36 / *Research: the New Factor of Production*

Some economists have argued that «organization», or entrepreneurial activity constitutes a fourth factor of production, in addition to the traditional three: nature, capital and labour. Similar arguments are now heard with regard to research. Again the activity is not a new one, but it is becoming increasingly «institutionalized». Research is now done systematically, in special institutions and at an unprecedented scale. Several modern industries are based on knowledge obtained through scientific research which was originally undertaken for its own sake but was drawn into the sphere of business activity. It is characteristic of the last fifty years that the centres of gravity of applied research have moved from the universities to the laboratories of big firms. The number of man-made materials is rapidly increasing, as we saw already in the case of plastics. Experience with regard to a product's quality and behaviour is now accumulated by deliberate checks and testing. In several industries this has given a key position to research and the portion of national income devoted to research is no longer insignificant. Some of the most important recent developments, such as in the fields of nuclear energy and electronics, would have been impossible without the modern scale of research activity. It is preponderantly research in the natural sciences which has shown this degree of productivity and the amounts spent on it by far surpass the amounts used for research in the social and behaviouristic sciences. Yet we can observe a considerable increase of research in the latter field also, with the goal of increasing human happiness through social services, both inside and outside enterprises.

1.37 / *Differences between West, East and South*

The rate of technological development in the world's three main regions — West, East and South – has not been equal. In the fifty years under review the West maintained its leading position, mainly as a consequence of its originally higher standard of living. Not only were the majority of inventions made in the West, but they were also geared to the West's problems. These problems were how to save labour and to create new ways of satisfying the well-to-do consumers. These were certainly not the major problems of the South, where labour was so abundant that unemployment was the biggest problem. Capital-saving inventions would have been much more useful to that part of the world. In stead of this latter type of innovation there was a tendency to imitate the West's development, partly for reasons of prestige and partly as a result of ill-conceived theories of development which were widely held. We are now beginning to understand that another course of technological development should be pursued in the interests of the developing countries.

The South might also profit more than it has sofar from the availability at low prices of second-hand capital goods such as automobiles of last year's design. There has been some investment of this type, but, for understandable reasons, there is a resistence, on the part of the South, to this type of transaction. Yet a real advantage could have been derived from a better realization of these possibilities. The South might exploit in this way some of the West's prejudices or fads.

For most of the half century behind us the East also lagged behind the West in technological development. This situation is now rapidly changing. The long-term educational policies of the Soviet Union are beginning to pay off and the numbers of possible inventors are now approaching, if not already surpassing, those in the West. For military reasons some lines of technological development in the East have been pushed excessively and out of proportion with the rest of the economy. Rockets and sputniks are the well-known examples. From the long-term economic point of view other less known developments are more interesting. These show an understanding of the real problem, namely how inventions may be used to solve the problems of less-developed countries, including the Soviet Union itself in its earlier phases. The types of machines they used in their own metal industry were rightly chosen so as to economize on capital in a situation of relative abundancy of labour. Multiple- and general-purpose machines were preferred over special-purpose machines, because the latter cannot be used continuously. A simple and very cheap lathe was developed which is now being offered to developing

countries. This probably serves their current needs better than the lathes now available from the West. Finally, we may mention that the expansion of the use of motor cars may have been purposely restricted because of the element of social-economic waste caused by this decentralized mode of transportation, not only directly but also indirectly. It results in indirect waste if it stimulates the spreading of population over large areas, as in the United States, making life as a whole more expensive. Usually it is argued that individual freedom is worth this price; but it remains to be seen whether or not this freedom and other feelings involved are only imaginary.

1.4 / MAN: FROM SATISFACTION TO CREATION OF NEEDS

1.41 / *Man in the West: A Double Life*

Let us now consider the third factor of production and at the same time the real end of all economic activity – man. Human beings are not the same now as they were fifty years ago. Economic and technological development cannot occur and leave man the same. Deep-seated habits and social traditions have been changed by the simple increase in well-being, even though it is only with a considerable time lag. Much of what has happened to man's feelings and attitudes in the last fifty years may be due to the changes in this surrounding which were made during the nineteenth century. Because of the differences in the level and rate of economic development, changes in human beings have also been different in the West, East and South. We will discuss the Western peoples first.

Perhaps the most characteristic evolution in human attitudes in the West is the emergence of a «double life»: life as a producer and life as a consumer. In our productive life – say from Monday through Friday, for many – we try to be as efficient as possible and we try to accelerate our efforts continually. The whole atmosphere of work has become one of tension and of using every minute, always aware of a need for further improvement of methods, further savings in the use of materials and energy and so on. We act as if matters of the highest urgency are involved.

As soon as we have brought home the high income [high in comparison to fifty years ago] which we now earn as a consequence of all these efforts, a completely different life begins. The high income must be spent. It is usually ample enough to buy all the necessities of life; so these are available immediately. The pressing needs are all met; those remaining are less pressing and the problem of spending the remainder starts. We must find all sorts of luxury

goods to solve this problem. Our headaches are caused by the need to make the choice between them. We talk with very serious expressions on our faces about where to park our cars, whether a new car must be bought next year or the year after, and so on. Since we do not get sufficient physical exercise by walking to our work or at least to our shopping centre, we must have golf clubs. On Saturday we do everything ourselves, displaying a low productivity which contrasts with our extremely high productivity from Monday through Friday. In this Saturday process of production we use tools which stand idle all the rest of the week, although we have complicated schemes in our factory in order to avoid idleness. Why all these inconsistencies? For the simple reason that there is a basic inconsistency between the high marginal disutility of hard work in our productive life and the low marginal utility of a luxury consumption life.

1.42 / *Need Creation*

One way in which Western men – and don't forget the women! – tried to «solve» their problem was the creation of new needs, which make him feel hungry again, with a corresponding desire to spend. Hungry not for bread, but for lobster, for evening dress and for keeping up with the Joneses. During the last fifty years these imaginary needs of the happy few who had known them through all history have been brought to increasing numbers in the Western world. The process is more subtle than the somewhat acid references made so far suggest. As is true of so many things in life, there are two sides, however. The positive side is the emergence of culture, of a refined taste, sometimes inducing and encouraging the greatest performances of art. This side of increased material well-being has made possible a creative life for more artists than otherwise could have been permitted to devote themselves to their vocation. The other side is the one already touched upon. Two features of the process of the creation of needs seem worth mentioning, as social phenomena of great interest play a part.

One feature is the susceptibility of so many people to this competition with the Joneses. In a way it is due to a great sensitivity to the opinions of other people, a need to be respected and admired on a somewhat traditional basis. It is a lack of independence and of the ability to find out for yourself what makes you happy and what is beautiful. It is often a lack of taste which must then be replaced by other people's [supposed!] taste.

The other feature is that producers of certain types of goods are deliberately exploiting these weaknesses for their own material interest and attempting to

suggest the things the Joneses must consume. It cannot be denied that it requires skill to succeed in this and that there is one type of producers even worse than the ones just described, namely those who try but do not succeed. In order to be successful as a producer and an advertiser one has to know intuitively what will impress the average Jones and his neighbour.

The whole process could be a simple source of amusement for those snobs [like the author] who feel that they are «beyond» all this, if such tremendous quantities of resources were not absorbed wastefully in a world which is still witnessing the most appalling privation and suffering. Apart from this aspect there is a general cultural aspect. A culture with less artificial needs and with a certain sobriety seems to the author to be more impressive than the present cultural pattern which predominates in the West. But this remains a question of taste.

1.43 / *More Leisure*

Increases in well-being have been accompanied by increases in leisure, since leisure, up to a certain point, adds to happiness. But only up to a certain point: the idleness of the unemployed usually makes them unhappy, irrespective even of the lack of income which it entails. In the nineteenth and the twentieth century working hours decreased from some sixteen hours a day to about seven or eight, or at a rate of one-half per cent per annum. Reduction of working hours to eight per day was for many years a famous aim of organized labour and was reached in most European countries immediately after World War 1. The International Labour Organization established around that same time made it a goal of international action all over the world. Some doubt must be expressed about the wisdom of striving for uniform labour regulations for both developed and developing countries. In low-income countries workers will prefer a longer working-day if they can earn a proportionately higher income – a question which has seldom been put in the proper way to the individual members of trade unions.

More leisure has already been obtained in other forms: paid holidays have been introduced or increased and to-day in European countries two to three weeks per year are normal. Housewives in many countries and other groups of the population have experienced a reduction in their often very long hours with the gradual introduction of household equipment such as vacuum cleaners and washing machines, and by new consumer goods such as nylon socks.

More leisure has also been obtained by some groups of small entrepreneurs,

for instance shop keepers in countries with a legal closing hour for shops, or for peasants to the extent that technological progress has penetrated into their farms. On the other hand, some of the previously privileged groups have experienced increases in working hours: this applies to some groups of office workers and the professions as well as to business executives. This phenomenon was partly an effect of voluntary decisions or of the changes in general attitudes, which made «being busy» into a status symbol. Among its consequences are over-worked intellectuals and the rise of such «managers diseases» as heart attacks and nervous breakdowns. The incidence of heart diseases may be, however, partly due to too heavy food.

With increased leisure, the problem also developed how to use leisure. Traditionally this had been the problem only of the well-to-do, who developed a number of cultural as well as quasi-cultural devices for its solution. Now the masses of the population in the developed countries were confronted with the problem. Idealists among the intellectuals had hoped that culture would rapidly spread as a consequence of shortened working hours; sceptics had predicted increased abuse of alcoholic beverages. The actual developments were somewhat in-between: culture had less attraction than hoped, but simpler patterns of life developed a good deal, helped by various inventions. Radio and later television, bicycles, motor cycles and motor cars absorbed a considerable portion of the added leisure hours. Social tourism, nowadays symbolized by bus tours, shows a rapid upturn. More active forms, like attending courses and lectures, or «doing it yourself», fortunately also developed. Better homing promoted a number of useful or enjoyable ways of using the new freedom. But there are less attractive consequences too, from boredom and «just hanging around» to juvenile crime. We will discuss them later [section 1.45].

1.44 / *Better Off?*

Sceptics have often repeated that the developments sketched in the previous sections and sub-sections should not be called «progress», as it was commonly believed to be by business men, progressive leaders and the mass of the people. It was change, of course, but were people really better off? Conservatives and reactionaries knew better and the sceptics had their doubts.

The man of somewhat naive economic approach would have no difficulty with the answer and would argue that more goods of course made people happier. Experience has made even economists somewhat more sophisticated and we are now able to list some of the counteracting forces. First of all, we

get accustomed, after a while, to having more to consume and perhaps it is the increase in consumption rather than consumption itself which keeps people satisfied. Then, too, it is the comparison with others [we already met the Joneses] that plays a large role. Also, if new products are added to those already known, we want to have these too and if we do not immediately get them, we may feel unhappier even though we have the same level of consumption as before. Finally, socialist propaganda, by pointing out income differences and their injustice, made people less happy even when they were increasing their consumption. Most of these counteracting forces will be recognized to exist by most observers, including socialists.

Does it follow that indeed there has been no progress and that it is futile to strive for social changes, for more income and a more equal distribution? It does not; but we can use our experience in the interest of everybody involved. We do understand better now that happiness depends on one's own attitude and philosophy as much as it depends on the material means available. A philosophy of mere envy is neither the wisest nor the most sympathetic attitude in life. Awareness of the many non-material elements of happiness is a beginning of wisdom. A search for what really matters in life and some detachedness from the futile may be a further step. Among the things that really matter are, however, also several material things, necessary for a healthy life; in addition, social justice is a very real thing too and not all comparison with others is futile, therefore. Comparison must be particularly recommended to those who are better off financially.

In the developing countries the material basis for even a simple healthy life is, generally speaking, not available. This implies that for these countries rapid material progress is necessary and makes sense. The assertion that modernization is not a contribution to their happiness is a dangerous half-truth, if it is used to discourage a development policy. But a development policy must also be aware of the insufficiency, in itself, of material improvement: non-material elements, including social justice, are complementary necessities.

1.45 / *Today's Youth*

Sofar we have spoken about man – mainly man in the West – in a way which implies that there is a homogeneity of human life and attitudes. This is only a first approximation and gives too crude a picture. There are many different groups of men and their circumstances and ambitions vary widely. There are, for instance, social classes within each society which often behave in very

different ways. In the West the class differences seem to be diminishing; this is not true however for the South. Social classes in the South will be discussed later [section 1.46]. An important distinction to be made within human society is the one between age groups. The young generation is the generation of the future. Successive generations have their own attitude the young one is searching for its own approach to life. Partly its actions are a reaction to the views of the previous generation which exercises a certain amount of authority over the younger. Young people, aware of their common problems, have a tendency toward solidarity with other youngsters of other lands making for an international parallelism in their attitudes.

It is only natural that in their search for a new approach they are influenced by the circumstances under which they live and by the experiences they undergo in their most sensitive years. Some of these are:

[a] the purely economic circumstances consisting of a higher standard of consumption and more leisure;

[b] the cultural circumstances, partly consisting of such tangible things as the movies, radio and television and partly of that less tangible atmosphere of the relaxation of discipline, authority, and responsability on the part of what is today the older generation. This highly important atmosphere is not so easy to explain completely, but some of its origins seem clear. With the development of science some types of primitive, imposed religious opinions and authority had to vanish. As a consequence of this, some of the brakes on the natural, egocentric instincts were taken off. In addition, two wars and a great depression brought so much privation that in reaction, people hunted for satisfaction of the long suppressed needs. Perhaps we must also say that socialist propaganda in some respects operated in the same way. The unfortunate outcome of the various forces at work has been this lack of responsibility which characterizes today's older generation and constitutes the atmosphere in which the younger are growing up.

[c] Finally, the younger generation shared in some of the experiences of the last war or at least feels the threat of a new one, incomparably more dangerous than all the previous ones.

What is evolving in the attitudes of today's young generation has hardly been determined as yet, and we must be extremely careful not to generalize about them too quickly. Generations are not completely homogeneous and our knowledge of previous generations is only partial. Some features of current

attitudes which seem to have been established more or less reveal a considerable degree of scepticism in today's youth; too many beautiful words have gone over their heads which were followed by, to say the least, non-fulfilment. Not only are they realists, but they also are more pronounced individualists than the previous generation or two. Mass movements appeal to them to a lesser degree than they did to the previous younger generations; especially mass movements organized «for them» by . . . older people. They now want to do it themselves and we can only wish them good luck. They have greater difficulties to face than many generations before them.

Another feature and precisely the one we must be careful not too easily to generalize about is the one of increased hooliganism and crime. Again part of the responsibility for it lies with the circumstances, such as the films they have seen and the decreased sense of responsibility of their elders. In a way it does not help much to philosophize about the possible causes; what matters most is how to reduce these unhappy phenomena. Perhaps the most constructive remedies are those which try to use the instincts and desires at work for helping others. An example is the use of «motorized hooligans» for the transmission of urgent messages about accidents, emergency cases and even police services, reported somewhere from Britain. They show what some imagination and some real interest in young people may bring about.

1.46 / *Man in the South: Misery and Privation*

The changes in the «human factor of production» over the last fifty years have been much more evident in the West and the East than in the South. This is due first of all to the economic circumstances under which people have been living. Opportunities have improved quite considerably in western as well as in communist countries; but the main feature of developing countries over the half century has been almost stagnation, even though in the last ten years things have been changing somewhat more rapidly. To be sure there have also been exceptions to the rule; the oil production countries are the best-known examples.

For immense numbers of people life has remained on the border-line between life and death. In many respects there was similarity with the previous century in developed countries: poverty, starvation and exploitation. In some other respects the South was and has remained different. Not only the climate in the physical sense, but also the spiritual climate is different: there is a larger influence of religions and philosophies which teach resignation; and superstition. Moreover, unemployment or underemployment are much more wide-

spread; one of the characteristics of the South being the disproportion between people and means of production.

Yet, even in the South some of the changes discussed above have started and a new way of life has touched at least some groups in these vast countries. Modern technology is spreading and old religions and philosophies are being replaced by modern desires. The process of modernization is under way and it will be irreversible. Just as European life has taken over almost unconsciously a number of American features, life in the South is bound to follow European and American examples: the main factor being the increase in production. Incomes per head in India have risen, over the last ten years by the same average rate as was true for the West during the whole of the nineteenth century, namely by 1,5 per cent per annum.

1.47 / *The Spell of Ideologies*

An important extra-economic characteristic of the last fifty years of human history must now be considered, if only because it plays a considerable role in economic and social development. This is the change in the way of thinking of large groups of citizens of the big nations. The process may be seen as one of intellectual concentration: instead of individual thinking we find more and more «collective» or «guided» thinking. This does not of course apply to the few who are creating the important new ideas in art, science and technology: such thinking by nature is individual. The process of concentration applies to the formation of the «public opinion». We should not idealize this process as it existed half a century ago; certainly a relatively small portion of the nations participated in it and very often it was narrowminded and nationalistic. But the tradition of objectivity was felt to be valuable and was furthered by the development of science.

The changes which took place were due, first of all, to the spread of democracy. After World War I many countries gave voting rights to all adults, whereas before large sections of the population had been excluded. The need for mass information on political problems thus developed. Then the possibilities for mass information were simultaneously increased by the development of radio broadcasting. Finally, the world seemed to have entered an era of violent shocks, such as the two great wars and the deep depression of the thirties. These provided a fertile ground for extremist points of view, such as communism and fascism. Central and Eastern Europe were the scene of political swings from one extreme to the other, stirring the passions of many. Emotions are never the proper climate for clear thinking and the totalitarian

leaders from both sides consciously used the opportunities available to them. The process is to some extent selfreinforcing, as it forces the defenders of other methods to organize themselves and to formulate their point of view in simple terms, usually leading to over-simplification. Thus we have arrived at a situation much more than before where mankind arguing in an organized and imposed way, where large sections of public opinion consist of pre-conceived ideas and where doctrinaire thinking prevails. Official opinions of political leaders are spread at high cost to immense numbers of people and deviations are made less and less easy. Some authors have shown the evil consequences which may be feared from such a process and the danger is better understood now than it was before. However a counteracting tendency is not altogether absent: increased well-being in the West appears to have to contribute to lessened tensions inside that part of the world. Elsewhere, however, increased well-being provisionally shows an opposite effect.

Another counteracting force is experience. Later we will discuss at some length [section 4.2] the evolution of communist ideas from the experience of their regimes with some of the measures they undertook. Some of the policy changes in the West [see section 2.2] may also be considered as reactions to previously-held doctrinaire ideas.

Nevertheless the conclusion of this section must be that the inhabitants of today's world are to a considerable extent under the spell of conflicting ideologies and that their fate depends, to a very considerable extent, on the compromises which can be brought about in some of the main controversies [see section 5.3].

2 / COCKPITS AND PILOTS IN THE ECONOMY

2.1 / COCKPITS AND PILOTS IN THE EAST

2.11 / *The Control of Details*

In chapter 1 we have examined the changes which occurred in the factors of production during the last fifty years: nature, technology and man. We are now going to discuss how these factors are used, in what way the process of production and consumption is organized and what evolution has taken place in that organization. We will concentrate on the question of who makes the main decisions in the production process. It is clear that this topic must be discussed separately for the West, the East and the South. Since the most drastic changes took place in the communist countries we will start by discussing that part of the world.

In the period under review, namely in 1918, the first communist regime came into being; and the Soviet Union resulted. For a considerable period, up to the end of the Second World War, it was the only country where the Communist Party had taken power. Its experiences and ideas greatly influenced the policies of the countries which were later brought into the communist orbit. It is natural therefore to concentrate first on the history and characteristics of the Soviet Union.

The biggest and most characteristic difference between the economic systems of the East and the West is to be found in the degree of control exercised by the government over the processes of production and distribution. A few thousands of them in the East, the volume of production and of sales for a large number of items of each factory, are set by decisions of centralized government and derived from the Plan. This organization of production was created as a reaction to the capitalist societies described by Marx: the nineteenth century societies, where government interference was at a minimum. These regimes were considered anarchic; «blind» forces operated them and were made responsible for a number of bad features of nineteenth-century societies. The communist regimes wanted to establish a socialist society as

defined by Marx: a society in which the means of production are owned by the community and a planned program of production is carried out. In present-day terminology we should perhaps add that production was supposed to be planned in considerable detail. However, Marx did not specify very precisely what type of planning should be followed; he refused, on various occasions, to give «recipes for the future». The Soviet regime had to invent the organization of a planned society itself and was, in the beginning, influenced by the German war economy and generally by military concepts, since their search for power inevitably introduced into their thinking elements of a military nature. The circumstances under which these systems came into being were characterized by extreme scarcity which explains their preference for tight and detailed controls. After some time the leaders of the Soviet Union went in for accelerated growth which meant a continuation of the limitation of consumption.

In many ways the communist rulers had to find their way by experimenting; they were pioneers. This implies that several changes in their general policy took place. In the beginning a situation of war prevailed: not only was Russia still at war with Germany, but civil war, complicated with foreign armed intervention, followed the communist revolution. When it became clear that it was an impossible task for the public authorities to organize production in every detail, a temporary loosening of the controls, called the New Economic Policy [NEP], was introduced. This policy permitted private production in many sectors. Later on the private sector was gradually eliminated, partly by imposing heavier taxes on it than on the public enterprises. Private production was not altogether annihilated; it prevailed in the private plots of farm land, in some branches of handicraft, and some of the liberal professions. A considerable portion of building was also left in private hands. Soviet policy with regard to agriculture was a succession of varying attempts to get it under public control and today agriculture still presents a major problem [cf. section 2.14].

Most of manufacturing industry, mining, transportation and other services were absorbed into the public sector and decisions were taken in a highly centralized way. The Central Plan not only fixes the volume of production and sales, but prescribes as well the deliveries between factories and prices. These production plans are based on broad decisions made by the highest authorities and are then elaborated in more detail by the planning agencies, coordinated by a central planning agency. It is interesting for the western expert to find that the broad decisions just mentioned were not, originally,

expressed in such macro-economic concepts as national income, total consumption and investment and so on, but were instead in terms of the production figures for a number of key commodities, such as steel, coal, cement, textiles, sugar, wheat etc. In recent years, especially in 1957, some important changes in the degree of centralization of decisionmaking have been introduced. The production decisions for a number of commodities are no longer made in the central planning agency, but in a number of decentralized agencies responsable for geographical parts of the Union. There are some one hundred of these decentralized *sovnarkhozy,* grouped into seventeen larger units. The number of commodities controlled by central planning has been reduced but still amounts to about 1500.

There should, however, be no misunderstanding about the nature of the economic process in any country. Even when such a large number of decisions are made by central authorities there always remain many more decisions which must be left to people on the spot or somewhere in between. Some of the propaganda from both sides is misleading and suggests that in the Soviet Union «everything» is planned. In actual fact very important phenomena of economic life remain outside the scope of planning, even in the Soviet Union. For example the volume of agricultural production is no longer planned; what is planned is the volume of the deliveries by agriculture to the other sectors. Rationing of consumer goods has been discontinued also and has been replaced by rationing by the purse. Both the agricultural and the consumer sector contain a host of phenomena [such as the yield per acre of each crop in each region and the choices of consumers] which the Soviet planners as well as planners elsewhere cannot control but can only estimate and try to predict. Therefore, the problem of planning economic policy does not differ in principle between East and modern western or southern countries; there is only a difference of a quantitative nature.

Even so it should be recognized and expressly stated that the Soviet Union was the pioneer of central economic planning and has taught the world some of the possibilities in this field.

2.12 / *Institutions: Socialization, Planning and Centralization*

We will now discuss somewhat more precisely the main institutions characterizing the economic organization of the Soviet Union. The communist leaders always speak of their society as a socialist – and not a communist – society. The common characteristic of these two social organizations is the public ownership of the main means of production. The differences are in the

system of distribution and will be discussed in section 2.13. Contrary to democratic socialists in Western Europe the Russian leaders have always taken a very strict view with regard to this element of their society.

They have brought almost all means of production under community ownership and not only the main portions of them. The exceptions mentioned in section 2.12 are a small portion of the total productive capacity. They have preferred this direct method of reducing exploitation and unearned income rather than the indirect methods followed in Western Europe, where the emphasis has been on social legislation and progressive taxation. Western democratic socialists feel that their concept of a socialist society implies elements of human rights which are considered so fundamental that they cannot consider the Soviet Union society a socialist one. Part of this difference in approach must be seen as a consequence of the almost complete lack in Russia of democratic traditions. Western democratic socialists also feel that the very strict interpretation of socialization followed in the Soviet Union has led to losses of efficiency which are detrimental to general well-being. Small units such as shops, farms and a number of small or even medium-sized factories, can in all probability be run better as private units than as state enterprises. They can never be an important source of exploitation, once a system of social legislation protects the workers, and their net contribution to national product can be higher in the absence of red tape. It seems important to collect material about the relative efficiency of units of the types mentioned in different countries in order to test the contentions just made. Serious western students of Russian agriculture hold the opinion that this industry constitutes a clear case: its productivity is less than the productivity of comparable activities elsewhere.

The second main institution of the Soviet economy, the planning of production, is also characterized by a very strict interpretation. Planning procedures have been developed more recently in western and southern countries which do not try to fix as many details as Russian planning does. The question remains, what constitutes the optimum volume of planning. The advantage of planning typically consists of avoiding discrepancies between demand and supply, that is, avoiding idleness of productive capacity as well as shortages of goods. More generally planning may also be said to avoid a «wrong» use of other instruments of economic policy, such as taxes, public expenditures for education etc. at the government level and decisions on size of enterprises, technology etc. at the enterprise level. There can be no doubt that planning can protect the economy against considerable losses in national efficiency by

avoiding an incomplete use of a country's productive capacity such as occurs during a depression. It seems possible, however, to reach this goal with the aid of macro-economic planning and it must be doubted whether detailed planning adds much to the gains to be obtained. Here again we may hope that future research will shed some light on the optimum degree of planning.

The third main institution characteristic of the Soviet economy has been its high degree of centralization, that is, the important role played by orders from above, enforced either on pure authority or by some idealistic appeal on behalf of the communist cause. This institution is intimately connected with that of planning, but only because of the particular type of planning chosen and it can also be conceived of without planning. In essence it has in it again elements of thinking in power terms which is also an element of Russian tradition. This becomes clear when we compare the Soviet Union with such countries as Yugoslavia or Poland. What we want to stress here only is the general side of how people are induced to perform certain tasks. The method depends on the circumstances and the people; in war time orders may be the only possible way to get things done and some people «like to obey», but others don't. Even in Russia the general tendency since the war has been to replace order by incentives to an increasing degree.

2.13 | *Instruments: Investments, Education, Incentives*

Within the institutional setting just described, the Soviet economy has used a number of instruments of economic policy in order to reach the goals of a high level of well-being and a strong nation. Three of these instruments have been of outstanding importance: investments, education and the creation of material incentives.

The Soviet leaders rightly understood that both aims required the industrialization of their countries and that the two corner stones for industrialization are investment in capital goods and in human beings, the latter meaning education. In addition it was clear to them that a strong nation must have its own heavy industry and so they formulated their well-known preference for heavy industry. This was interpreted as requiring a rate of development of the industries producing capital goods [and arms!] greater than the rate of development of the industries producing consumer goods. Even though theoretically this problem was not stated in the proper way, it seems well established that the slogan for quite some time had a beneficial effect. After an initial period of diverging opinions the correct conclusion was drawn that, in the somewhat longer run, an economy can freely choose its rate of investment and

in the case of the Soviet Union it was chosen at the level of about 25 per cent of national income – if we use the western concepts and price ratios. This is about twice as high as the rate of investment had been, over long periods, in the leading western countries. The rate of growth obtained may be estimated to have been, over the periods 1928–1940 and 1950–1958 about 7 per cent per annum, which again is about twice as high as the rate of growth of leading western countries. It is true that in the last ten years the countries of Western Europe have shown higher rates of growth than before – around 5 per cent – and that Japan has showed the highest average rate of growth ever observed over a ten-year period. But the Soviet Union was the first to achieve such high growth rates.

In education also a remarkable job was done. One of the first campaigns in the Soviet Union was the one against illiteracy. Since then the education system has been geared to filling future needs for technicians and scientists in a way which has been followed only gradually by western and southern countries. Of course the admiration the western observer feels for this degree of foresight does not apply to the content of the general cultural education, which is doctrinaire.

The third instrument, the creation of incentives, has not been applied from the start in the same way and has been characterized by trial and error. Doctrinaire – and idealistic – thinking first induced the authorities to follow completely different, but unsuccessful, ways. Finally, experience taught them the necessity of providing incentives. As already observed, the early approaches were to give orders or to appeal to idealistic feelings. While these forces may be powerful in war and revolution they tend to lose their impact on ordinary people when time goes on and life becomes more normal. Material incentives are more natural in normal times, and the communist regime has at last understood this. In the early days all individuals had fixed fairly equal incomes. Now wage scales for different jobs are very different and depend on the productive contribution made. Various methods of profit-sharing exist and the shares increase if the volume of production rises in comparison to the planned figures. All this is now called socialist wage policy and equalitarian ideas have been given up. They have even been called petty bourgeois, which is a very bad word in communist ears. To be sure, a distinction is made between the present, socialist phase and a future, communist one. The former has been characterized by a system of income distribution to everyone according to his contribution while the latter distributes income according to needs. In the program for 1960–1980, discussed and adopted at the 22nd Party Congress in

1961, the planned transition to communism was announced. Current incomes, however, are geared to the productive contributions made and are corrected by income taxes only in the private sector of artisans and liberal professions; income taxes on wages and salaries have been abolished.

2.14 / *The Struggle for Agriculture*

The section of the community which has caused the biggest difficulties to the communist regime is agriculture. Agriculture has always been felt to constitute in various ways an «exception» to Marxist ideas about the expected course of development towards bigger and more efficient units, operated in the interest of smaller and smaller numbers, which will finally be socialized almost automatically. Both the physical laws of production in agriculture and the preferences of farmers seem to be at variance with these ideas. While it is true that big estates owned by a few very rich landowners exist in a number of countries, developments in the West and to some extent already in the South have been in the direction of an increase in the numbers of small peasant farmers and a reduction of the power and influence of the big landowners. The communist regime started in the same way: the big estates were expropriated and the land distributed among the farmers and workers. But the subsequent developments were not in agreement with communist hopes and a struggle started between the regime and the farmers which is not yet finished. The problems as seen by the regime were,

[i] how to increase and control agricultural production, and

[ii] how to introduce into the agricultural sector the advantages of large-scale production, in which communists believe strongly.

Control was needed in order to obtain food for the city workers and raw materials for manufacturing industry. It was also wanted for political reasons: the general outlook on life prevailing in rural areas conflicts with the one favoured by communists. Several consecutive measures were taken in a search for the most appropriate organization of this highly important industry, employing over half of the population in almost all developing countries.

One instrument of policy used from the start was the compulsory delivery of part of the crop at fixed, low prices. In the beginning all production was requisitioned in this way. This enormously reduced the peasant's willingness to produce and resulted in a food shortage, to make an understatement, for a considerable period of time. Gradually the percentage of production which had to be delivered this way was reduced and the prices were raised. Peasants

were permitted to have a private plot of land and to sell the products of it at higher prices or in free markets. Experiments of this type have been repeated and as recently as 1962 a 25 to 30 percent rise in meat and dairy prices was decided upon in order to raise productivity once again.

Another set of instruments which have been used is the establishment of cooperative and state farms by combining a large number of individual farms. Practically all farming in the Soviet Union is now run under one of these two forms and the entrance of farmers into these units was not, as a rule, voluntary. *Colkhoz y* and *sovkhoz y*, as these two types are called, were granted several advantages in taxation, supply of seeds and fertilizer and sales of products. These two institutions are the expressions of the communist belief in large-scale operation. The main counteracting forces hindering their success are the insufficiency of individual incentives and red tape.

One particular instrument used for quite some time in the attempt at tightening controls and increasing the scale of operations is the one of the tractors and machine stations [TMS] which provided a large number of farming units with these capital goods. They have not been a success, however, and have finally been abolished.

Finally, considerable effort has been put into the opening up of new territories, with the use of the most modern large-scale production methods.

Agricultural production has no doubt increased quite considerably in the end, but not until 1930 was the production volume of 1913 finally reached again. It is also the opinion of western experts that the volume of production falls short of the volume that could have been expected from the human and material inputs currently applied. It is the prevailing opinion throughout the West that it is not a coincidence that eastern countries are periodically faced with food shortages while western countries have food surpluses.

2.15 / *People's Democracies*

Until 1945 the only experience with «socialist» regimes was the Russian one. After World War II several other Eastern-European countries were brought under communist rule, by the use of violence in some way. All Slav peoples are now governed by their communist parties; this is also true for the Baltic states, Hungary, Romania, Albania and the Soviet-zone of Germany, called by its government the DDR [German Democratic Republic]. As a group these countries are known as the «people's democracies», a name coined by their rulers. Finally, a group of Asian countries are now under communist rule, including the world's largest country with one of the oldest civilizations, China.

As a consequence, our experience with communist policies has broadened considerably. Among the countries mentioned several were highly industrialized before they came under communist control. Most of them are much smaller than the Soviet Union and hence are more dependent on foreign trade and some of them have had long and intensive experience with democratic traditions.

In quite a few respects the people's democracies simply copied or had to copy Russian methods of economic policy. While considerable successes in some sense were obtained, outright blunders were also made and gradually, as more freedom was given or taken, they deviated from the Soviet pattern. Clearly the deviations indicate a great deal about the pros and cons of the system. Yugoslavia was the country which first went its own way and it did go quite a distance. Probably the largest differences from the Russian set-up are to be found in the degree of decentralization of production decision-making and other policy decision-making, a natural consequence of the less centralized traditions in that part of the world, but also of the disadvantages experienced with a highly centralized system. In Yugoslavia small-scale activities such as agriculture and retail trade cannot be distinguished easily from private enterprise. It is true that manufacturing industry, mining and transportation are community-owned, but production decisions are more decentralized and prices are fixed not by central authorities but by the market.

Poland has not gone as far as this, perhaps partly as a consequence of its geographical situation, but its planning and production decisions are also more decentralized than before, especially in agriculture.

Considerable evolution has been shown also by the organization of international trade within the communist group.

Taken together we may state that the pattern of society in the East is now more diversified than before 1945 and that some of the deviations are indicative of some of the weaknesses of the Soviet system.

2.16 / *Sociological Features*

It goes without saying that the importance of the existence of a group of communist-ruled countries surpasses by far the significance of this phenomenon in the purely economic sphere. There is scope for a wider appraisal, and an attempt to combine all social features at stake in a general sociological setting. We will make an attempt to indicate some of the most important negative and positive implications of the Eastern organization of society.

Looking at the phenomenon in a negative way, western observers often feel

that the communist leaders have been fanatics, overstating their case against «capitalism»; they have been driven to this by a desire for power, and by their overwhelming hatred of the exploitation in old-day Russia and Eastern-Europe. Their drive for power has been combined with some long-standing Russian nationalist aspirations and a personality cult, typical of despotist traditions, and not vanished yet completely after the elimination of the Stalin cult. In their zeal to establish a «socialist» society they have lost their sense of proportion and have resorted to some means which are worse than the evils to be eliminated; they have violated the fundamental rights of man, they have violated the search for objective truth and they lock the road to peace.

This presentation of facts is one-sided, however. There are positive sides too and a complete picture must mention these also. In the countries where the communist party took power democracy hardly existed and privileged reactionary groups as well as speculative business groups exploited large groups of peasants and workers. Communist regimes have brought modern industrial development to a number of backward regions; they have shown that it is possible to operate industries without private ownership of the means of production. They have eliminated some forms of superstition and abuse of religion in social matters and given new perspectives to millions of common workers. They have brought at least technical education and probably more than that to large numbers of people to whom it was not previously available. They have eliminated some of the senseless materialism of the West and in their countries there seems to be more awareness of the need to give a meaning to life than in many Western circles.

In the purely economic realm they solved the problem of imposing a high rate of investment on a community; a policy decision which it is very difficult, if not impossible, to obtain by purely democratic means and which nevertheless is approved later by many who have gone through the meagre years and now experience fatter ones.

It must be hoped that in the long run the sharp edges of the regime will be worn off somewhat by natural human factors. Some tendencies of this nature can be observed already. If you teach people to think scientifically they will eventually apply this ability to other problems than their narrow professional subjects. Young people all over the world in all eras of history have wanted to find their own way moreover. Higher standards of life are conducive to tolerance. All these factors may help to somewhat reduce internal and external tentions; but we cannot rely on them solely. In chapters 5, 6 and 7, we are going to take up the problem of coexistence.

2.2 / THE WEST'S AUTOMATIC PILOT

2.21 / *Introduction: Indirect Controls*

In contrast to the system of the East, with its detailed and direct guidance of the economy, the West prefers a system of indirect guidance with a restricted number of «levers». In the terms of aviation, quite a bit is left to an automatic pilot and the pilots of our government are needed only for major corrections. This «automatic pilot» is the set of built-in regulators of the markets, once even believed to be able to do the job of regulating the economy all by itself. This belief no longer prevails in the West and we now have a «mixed system», in various respects.

First of all, there is an important public sector side-by-side with private production. Sometimes this public sector is as large as 20 or 25 per cent of the national economy. In most Western European countries energy and rail transportation are in the public sector; sometimes coal production is also included. In some countries steel production is publicly-owned or half-way so; some types of banks are sometimes also public institutions. Public ownership does not necessarily imply a centralized management; the tendency in western countries is toward giving a relatively large degree of freedom to managers of public enterprises so as to attain a high level of efficiency.

Next, in the realm of economic and social policy, the role played by government proper is also considerable. Tax revenues generally amount to some 25 or 30 per cent of national income, and accordingly exert a strong influence on the economy: they constitute an instrument for income redistribution, for saving if necessary, and for the regulation of total demand. Government interference with unstable markets is another field of considerable importance in modern Western economies. This interference is especially important for the agricultural sector.

By means of its control of the public sector as well as by its economic and social policies the government creates a framework for the private sector which does not permit some of the evil effects of unbridled competition yet retains its favourable effects on efficiency. The private sector comprises all the industries not yet mentioned – agriculture, trade and handicrafts and usually road transportation – although parts of these activities are carried out by co-operation. The latter are found mainly in retail trade [consumers' co-operatives] and agriculture. In agriculture, they are entrusted with a number of auxiliary processes, such as buying and selling, processing and leasing of machines and in Northern, Western and Central Europe they have been suc-

cessful. The agricultural production process proper is not conducted by co-operative organizations, however.

The prevailing structure of economic and social life is not considered ideal by everybody. It is essential for the West that strongly different opinions can be held and expressed and some groups think that modern Western society should go back to the old days of laissez-faire, while other groups think a much larger role should be given to the state or to workers' organizations or co-operatives. There is a clear difference in this respect between the United States and Western Europe. In the former country socialist ideas have less influence than in the latter region.

2.22 / *The «Free forces» and Markets*

There was a time when most of the West was much closer to the model of free competition and private enterprise with little government interference. Even in 1910 many economists still held the opinion that the best guarantee for general welfare was «laissez-faire». Theorists ever since Adam Smith had been impressed with «proofs», like the ones later given by Vilfredo Pareto, that the optimum situation is characterized by free competition. The important qualifications for any such statement were developed only later when practical political decisions had already accepted some deviations from laissez-faire in the beginning phase of social legislation. Some of the evils created by uncontrolled free enterprise had already become clear enough. They will be discussed in the following paragraphs.

In this sub-section some of the advantages of free competition and markets as institutions will be briefly reviewed. Their general feature is that the owners of productive forces will automatically tend to satisfy demand, if they strive for maximum income. If tastes change, the favoured commodities will show price rises and their production will become more attractive since they promise higher profits. If new inventions lower production costs this will also induce entrepreneurs to utilize them. If, in relation to its cost, one quality is more profitable to produce than another, this will be an automatic incentive to producers to produce goods with the most demanded qualities. It is well known that Soviet production did not always concentrate on the right qualities.

Free competition in the international field also helps to make the best use of each country's productive resources. It leads, for each of the countries participating, to the highest well-being compatible with the supply of resources, the laws of production and the distribution of income adhered to by the

nations considered. This latter qualification is one of considerable importance, limiting the significance of our statement; it will be discussed at some length later [cf. section 6.22].

Free enterprise – whether by private or by public enterprises – is equivalent to a high degree of decentralization of production decisions and as such avoids a large number of duplications of calculations and decision making in comparison to a more centralized system, where the proposals of the lower levels are checked and perhaps changed by one of more higher levels.

The western system of wage setting cannot be called an example of free competition anymore, but in a macro-economic sense it still shows considerable resemblance with such a system since wages are intimately related to marginal productivity. It is interesting that this is also true for the «socialist» wage system of the Soviet Union.

As already observed in the beginning of this sub-section, the West has already limited the operation of these «free forces» to a considerable extent by government policies. The main limitations will be discussed in the subsequent sub-sections.

2.23 / *The Social Problem*

Free competition without state intervention produces a very unequal income distribution, especially when the supply of unskilled labour is relatively abundant in comparison to the supply of land, capital and trained and qualified labour. In the nineteenth century this was true even for the West. The contrast between the low incomes of the masses and the high incomes of few gave rise to what has often been called the social problem and to various protests against the free-enterprise system. The most important counterforces have been the various types of labour movements, including both trade unions and the socialist parties, characteristic for western society. In the twentieth century a more radical wing left the democratic socialist parties, and constituted the parties which later became communist parties. In some countries, intermediate groups, such as the Nenni socialist party in Italy or the Japanese socialist party became the more important groups.

The first half of the twentieth century witnessed considerable reforms in most Western countries, due to socialist pressure. Social protection and insurance were introduced as part of the legal structure; this legislation brought the prohibition of child labour, the limitation of working hours, especially the eight-hour working day around 1919 and compulsory insurance against accidents, illness and unemployment. Over a period extending into the nineteen-

fifties the system of social insurance was gradually completed and improved, including in many countries a general old-age pension and pensions for widows and orphans. In some countries, such as Great Britain, free medical services were extended to cover all medical treatment.

Some of the social benefits and free services, including primary and secondary education, are being financed out of the proceeds of progressive taxes, usually income and profit taxes, with rates of the latter often in the neighbourhood of 50 per cent.

In the various western countries the level of social benefits and free services varies and depends on income per head and on political aspirations. An example of the changes in income distribution over the last forty years can be seen in the figures for the relative average deviation of incomes in the Netherlands[1]. In 1921 this figure amounted to 0.72, meaning that the deviations of individual incomes from average income amounted to 72 per cent of average income. In 1955 this figure was 0.60. These figures refer to incomes before tax. From British figures it can be found that for incomes after tax the relative average deviation is 0.06 lower than for incomes before tax. Since taxes were considerably higher in 1955 than in 1921 the decline in the relative average deviation of incomes after tax will have been larger than the decline of 0.12 just shown.

2.24 / *Further Limitations to Automatism*

The interference on behalf of greater social equality was followed by a series of further limitations to the automatic operation of the economies of the West when it became apparent that this operation led to undesirable or inacceptable results. The two big wars through which the world has gone since 1914 showed that under such conditions free forces would result in a very skewed income distribution in real terms. Rationing by the purse, which is an acceptable devise in peace periods, was replaced by direct rationing. The fundamental problem was a problem of extreme scarcity; war makes it necessary to have so many more war goods, that only a bare minimum of non-military goods can be produced. At the same time many more people must be put to work to produce for «national ends». Ideally this should be financed out of taxes, which at the same time would reduce the buying power of the population to match the bare minimum of goods just mentioned. Such a tax system is difficult

1. «Recent Changes in the Income Distribution in the Netherlands and Selected Other Countries», [in Dutch], W. de Haan N.V., Zeist, 1960, p. 51.

to devise and carry out and under these circumstances there is a well-known tendency for the government to resort to inflationary means of financing, such as the printing of money. Even if that can be avoided, the tax system needed would at the same time kill the material incentives which many people need to encourage them to work hard. Theoretically national feelings should take the place of material incentives, and certainly these feelings have been strong enough in most countries, but they are not as strong as the war effort requires. All these reasons make it necessary to spread a network of controls over the nation, starting with rationing of consumer goods and extending to price controls, controls on the use of raw materials, imports and capital goods and ending up with a completely regulated economy. The limits to regulation depend on the discipline and organizing talents of the country.

Western countries – and many non-western countries too – went through this experience in the Second World War even more than during the First World War. As already observed, Soviet planning started this way also.

It will be understood that the argument used does not only apply to war conditions but to any situation of extreme scarcity, that is, to any situation in which heavy new needs suddenly arise. The necessity for detailed regulation therefore also applies in a post-war reconstruction period and such regulation was put into effect after both wars. To some extent it also applies to the situation of a deep depression, but this similarity has some misleading features. We will discuss the problems concerned in a sub-section [2.25]. Finally a suddenly felt need for development creates similar problems!

Before discussing depressions we want to state that there are a number of markets where the automatism hardly works or works in a very imperfect way. The first clear indications of another approach to these unstable markets occurred around 1900 when the Brazilian government decided to regulate the coffee market. To be sure, this market, as well as others, had already shown its dramatic swings long before, but around 1900 the belief in the automatic operation of markets had been sufficiently undermined to stimulate thinking in another direction. There are two main reasons why in some markets the free forces do not operate in a satisfactory way; either they are delayed or they are too weak. In the coffee market the delays are very long. A high price for coffee does stimulate supply, but only after the seven year period required for the new coffee trees to bear fruit. In the wheat market we have an example of too weak forces: an increase in prices does reduce demand, but only by very little, since wheat is a primary food. In various agricultural and mining product markets we find these forces to be insufficient to prevent intensive swings

in prices and quantities and during the last fifty years it has been generally recognized that it is not advisable to leave such markets to the operation of free forces. In almost all countries, including the Western countries, a number of these markets are now regulated so as to yield more stable incomes to agriculture and mining. Various forms of regulation are practized:

[i] sometimes inventories are manipulated with a view to keeping prices more stable;

[ii] in other cases exports or imports are regulated;

[iii] in still other cases the regulation goes back to the processes of production and consumption.

The manipulation of stocks or inventories [so-called buffer stocks] in principle coincides with what regular trade does in future markets: stocks are increased when prices are abnormally low as a consequence of a bumper crop and sold out when prices are abnormally high as a consequence of a short crop. This useful function of trade is sometimes unduly limited by lack of capital. Governments can manipulate larger stocks of goods because of their larger capital resources.

Regulation of imports or exports is only a second best policy for the regulation of consumption of production. The latter types of regulation in essence aim at restricting consumption in case of shortage and stimulating it in case of abundance or at stimulating production in a period of shortage and restricting it when abundance prevails.

While many countries have national schemes of regulation, the necessity of achieving some type of international control has increasingly been felt. The great depression with its artificially low level of demand induced a number of governments to conclude such international agreements, for instance, the agreements for rubber, tin, sugar and tea. After the Second World War the conclusion of such «commodity agreements» was made an official activity within the framework of the United Nations and its specialized agencies, especially the Food and Agriculture Organization [FAO].

2.25 / *Business Cycle Policy*

A special chapter in the limitation of the «free forces» has been the treatment of the so-called business cycle. Free-enterprise economies of the nineteenth and early twentieth century had shown a more or less regular succession of ups and downs in production, employment, incomes and prices. In Western Europe such a cycle was completed every ten to seven years, and in the United

States every four or three years. Some of the downturns, for instance the ones in 1873 or 1890, took rather dramatic forms: business failures and large-scale unemployment accompanied these «crises». Theorists gave considerable attention to the phenomenon, and a large number of competing theories was formulated. Only a few were completely wrong; most of them contained some elements of truth. The general tendency of the explanations given was of course to suggest the unavoidability of the cycles; few of them also gave thought to the «political» question how they possibly could be avoided or at least reduced to less dangerous proportions. Several of the theories, produced by authors who generally admired the operation of the free forces, tended to show that in the end everything becomes all right again and that the depression was a necessary correction of mistakes made before. The theories produced by critics of the free-enterprise system tended to show that all this was just one more of the evils of capitalism and that capitalism itself had to be eliminated in order to get rid of the cycle.

It was still more or less in that general mood that mankind was faced with what seems to have been about the worst of all depressions, the «Great Depression», starting with the crisis of 1929. The downturn was unusually severe and in 1932 unemployment percentages of over 30 per cent prevailed in the big industrial countries. In the face of such figures no government could sit down and tell its people that it was all a necessary correction of previous mistakes and that nothing could be done about it. Under the pressure of events several large-scale programmes of re-employment were launched, especially in Germany and the United States, and cycle theory made rapid progress under Lord Keynes' leadership. Not rapid enough, however, to impart to politicians the appropriate ideas during that depression. Several wrong policies were followed in the United States and it was only around 1934 that better policies were substituted for them. The business community in that country, still very suspicious of any large-scale government activity, did not accept the policies which made them work less well than might otherwise have been the case.

We may say, however, that the post-war era found both theorists and politicians, including those of the business community, more or less informed about the true nature of the cycle and the possibilities to reduce its intensity and that the world has profited from this ever since. Very briefly stated cyclical movements are movements in the total demand for goods and services, for consumption and investment purposes, the latter including also demand for the accumulation of stocks. Total demand is composed of private and of public

demand. Private demand shows wide fluctuations, especially in expenditures for investment. There is nothing to be lost and there is much to be gained by increasing public demand to compensate for these fluctuations or by trying to regulate private demand through the power of public authorities to alter tax rates. Mistakes made in private investment will have to be followed by corrections, that is, by reductions, if overinvestment was the mistake, or by increases if underinvestment was the mistake. But these corrections must be undertaken in the same industries where the mistakes were made. There is no need for a general reduction in all investment if overinvestment had taken place in a few industries. There is no normative level of investment for the economy as a whole; it can be as high as the nation wants, provided that it is not financed by inflation. This is one of the essential aspects of compensatory public finance: it should always operate so as to avoid both inflation or deflation, that is, it should not let the nation spend more than can be produced.

In this way the use of some of the most important instruments of economic policy of modern western societies has come to be understood. By its policies of expenditure – on investment and consumption – and of taxation the government can regulate the total flow of demand as well as the flow of demand for investment goods and avoid serious discrepancies between a country's capacity to produce and its capacity to consume and invest.

Now that some 17 years have elapsed since the end of World War II we can state that the cycle has been brought back to such small proportions that it does not do much harm anymore. There remain, to be sure, problems of the stabilization of the incomes of producers of primary goods: but these can be solved in a different way. As a consequence of the successful operation of anticyclical policies the expectation of some that «capitalism would succumb from its own contradictions» as a consequence of increasingly stronger depressions is no longer real. Capitalism is being replaced by a mixed system in which serious depressions are no longer necessary or probable.

2.26 / *Structural Change*

All the examples discussed in sub-sections 2.23 through 2.25 illustrate this process of structural change under the influence of socialist and other workers' influence, helped by modern economic analysis of a more operative character. A last example may be added, the one of increased influence of workers' organizations on general economic policy. Trade unions and socialist and other workers' parties have in the beginning of their existence been felt as alien elements, not consistent with the basis of nineteenth century

capitalism and indeed they were. Today we observe that these organizations are vested with official responsibilities in the planning apparatus and the economic councils advising governments on their economic and social policies. In various countries their influence is now considerable. A pre-condition for such a narrow co-operation between trade unions and government is a state of confidence between the two and this is not possible if, for instance, workers' parties are kept out of government. But it is in the nature of things also that stable governments can be established only on the basis of coalitions which include the socialist parties.

What is perhaps the most important side of the structural changes we have discussed is their complete agreement with modern theoretical economic analysis. The chapter of «welfare economics» is an insufficiently known chapter of economic theory: it should not be identified with the economics of the welfare state. This chapter indicates the conditions for maximum welfare and any set of institutions can thus be tested for its optimality. The institutions we nowadays have in Western societies are closer to the optimal than purely free enterprise systems. It can be shown that free-enterprise systems are optimal only if:

[i] all production shows marginal costs higher than average costs and

[ii] no production or other activity shows external effects; even then, there is a third condition to be fulfilled, namely

[iii] that income is so redistributed as to equalize marginal utility between citizens.

The activities not satisfying the conditions [i] and [ii] require institutions other than the free market; in fact they require forms of public activity not too different from those performed by our public sector; and condition [iii] requires a tax system of considerable proportions. Even when it does not follow that our present mixed system satisfies the optimum conditions, it is very likely that it is closer to the optimum than the nineteenth century capitalistic system.

2.27 / *Towards International Integration*

After World War II still another structural change in the Western world began: a trend toward the formation of larger political areas. In the terminology used before we will call this a movement towards greater centralization in economic decision making. It is also a process of increasing political centralization. Both for economic and for political reasons the majority of western nations are considered to be too small in today's world where policy

is made by the «giant» countries: the United States, the Soviet Union and, in the future, India and China.

In the purely economic field it was thought that some important instruments of economic policy require larger areas for their proper handling. The heart of the matter is that decisions on the use of these instruments of economic policy affect not only the well-being of the area in which they are carried out but also that of neighbouring areas. If these areas are small, the external effects of policy may be considerable in comparison to the internal effects. The decisions must not be left, therefore, to governments having the responsibility for such a small area only. Such decisions would not be based sufficiently on the external effects. In plain terms, trade barriers always influence the well-being of surrounding countries as well as the well-being of the country applying them and should not be imposed without discussion with surrounding territories. In the thirties this was often forgotten and many of the measures then taken would not have been taken if the interest of the international community had been given a greater weight. The argument applies to trade restrictions as well as to monetary measures such as devaluations.

Since 1945 there have come into existence several institutions using forms of international co-operation in order to prevent such unhappy policies. The International Monetary Fund exerts a certain influence of moderation on possible desires to apply monetary measures and the General Agreement on Tariffs and Trade [GATT] organizes co-operation in the field of trade policy, while prohibiting certain other policies. A stronger form of co-operation is the one applied in more restricted areas such as the European Economic Community. In the Rome Treaty it is stipulated that after some 12 years there will be no import duties on goods moving between the members of the Community.

Such restrictions on the use of some instruments may be called examples of negative integration, but there are also some examples of positive integration to be found in the Rome Treaty. A common Investment Bank and an Investment Fund provide means to overcome the undesirable consequences of the negative integration policies. Social harmonization, the application of the same rules to a number of social issues, especially working hours and women's wages, is another example. The most important example is the common agricultural policy, consisting of the regulation of a number of unstable markets within EEC. All these examples are beginnings of the establishment of more centralized economic and social policies over a larger area which will in the end favourably affect general welfare.

It is a misunderstanding that European integration is a step back to laissez-faire. It is true that it intends to strengthen competition in a number of markets but it is also true that it intends to create a framework of state activity and public institutions similar to that which already is accepted in the individual countries, but on a wider scale. This will eliminate some of the unfortunately narrow national policies which did harm to many countries in the thirties.

2.3 / PILOTS FOR THE SOUTH

2.31 / *Colonialism is Ending*

In many respects the countries of the South are in an earlier stage of development than the West and East and the changes to be expected there will not reveal so many new features in comparison to the two other areas considered. The new developments in the South are rather that these countries are now getting their own pilots, if we may continue our analogy with aviation for a while. Fifty years ago, many countries of Asia and Africa were colonies and others, if not colonies in the political or legal sense, were colonies in the economic sense of the word. The great change took place during and after the Second World War. In a very few years the status of India [and Pakistan], Birma, Laos, Vietnam, Indonesia changed from colonies to independent states. Unfortunately the French and Dutch were less able to understand the new era than the British and hence the process of decolonization was longer for their former colonies than for the main former British colonies.

In the Arab region the interference of European countries was also lessened. No outright colonial relationships had existed here, but only intermediate forms. The problems in this area are more complex as a consequence of the creation of the Zionist state of Israel and because of the mixed character of Algeria.

An amazingly rapid process of decolonization took place in the remainders of Africa, where a large number of independent nations was established after 1950. Although the process has not been finished yet, the remnants of old colonialism are rapidly disappearing. The last colonial empire to disintegrate is the Portuguese one. A situation *sui generis* exists in the Union of South Africa, where the experiment of separate areas for the white and the black has been undertaken, with little sympathy from elsewhere.

In Latin America colonialism at least formally was eliminated earlier but colonialism of an economic type still prevailed as a consequence of heavy

foreign interests in these economies. The shifts in the world scene since 1945 also changed these relationships and the power position of foreign investors.

The general picture we find is one of increasing national selfconsciousness of all countries of the South and of diminishing power of foreign business interests. The more advanced among the foreign firms have understood the change and try to find forms of co-operation on a new footing. One of the concessions they have found it wise to make is the admission into the management of their enterprises of a rising number of citizens from the countries in which they operate. In this way new pilots are being trained who may be of great use to their countries as intermediaries between the southern nations and western knowledge and business attitudes.

2.32 / *A More Deliberate Development Policy*

At the same time, other pilots are being added from the ranks of the new governments. The nations which recently got their political independence are looking for a new goal. Those which had their independence already as well as the newly liberated countries are influenced by the general interest taken in economic development. Why this general interest for an old subject? Partly, no doubt, because the communist countries have had remarkable successes in this field. Partly, because the western countries, after much worrying about the great depression, returned to this older theme which had been the subject of so much discussion in the first half of the nineteenth century. But the major reason, in all probability, was because the poverty in most Southern countries is indeed appalling and because the most pressing problem for the masses of their population is to increase their consumption. Finally, because it has been shown that this poverty was not inevitable and that something could be done about it.

Governments began to formulate development plans and it is in this field that the «new pilots» operate. The western governments in the days that their peoples were poor had at most only a program of «furthering» economic development. In contrast the Soviet Union has made development a clear-cut aim of their policies ever since the Five-year Plans began. The South chose a middle way and developed mixed plans in which the government would act itself in a direct way, by establishing infrastructure [roads, energy, schools, dwellings], but would also act indirectly by measures to stimulate private activity [pilot farms, industrial estates, tax measures, education]. Their approach coincided remarkably well with the advise a welfare economist might

give them today: we said before that this mixed type of society may be closer to the optimum than either of the extremes.

Large numbers of expert pilots are needed and the countries of the South cannot supply them all at short notice. The international agencies of the United Nations are assisting them by supplying experts from West and East and so are the individual countries of the West and East themselves. The type of westerners now in these posts are different from the previous pilots, although some of the former type are still active. One group consists of the new scientist who is fascinated by the job of the development expert and has no business interests. Another group consists of the modern business man who understands his new position: he wants to operate his business in the new framework and he is extremely valuable because of his practical knowledge. A last group, diminishing rapidly in importance, still dreams of the old days and sometimes plays a political role against the new governments. Its dreams must be abandoned; it will not be able to change the new political situation because the process of decolonization is irreversible.

2.33 / *Tendencies Toward International Integration*

The South cannot escape this other tendency of today's world, namely to closer co-operation between nations, and to larger economic units. With transportation costs decreasing and production increasing the need for larger administrative units and larger markets will be growing too. In addition, the integration process in Europe will make similar processes elsewhere desirable, if only from the political point of view: successful trade negotiations will require a concentration of economic power in the South as a counterpart to the negotiating power of the Europeans. But the economic use of larger units is important by itself. There is a real danger of the emergence of widespread economic inefficiency if all countries act independently. From the economic point of view many countries in the South are too small. It is vital for them to be able to establish industrial plants of optimum size. But in the heavy industries such units are so large as to be viable only in a market which by far surpasses the potential internal market of countries in the South. Co-operation between countries in the establishment of such industries and their market areas is called for.

It is not easy for a nation which has just attained national independence to enter immediately into negotiations for giving up some of its sovereignty. The governments of the former colonies are too anxious to preserve their autonomy. This may be the explanation why the first attempts at integration

in the South were taken in Latin-America. Two processes of integration are under way in which the Economic Commission for Latin America [CEPAL, or, in English, ECLA] has played a role, while GATT produced an alternative. One concerns a close co-operation, between the five Central-American states, while the other aims at an integration of the whole of Latin-America, and for the time being at a Free-Trade Area between some of the most important countries of the region.

The next example concerns the Arab region. Several initiatives are in the process of execution. The Arab League is the most important one; it is already in operation, has carried through some reductions in trade impediments and has organized a common investment bank. Besides its purely economic activities it also has a cultural programme. An example of partial integration within the region is the proposal to merge the three countries of the *Maghreb:* Morocco, Algeria and Tunesia.

Latin America and the Arab region both have the great advantage of a common language [if we neglect the fact that Brazil's language is not the same as the other countries' language, although narrowly related]. This applies in a much more restricted way only to the remainder of the South. In Africa and Asia there is a family of countries which has French and another which has English as their second, but only their second, language. These «families», moreover, are not connected geographically as well as is Latin America or the Arab region. For all these reasons, integration in Africa and Asia will not be so simple. Yet some beginnings have been made here also, supported and elaborated by the Regional Commissions of the United Nations, ECA and ECAFE respectively. We must hope that they will be successful in the future, but they require a huge volume of persuasion and elaboration.

2.34 / *Social Changes*

In many, if not all, of the countries of the South, the social framework has not yet been adapted to the requirements of modern economic growth. As a rule feudal forces and institutions still are strong, even when formally they have already been removed. Their legal removal does not at once change the pattern of relations and attitudes connected with the feudal structure. As are most human attitudes, these are slow in changing. In most, if not all of these countries, big land owners still play an important role. Capital and intellectual education being scarce, their marginal values are high and income distribution is very unequal. Industrial employees are relatively few in populations which are to a very considerable degree still rural. The mass organizations

which support the progressive views in western countries – trade unions and progressive parties – are lacking or are not yet really mass organizations, although sometimes their power is larger than their membership suggests.

The beginnings of social change can be observed. Land reforms, tending to eliminate big estates, have been passed in varying versions, but a thorough enforcement of such laws does not necessarily follow. The informal forces opposing them are strong and governments are often weak. In many countries land reforms are still to come.

Because of the relative abundance of unskilled labour, wages for such type of labour are usually very low and unemployment is widespread. Workers are highly dependent on their employers and this makes for an attitude of submissiveness. Unfortunately not only employers but even the somewhat better-off skilled workers or supervisors are exploiting the unskilled. The general atmosphere is highly undemocratic and changes only slowly. In reaction trade unions often are very cynical about reforms and tend to distribute revolutionary propaganda rather than advocate constructive co-operation with the authorities.

A beginning has been made with social legislation and social insurance, but usually these apply only to relatively small privileged groups; such as office workers or the employees of a few public utilities and hardly ever to the masses of agricultural workers. This policy is understandable because of the very low level of average income, but the danger is that it may create a rift between the masses of the poor and small groups of skilled workers and industrial employees. Sometimes this situation is a remnant of the colonial era and should be gradually changed.

Education is another field of social policy where some beginnings have been made, but much remains to be done. Usually the countries' resources are not even sufficient to permit enforcement of the law requiring compulsory primary education for all. Again a gradual introduction of such education is the best compromise between the desirable and the possible.

3 / FLOURISHING AND AILING ECONOMIES

3.1 / ECONOMIC SYSTEMS IN OPERATION

3.11 / *The General Operation of National Economies*

In this chapter we describe the operation of the world's economic systems as co-operation between the factors of production – described in chapter 1 – within a framework of social and economic institutions – described in chapter 2 – and the motivations behind this co-operation. Even though the framework differs between the large areas of the world, the economic processes themselves have much in common which can be described and understood in a general way. In all economic systems we observe man acting out of a double role: he is both the supplier of the factors of production and the recipient of the final products meant for his use. Flows of goods and services move from nature through a complex network of production units until they arrive at a final destination. During the production and distribution process man is involved as the supplier of labour, capital and land and at the end he is involved as the consumer or investor. For his contribution to production he receives an income which in the end he spends either on consumption or on taxes or on investment. Taxes are also flowing directly from the production units to the state, and the state, like the individuals, spends the proceeds on consumption or investment. State consumption is either for the purpose of filling collective needs or for the supply of free services. Investment, whether undertaken by the state, by enterprises or by individuals, adds to the productive equipment of the economy. All the flows of incomes and expenditures may be summarized as the system of financial flows, partly a replica of the material flows but moving in the opposite direction. The financial flows within each country are expressed in national currency and the paper used for them is valid only inside the country.

Individual countries are the building blocks of the international community. Some of the products they produce are exported to other countries and some of the goods they use in their production process are imported from other

countries. Exports and imports also include services, such as freight carried or tourist services. Exports and imports are not always equal in value; the «balance on current account» being the difference between the two. Imports must be paid for in foreign currency of some type. Such foreign currency can be obtained by selling exports. If the proceeds are not sufficient to pay for the imports, the balance on current account must be paid for either from stocks of foreign currency already accumulated, or from gold, or new credits must be asked for. The kind of foreign currency needed for the payment of imports may not be the same as the currency available from exports, stocks or new credits. Some kinds can be converted into other currencies and this may solve the problem. Some cannot be converted and this creates a new problem: it may give rise to changes in exports so as to get the proper kind of currency or changes in imports so as to use the currencies available.

3.12 / *Quantitative Changes in External Factors*

In chapter 1 we discussed the qualitative changes which occurred in the last half century in the «data» or external factors determining the economy. The economic history of these fifty years was also affected by the quantitative changes which took place. These may now be summarized very briefly. They represent the elements which are used in quantitative models – that is, simplified pictures – of economic movements, both long-term and short-term, for the world as a whole.

Changes in natural resources still constitute one of the main uncertainties in economic life. Random fluctuations in crop yields from year to year may be as large as 20 per cent of the total yield. Long-term increases in the level of agricultural output occur slowly only, and are due partly to the new land brought under cultivation and partly to technological progress which will be discussed presently.

Technological progress, in its multiple forms described in chapter 1, results in a fairly smooth rise in the average productivity of labour. This rise has been estimated to be somewhere between 1 or 2 per cent per annum. The remainder of the increase must be attributed to increases in capital stock, which is not an external but an internal factor. In recent decades both processes have been accelerated, resulting in increases in labour productivity up to double the average figure of the nineteenth century in western countries and even more in eastern countries.

The supply of labour has also increased quantitatively: population has grown by about one per cent annually for decades in the world as a whole. In

recent decades population increases in western countries have been generally lower. However, in some of them, including the United States, rates above 1 per cent now prevail. Developing countries are experiencing extremely rapid increases in population, such as 2 per cent in India and 3 per cent in Latin America.

3.13 / *Political History*

Economic history and political history are closely interrelated. Often it is difficult to disentangle them and to find out which have been the original causes, or autonomous factors. In the short run, the political framework can be considered autonomous in many respects; but long-run changes in political institutions often have an economic source. In this sub-section an attempt will be made to sum up the main lines of the autonomous political events which influenced the short-run economic history of our period.

In 1913 Europe was still the political centre of the world, where almost all important decisions were made. The United States was in the process of taking over this role, however, as a consequence of its growing economic potential. Politically Europe was the scene of an equilibrium of opposing powers; an equilibrium of an unstable nature. Since 1871 the conflicts between the main powers have centered mainly around the colonial or «imperialistic» interests.

In 1914 the basic instability of the equilibrium was demonstrated by the outbreak of World War I. German expansionist economic and military forces, with some allies, clashed with the older powers of Britain and France, still the centres of huge colonial empires, and with the backward semi-feudal power of Russia. To a large extent the conflict was as Marxism saw it, an imperialist one. One must add the qualification, however, that at home Britain and France were older democracies than Germany. After a while the United States joined Britain and France in fighting Germany, partly as a consequence of cultural ties with Britain, but mainly to preserve the balance of power and possibly to strengthen democracy. As a result German militarism was defeated. At the same time, however, social progress made an extremely important jump.

In Russia the czarist regime fell, and after a short democratic interlude, the communist wing of the socialist party assumed power. The far reaching consequences of this change are clear enough by now. In the remainder of Europe a political landslide also took place. After the elimination of monarchist and military governments the vacuum in central Europe had to be filled by demo-

cratic socialist parties. In Western Europe the workers achieved a series of improvements in their position and status. Members of the democratic socialist parties became eligible for office, and actually took office in various countries on various occasions, either in coalitions or separately. An acceleration in social legislation and insurance changed the social face of Western and Central Europe.

The First World War was a tremendous shock to the economies of the countries involved. Never before in Europe had such large scale dislocations, both material and financial, occurred. The old economic theories based on laissez-faire, were unable to suggest methods to cope with them in an effective way. During the war large deviations from free enterprise had already been necessary. After the war, the basic problems were not always well understood and one economic difficulty after the other occurred. These difficulties gave momentum to the political and social reaction to the post war change in social structure, and a political counter-current of reactionary tendencies began. The Great Depression starting in 1929, again not well understood, only strengthened the political controversies. The extreme form of reaction called fascism became more and more widespread and German «national-socialism» was its worst form. Democracy and humaneness were thrown overboard. A cultural set-back toward mediaeval standards threatened.

A long series of mistakes brought the Nazi party into power and the result was the Second World War. This was not an imperialist war in the Marxian sense. It was mainly an ideological struggle with two issues. For the western powers Britain and France and later for the United States, it was a struggle for democracy against totalitarianism and barbarism. For the Soviet Union, coming in later, it was also a struggle between fascism and socialism, both organized on a totalitarian basis. The German Nazis were allied with Italian fascists and Japanese militarists. The alliance between the Soviet Union and the western democratic powers was only opportunistic, as is illustrated by the temporary treaty between the Soviet Union and Nazi Germany in 1939.

A large part of the world was again drawn into the struggle; the economic and social shock to the world was even larger than that caused by World War I. Again the end of the war brought a social landslide, even in the countries of the victors. This time it was the colonial structure which collapsed. Colonies had given their co-operation with the «mother powers» only after the promise of independence. This promise had to be fulfilled and it was, although not always wholeheartedly.

After the defeat of the fascist powers the political scene was dominated by the communist powers competing with the mixed western systems before an audience of developing countries.

3.14 / *Data and Economic Development: Quantitative Relations*

The factors enumerated so far, taken together, determine economic development or change, both short-term and long-term, in all economic systems. However, the patterns of reaction to these factors may differ quantitatively. Thus, consumers' consumption purchases depend on their disposible income, but the quantitative relationship between the two may differ between economies. In poor economies consumers will spend a larger part of their income than in wealthy economies. The volume of investment will depend on the financial resources available to private enterprises, public enterprises, private consumers and government administration; but the relative importance of these groups in the investment process varies widely between countries and regimes. Prices will be determined by production costs and by the level of demand relative to production capacity, but the mechanism by which these two variables influence prices is different in western countries from that in communist countries. The totality of these quantitative relationships, which can be expressed mathematically as coefficients, represents the «structure» of an economy.

Since production and consumption are the most important activities in an economy of any type, we will therefore discuss in this chapter the economic evolution of the various regions and some big countries mainly in terms of how these two activities changed over time. In this sub-section we try to summarize the mechanism which determines the level of production and consumption. In the short run production is determined by the expenditures made by all groups of the population – households, production units, government departments – on goods and services, that is, the initiative is largely on the side of demand. Demand consists of both the demand for consumer goods and demand for investment goods. As already observed, the extent of demand depends to a considerable degree on the financial means in the hands of the potential buyers. This is not true, however, for bigger enterprises and for government. Bigger enterprises may decide to spend less than they could if they do not foresee the possibility of selling the products. Governments may follow a deliberate policy of spending less than is possible. In a way their spending possibilities are unlimited because they can create money. Moreover

governments, by the tax policies they follow, will regulate consciously or unconsciously the purchasing power left in the hands of consumers and production units. By this means they regulate the volume of consumption also. Only a few very wealthy consumers can determine autonomously how much they will consume and how much they will put at the disposal of production units or government [how much they save].

Some of the unexpected movements in investment expenditure spring from the expectations, already mentioned, of private entrepreneurs as to what they will be able to sell in the future. Although other factors also enter – for instance those of the «flexible accelerator» – and although expectations are based partly on past trends, it has not been possible to ascertain with much precision what determines private investment demand in the short run. Sometimes political events will influence them strongly, such as a «lack of confidence» in government policies.

The longer-run movements in production are determined much more by the capacities to produce, that is, by the supply side. Even though all capacity may not be used in the short run, this is generally only a temporary phenomenon. In the somewhat longer run new markets will be found or created, or sales will be raised by price and tax policies. In the long run production is therefore determined by the rise in productive capacity, which is a direct consequence of investment decisions. At the same time the latter also determine which part of total production is left over for consumption.

Considerable changes in production will be noticed only over long periods, since the addition to capacity during any one year can only be a small proportion. The higher rates of increase in production such as occur in the early stages of development tend to bring about changes in the composition of production. With increasing consumption people will demand relatively less of the primary necessities, for instance food and relatively more luxury goods. Greater production in the earlier stages of development will usually be possible only if a larger part of it is industrial production. In a later stage, even industrial production will become proportionately less important and services will take a larger part.

Since production increases as the capital stock grows, the relative scarcity of capital and relative abundance of labour will diminish with increasing production. This will lead to a more even income distribution and to more stable social relationships. Of course, political preferences may also contribute independently to improving social relationships.

3.2 / THE EAST: FASTEST GROWTH

3.21 / *Some Statistics of Communist Development*

Gradually a large amount of statistics have been made available for the development of the Soviet economy and, since 1945, for the economies of the other communist countries.

Comparisons between the eastern economies and those of the western and southern countries are not so easy, however, since the definitions used for some important concepts, such as national income and production, differ. They are also difficult because the price structure in the communist countries differs: capital goods are relatively much cheaper in these countries than consumer goods, since they do not contain what the west would call a purchase tax, whereas consumer goods contain a tax of that kind of about 40 percent of their retail value. Finally there are difficulties because some of the official indexes of Soviet production contain duplication and are weighted in a biased way. Comparison can be made only after careful corrections have been made. Several western economists have attempted carefully to carry out such corrections and the picture they obtain is roughly the following.

In the early years of the Soviet Union production was at a very low level, as a consequence of World War I, the civil war and some economic measures which later were revised. The experimenting with economic measures went on and revisions were made later also, but it is almost natural that the biggest errors were made in the beginning. This would be true for any new regime. In 1928 the level of production reached was not much higher than that of 1913. In 1928/29 the First Five Year Plan was instituted and from then on the economy grew. Between 1928 and 1940 the growth in real gross national product as estimated by Abram Bergson was 5 to 10 per cent per annum; between 1940 and 1950 it was about 2 per cent notwithstanding the war; and for the period between 1950 and 1958 various authors give estimates of around 7 per cent per year.

The impression left by these figures is that a fairly regular rate of growth of some 7 or 8 per cent per annum is now normal. The volume of investment, measured by the western yardstick, amounts to some 25 per cent of national income, corresponding with a capital-output ratio of about 3. The rate of investment is not changing so much any more, meaning that the rise in consumption is about equal, percentagewise, to the rate of increase in income. It took a long time for consumption to rise, however. It is estimated that in 1940 real wages were lower than in 1928 and they were lower then than in 1913.

3.22 / *The Results Due to the Communist Regime*

It must be stated, to begin with, that the rate of increase in national product in the Soviet Union, discussed above, compares favourably with the rates of increase which were customary in capitalist countries before 1914. For the United States and the United Kingdom the normal growth rate was in the neighbourhood of 3 per cent and the rate of investment was close to 11 or 12 per cent. It should be added that up to 1914 other Western countries showed similar growth rates but that after 1950 Continental Western Europe has grown at a rate of some 5 per cent per annum.

It is not correct to say that this higher rate of growth of the Soviet Union is due to the advantages of the communist system. The direct cause of the higher rate of growth is the higher rate of investment and this can also be reached in non-communist economies, as the example of Japan after 1950 shows. But it should be admitted that a centrally planned system can attain more easily a high rate of investment than a free-enterprise system. Such a higher rate of investment is equivalent to a lower volume of consumption than would have been possible from the same income and the higher growth rythm is the effect of both the higher rate of investment and the system. As we saw in chapter 2, the main characteristics of the system were public ownership and detailed planning. It is not easy to say what influence on the rate of growth and on general productivity has been exerted by each of these two elements. There are no clear indications that public ownership adds much to productivity. Detailed planning above all means, as we also saw [sub-section 2.12], the avoidance of idle capacity. Since in Western countries idle capacity may amount to something of the order of 15 percent of total capacity, we may say perhaps that planning is able to increase national product by 20 per cent [namely $\frac{100}{85}$], and keep it at that level as long as capacity is not increased by investment. The greatest part of the increase is due to investment, however, and only 20 per cent to planning.

It is still possible that the increase in production obtained by a unit of investment is higher in the Soviet Union than in Western countries. This should express itself in a capital-output ratio lower in the Soviet Union than in the West. Again, comparisons are difficult but there is some evidence that the ratio is indeed lower. The difference is not large, however, and can be explained by two factors, namely

[i] the effect of planning already mentioned and

[ii] the neglect of residential building by the Soviet Union until 1956 or thereabout.

Residential building is a type of investment which contributes very little to national product, statistically speaking, and its neglect means a favourable capital-output ratio. It does mean, however, a deviation from the consumer's preference which should be corrected.

We should not leave the subject without reminding the reader of the important part played by education in the accelerated process of growth of the Soviet Union. We may tentatively conclude that high investments in material assets as well as in human beings, together with planning, have led to this favourable result; the larger part, to be sure, by the high level of investment.

3.23 / *Setbacks and Interruptions of Growth*

We have stated already that the history of the Soviet economy was characterized by ups and downs, sometimes of a dramatic character, due to various factors. In this sub-section we will briefly survey the setbacks and interruptions of major importance.

In the early days of the regime, the First World War had already reduced production capacity and the Civil War, with external intervention, caused another setback. The lack of revival for several years after the revolution must be attributed to a number of radical and doctrinaire measures taken by the regime, such as socialization without indemnification, forced deliveries of agricultural products and an equalitarian wage policy. For a series of years the regime experimented with various types of measures and subsequently revised them to solve the difficulties they evoked. We already stated [subsection 2.14] that its agricultural policy was an almost continuous series of moves and counter-moves. Around 1930 a situation of very low agricultural production caused great difficulties. However, industrial production rose, in contrast with what happened in the West during the Great Depression.

Of course, the Second World War and its aftermath constituted a major interruption of growth. Not only had an increasing part of production to be devoted to military supplies, but enormous devastations and heavy losses of population reduced the economic capacity. We will say nothing of the human suffering, which was much more serious in Eastern Europe than in Western Europe. After the war reconstruction required very considerable efforts. Then the nuclear arms race started. For the Soviet Union it was unacceptable that the United States should have the monopoly of the nuclear bomb. The considerable means devoted to its development were successful. Even so the United States retained the lead in numbers of bombs. The Soviet Union main-

tained a large conventional military force, which meant a reduction in investment in production potential.

Around 1956, when at the 20th Congress of the Communist Party Khrushchev delivered his famous speech against Stalin's methods, the pressure of consumers induced the government to make some changes toward a larger volume of consumption, but soon afterwards the well-known priority for heavy industry was resumed. There was no clear change in the general rate of growth.

At the 22nd Congress in 1961 a programme was announced for the years up to 1980 based on an average increase in national product of 7,5 per cent.

3.24 / *People's Democracies: New Roads*

We will summarize here some of the events already referred to earlier which affected developments in the people's democracies. In the first years of their existence, heavy reconstruction needs had to be accomplished and in a general way the Russian pattern was imposed on them, implying a tendency to build up a heavy industry everywhere, a tendency towards self-sufficiency and a drive for collectivization of agriculture. For the former enemy countries of Germany, Hungary and Rumania this period meant heavy pressure on the economy on the behalf of reparation payments. Pressures were increased by armament requirements after the Korean war.

Yugoslavia was the first to go its own way politically to an extent considered inadmissible by the Soviet Union. Since 1956 the other people's democracies have been somewhat freer. Some of the recent results of economic activity are shown below.

TABLE 3.24

Annual Percentage Rages of Growth in National Income

	1959	*1960*	*1961*
Albania	17	3	10
Bulgaria	22	7	3
Czechoslovakia	6	8	7
Eastern Germany	9	5	—
Hungary	7	10	6
Poland	5	6	8
Rumania	13	8	10
Soviet Union	8	8	7

Source: United Nations ECE, Economic Survey of Europe, in 1961, Part 1, p. 11.2.

From these figures, which are the most comprehensive ones available, it can be seen that there is not a significant difference in growth rate between the Soviet Union and the peoples' democracies. The fluctuations in the figures are largely due to the vicissitudes of agricultural output.

3.3 / THE WEST: FASTER THAN EVER

3.31 / *Before 1914*

Up to 1945 the course of world economic history was to a very high degree determined by economic developments in the West. The Soviet Union was rather isolated – its foreign trade was and is still of relatively small importance in comparison to world trade – and for a considerable period this country had still to find its way. The countries of the South were linked to the West with very strong ties, partly of a colonial character.

Economic developments in the West were dramatic in comparison to what they had been before. Two world wars and the great depression shattered the foundations of society and killed a number of old beliefs, while opening up new possibilities. There is justification, therefore, for dividing the period up into three separate chapters about each of these three events and the eras which link them. Our fifty-year period, starting in 1912 and ending in 1962, has just witnessed the last years of a period of relative stability and slowly increasing prosperity interrupted only by mild depressions and minor wars. Such had indeed been the picture since 1895 and the main internal problems of the western countries centered around the working population and its political opposition. As already stated [cf. sub-section 2.26] western society was absorbing some new elements of a socialist character: an increasing public role in economic and social matters, the establishment of social insurance schemes [established much earlier in Germany] and the introduction of income taxes. Income per head increased, on the average, some 1½ to 2 per cent per annum.

Europe had been exporting increasing quantities of capital equipment to other continents. With their help the United States had developed and had become the largest industrial country of the world, almost independent of new capital from abroad. Britain had also exported huge amounts of capital goods to the countries of its empire as well as to Latin America. France exported mostly to African colonies and to political allies in Eastern Europe. Germany had industrialized more quickly than the two older European industrial countries and had become a severe competitor in the markets for capital goods.

3.32 / *World War I*

The political forces intimately connected with economic interests, briefly surveyed in section 3.13, led to an outburst of an armed conflict in 1914 and thereby concluded forever the era just briefly described. Technical development and increasing efficiency seemed also to have affected political action and to have resulted in an acceleration and widening of repercussions in an unprecedented way. So many countries felt involved or simply became involved unintentionally that this became truly a war at a world scale. Unprecedented numbers of soldiers were drawn into the struggle and unprecedented volumes of production for their more mechanized operations were needed. The growing portion of national product devoted to war purposes required ever tighter controls over economic life [cf. sub-section 2.24]. Consumption was reduced by rationing and civilian investment was stopped wherever it was not immediately necessary for the war effort. A considerable portion of the former prosperity was lost in a few years. Production in total went up in the short run because of the intensive demand for war goods, but its distribution was changed to the detriment of civilian consumption and civilian investment. Moreover, war destruction reduced the material capacity to produce and war morale, with its emphasis on uneconomic features, reduced the human capacity to produce. These phenomena were most pronounced in the countries which had been most involved in the war, that is, Central Europe and Eastern Europe as well as France and Belgium. Britain suffered less in the physical and human sense, but lost part of its overseas investment. The United States probably gained from the war in the material sense [expansion of production capacity], but also suffered much from human losses.

Thus the war left the Western as well as the Eastern world with strongly reduced production capacities and exhausted stocks and millions of people killed or mutilated. It was the first time in history that even the victors had to conclude that «war does not pay».

3.33 / *Until the Great Depression*

The war had not only left the peoples involved with all the sad human losses and with the material damage described, that is, with strongly reduced production capacity in Europe. It had also created financial disruptions of a serious kind. No government had been able to stick to the ideal rules of war financing, that is, financing out of taxes and real loans; all had to follow to some extent the road of inflation, that is printing money and similar paper documents. People came out of the war with a relatively large amount of

money, therefore, which they had not been able to spend during the war because of rationing, but now wanted to spend. The consequences of this combination of more money with a lower production capacity was a steep rise in prices, especially of raw materials. The workers, whose political influence suddenly rose, as we saw [sub-section 3.13], demanded and got increases in wages, which surpassed the rise in cost of living, and the early post-war years showed, at a magnified scale, the usual development of a «boom», followed by a crisis when it appeared that profit expectations were not fulfilled.

A period followed in which financial chaos prevailed in several respects. This was partly the consequence of the peace terms. Heavy reparation payments, in kind and in money, were imposed on Germany. The German government, faced with the task of buying the reparation goods and collecting the money for the reparation payments in a period when the country had to be reequipped and the workers also wanted their share, was forced into creating an inflation which surpassed anything known in Europe's past. The typical inflationary spiral set in, with rising prices, followed by more demand for money, which again pushed up prices and wages, and so on. Prices went up one-billion-fold [in the European meaning of 10^{12}], and the exchange rate of the mark in terms of gold went down correspondingly. In Austria things were not as bad as this, but even so a tremendous inflation took place. But the victorious West-European countries were not altogether without financial problems, either. France and Belgium suffered as well from the large amounts of money created during and shortly after the war for reconstruction and social purposes and also from the enormous devastations in production capacity. These countries also experienced a process of inflation which reduced the gold value of their currencies to only a fraction of the pre-war value. Inflation always creates many difficulties because it affects some groups of persons much more than others. Very often business gains from inflation but workers are unable to raise their wages as quickly as prices go up; so they lose. But the worst victims are the older persons who must live from a pension or from interest on bonds: they have no influence on economic decisions. As a rule public authorities also suffer from inflation, since tax revenue does not increase as quickly as the prices and wages they have to pay. But there are counteracting forces: the relative burden of interest and repayments on debt diminishes and in the longer run the tax revenues from progressive taxes rise more than expenditures.

Britain, in a relatively better position again than France and Belgium, had other difficulties to face. It would have been natural if her currency had also

been devalued, although perhaps only by a moderate percentage. British monetary traditions being those of the world's most important currency, there were strong pressures, however, to go back for prestige reasons to the old gold standard which had been temporarily given up. The government yielded to these pressures and sterling was again made convertible into gold at the old rate in 1925. This raised the British price level in terms of other currencies and therefore damaged the competitive position of British industry, leading to a stagnation of activity.

The United States had definitely become the world's most important economy. Its production soon recovered from the post-war crisis and prosperity rapidly increased, centered around the new motor car industry. Thanks to some important loans to Germany the United States enabled the latter country to regain strength by modernizing production processes. France too profited from such modernization.

An interesting development took place in Japan. This country clearly had entered the phase of an industrial country; it developed a very modern and competitive textile industry which became an important exporter and provided the necessary foreign exchange to pay for the imports, which are so vital to this country with an increasing population and with few natural resources.

The diversity of influences operating in the various countries and the dislocation of the exchange rates for some years broke up the usual interdependence in economic development. Only when disequilibria had been somewhat smoothed out, around 1928, the old parallelism showed up again and an increase in production occurred in most countries.

3.34 / *The Sad Thirties: The Great Depression*

Around 1928, price levels and currency rates seemed to have found a new equilibrium, corresponding to the changed positions of the leading countries. The worst consequences of the war seemed over. In the United States, now the leading economy, business cycles had been mild since 1921 and a feeling of «eternal prosperity» spread and caused a speculation boom at the New York stock exchange of unprecedented dimensions, fed by the entrance into that market of lots of «small savers». This created an additional demand for luxury goods by those who felt themselves becoming richer and richer as a consequence of the rise in share prices.

A succession of three bumper wheat crops put a considerable pressure on grain markets and a beginning of saturation of the stock market brought hesitation in prices. These factors started a change in speculation prospects

and a downturn of the share market. Demand for luxury goods and motor cars fell and profit expectations for a large section of American business dwindled. The snowball effect of such processes, well known from other crises, made itself felt more intensely than ever before and an unprecedented shrinkage of activity, profits, raw material prices and employment followed. Other industrial countries had similar experiences, partly of an autonomous character, and the Germans were unable to service some of their international loans. This broke the subtle balance of payments equilibrium of Britain, and sterling was finally devaluated in September of 1931, followed by the devaluation of various other currencies. While this stopped the decline in Britain, it further intensified the fall in American and German activity, where unemployment rose to about 40 percent. In both countries political changes took place. In the United States Franklin D. Roosevelt became president and started the New Deal. In Germany Hitler took over and organized a revival of the economy. As we already observed before [sub-section 3.13] business cycle theory was in a rather confused state and a clear agreement among economists about an anti-cyclical policy did not yet exist. This is illustrated by two measures taken to revive the economy, one in Germany by one of Hitler's predecessors, Brüning, who imposed a price reduction on all goods and labour of 10 per cent and the other in the early New Deal days, imposing wage and price rises. Neither was very successful. Around 1932 Germany understood that increased public expenditure was the proper thing to do and the United States came to that conclusion in 1934. Hitler's regime added a number of well-chosen micro-economic controls on foreign trade, whereas the Roosevelt administration had already devalued the dollar, with a similar effect, namely the protection of the balance of payments. After a few years the German nazi-policy had the economically sound but unattractive – to put it mildly – element of rearmament in it.

Around 1935 the three main Western countries were in a modest upturn. Only France and some smaller countries which had stuck to the old gold valuation of their currencies were still stagnating, until they finally followed the example of the others in September 1936.

Recovery in the United States still hesitated mainly because American business did not yet understand the role of government in anti-cyclical policy. They mistrusted the New Deal policy because of the role played by government and were not confident that prosperity could be brought about that way. Their investment decisions were unduly pessimistic and held up recovery. In most countries the level of employment remained highly unsatisfactory.

Social discontent rose and in addition there was the increasing concern about the war Hitler evidently wanted. It came in 1939.

3.35 / *The Second World War*

While it started in a different way, the Second World War in several ways soon became a replica of the First World War; but on a larger scale. Twenty-five additional years of technological and organizational development made possible the «totality» of war. Since it was deliberately prepared from the Nazi-German side, Germany had the advantage and in 1943 occupied a considerable portion of the European continent. For some time the Russians bore the full weight of German military power and Nazi civilian cruelty. The invasion by the allies in 1944 restored the two-front situation which Hitler had wanted to avoid and which in the end caused his defeat.

This war was waged on a larger scale and with greater technological perfection. The economic consequences were correspondingly larger. Some examples may be taken from the German war economy. Of the labour force of around 45 million people in 1944, 9.1 were in military service. Of the remaining 35.9 millions, 10.8 worked in manufacturing industry and it is estimated that 4.0 of these were engaged in military production. National expenditure in 1936 amounted to RM 102 billion, of which 21 was public expenditure. In 1944, of a total of RM 154 billion, RM 92 billion were public expenditure; private investment had gone down from 11 to 2 billion. It has been estimated that 40 per cent of Germany's national wealth was lost as a consequence of the war. For the Western European countries involved in the war, the loss in wealth was less, with the exception of the Netherlands. For the smaller Eastern European countries it was larger.

The total number of human victims has been estimated at 50 millions. For the second time the terrible lesson had been learned that in a modern war there are no victorious countries.

3.36 / *Since 1945*

While the intensity of the Second World War was greater and the economic consequences were accordingly worse, economic understanding had also increased considerably. As a consequence the post-war reconstruction policies were more successful and recovery was more rapid than the aftermath of the first war. It is true that inflation could again not be completely avoided, but a runaway inflation of the German 1923 type did not occur in any of the larger countries. Even so Japan, Italy and France suffered from inflationary pro-

cesses which reduced the gold equivalent of their currencies to those now prevailing. Germany and Japan had some difficult years before American aid put them on their feet again. In Germany the currency reform of 1948 eliminated the lethargy into which the country had sunk after 1945, and was the beginning of a rapid recovery. In 1945 the United States, Canada and Britain were already helping their Western-European continental allies to restart production and consumption. The latter even surpassed the former in the early phases. In 1948 the European Recovery Program or Marshall-Plan started its generous operations, bringing Western European recovery and quick redevelopment. In 1948, the prewar [1938] level of industrial production was reached for the member countries of the Organization for European Economic Co-operation [OEEC] and in 1953 it was surpassed by 50 per cent. In 1958 it had doubled. By that time industrial production of the United States had, by and large, risen to 250 per cent of its 1938 level, but cyclical fluctuations of its economy were more pronounced than in Europe. Real national income in Germany after World War II regained its 1938 level before 1951. After World War I the 1913 level was not reached until 1927[1].

Price rises after the second world war were not too different from those after the first world war, at least in the countries which maintained their exchange rate in terms of gold. This might have been different, since price controls during the war were much more efficient than during World War I. American public opinion was pressing hard for a return to free prices and was so little prepared for the monetary purges applied in several Western European countries, that in 1946 controls were discontinued and inflation given free rein. This was an unfortunate policy which had far-reaching social consequences in Europe.

In Western countries the period since 1945 has been remarkable both for its cyclical or short-run and for its long-run developments. There has been, practically speaking, no return of the business cycle. While immediately after the war several economists and business men feared a reconversion crisis with widespread unemployment, things moved smoothly and unemployment remained at modest levels. The slight cyclical movements which followed were incomparably milder than the pre-war cycles had been. Unemployment could be kept below 3 per cent in Northern and Western Europe.

The rate of economic development was definitely more rapid than between the two wars, when violent cycles dominated the picture, but it was also more

1 MENDERSHAUSEN, *Two Post-War Recoveries of the German Economy,* North Holland Publishing Company, Amsterdam, 1957, p. 10.

rapid than it had ever been before. For more than ten years an annual rate of increase in real national income of some 5 per cent continued. This is the more interesting since taxes on profit had never been so high as after the Second World War. The general impression is that business was confident that the cycle could be controlled and a high rate of increase could be maintained if sufficient investment were made. Some favourable influence must also be ascribed to economic planning, which in several countries [France, Norway, the Netherlands] created a greater awareness of the possibility of developing demand with the aid of proper government policies. Social tensions also have been definitely less than before the war and this has affected output and productivity favourably. Finally the successful attempts at international integration [cf. sub-section 2.27] have had an influence.

The most spectacular example of quick development among industrial countries is the one of Japan. In the last ten years the real national income of Japan increased by some 8 per cent per annum, or more than 6 per cent per capita. New industries have been established and Japan is now the biggest shipbuilder in the world and a supplier of electronics, optical instruments and many more products of its own design. Japanese scientific contributions are increasingly important. More interesting still is the attempt to find ways of life which combine some of these international industrial elements with some of the old Japanese cultural elements.

3.37 / *Life after Fifty Years*

Western economic history over the last fifty years has been full of ups and downs. Years of despair have been followed by rapid increase in prosperity and a wealth of new possibilities has developed. It seems proper to conclude

TABLE 3.37

Income per capita in 1953 dollars for selected Western areas in 1913 and 1957

	1913	*1957*
North America	917	1868
Oceania	572	1110
North-Western Europe	454	790
South-Eastern Europe	200	360
Japan	85	240

Source: L. J. ZIMMERMAN, «Poor and Wealthy Countries» (in Dutch), Albani, The Hague 1960, p. 29/31.

this brief survey of shadow and light by a direct comparison of the average citizen's economic and social position. Some of the most telling indications have been collected in table 3.37.

3.4 / THE SOUTH: STRUGGLE WITH POVERTY

3.41 / *Economic Structure and Trends*

We have already said that because of its economic level and political status the South was heavily dependent on the West for most of the period considered. Only in the last fifteen to twenty years has its development become a goal pursued for its own sake and only just now is the phase of research into the reasons for the South's position and problems reaching completion. We will therefore discuss the characteristics of the current position of the South and its economic history in a systematic way rather than a chronological order. One additional reason to do so is that by their nature Southern economies follow the ups and downs of their main primary products and these are much more different among themselves than the ups and downs of industrial products.

We will first discuss the economic structure and the long-term pattern of development of the South. Their main economic characteristic is a low level of wealth [in terms of land and capital per head] and a low level of skills. As an immediate consequence they have a low income per head. The other characteristic often mentioned, namely, that Southern economies produce mostly primary products [that is, agricultural and mining products] is logically connected with their main characteristic. Viewed from the demand side it is clear that in nations with low per capita incomes people must use a large part of their income for prime necessities. From the supply side it is clear that the products in which they are most competitive must be products using little capital and little specialized skills such as primary products; the more so since almost all of the countries concerned have a tropical climate. Other characteristics of their societies can also be viewed as immediate consequences of their low level of wealth and of skill. One of these is the very unequal distribution of income. As we have already observed [cf. sub-section 2.34] the scarcity of both capital and skills explains the relatively high prices of these factors of production, which makes for great inequalities in income. Such a society, with its immense hardships, can persist only by adherence to philosophies which require stratification – like the caste system – and which praise austerity and resignation for the masses.

Out of low incomes only very small amounts can be spent on anything beyond today's bare necessities of life. Thus, little can be spent on such things as health or education which can bear fruit only after longer periods, and little is saved. This leads to the well-known vicious circles which keep health, skill and investment at a low level, each of them sufficient reason for the continuation of low incomes.

Finally, the trends of the markets in which most of these economies have to sell their products are an additional reason for stagnation. In general the increase in the world demand for primary goods is slower than the increase in the production of industrial products.

3.42 / *Ups and Downs*

With a general trend in market proceeds for their main products, which lags behind the increase in proceeds of industrial products, with few exceptions, the countries of the South cannot easily expand the production of the commodities in which their competitive position is strongest. In addition to this handicap there is another one, namely the heavy fluctuations in the crop yields and the prices of agricultural products, and of a high cyclical sensitivity of the demand for mining products and their prices. The crop yields vary in a random way as a consequence of weather conditions and these irregular, unpredictable swings make it very difficult to maintain an equilibrium in the balance of payments. The proceeds of mining output are somewhat more predictable, but have much the same drawbacks.

Most countries of the South have gone through ups and downs of another type. In the period under discussion the two wars resulted in considerable price rises for primary goods. This temporarily improved the economic position of the South. During the same war periods, however, industrial products also became scarce and often were not available at all. This stimulated the process of industrialization, especially in Latin America, but also elsewhere. When peace returned there was the double difficulty for the South that the prices of primary products fell again and that competing industrial products became available at lower prices. Protection of manufacturing industry was the result in many countries.

3.43 / *Financial and Monetary Implications*

The unfavourable characteristics of the main markets of southern economies have influenced internal financial and monetary policies. However, generalization on this aspect is not possible. There are many differences between

countries due to traditional attitudes toward financial and monetary policy. India and the United Arab Republic provide examples of much better policy than one finds in the average developing country. The general picture is one of weak financial and monetary policies. This is due partly to the low level of income, to the existence of privileged classes not accustomed to high tax levels, and to the absence of a civil service paid sufficiently well to be reliable. Now that the desire for development has become stronger the situation has become more difficult. There is continuous pressure to increase public expenditure on development projects, and a permanent tendency towards a budget deficit and hence for national expenditures to surpass national income. This is equivalent to saying that there is a continuing tendency towards a deficit on current account in the balance of payments with foreign countries. As a consequence gold stocks often have been exhausted, except for a low minimum retained for emergencies. The persistent pressure on the balance of payments makes it necessary to take all conceivable measures to reduce imports. Although devaluation might be the simplest solution, rather complicated import controls are preferred, often because some social justice in the restrictions which is difficult to obtain in other ways is aimed at. As a rule social insurance or income taxes are not highly developed. Measures which are sometimes used are multiple exchange rates, that is, a system with a lower dollar price in terms of national currency for imports of necessities or raw materials than for luxuries or finished products. Quota systems are also frequently applied, and long delays in payments are a regular feature. All of this does not encourage foreign trade with these countries.

Some of the Latin American countries have gone through several decades of inflation of a rather violent character, with annual price increases of 25 to 50 or more per cent. Brazil and Chile are two outstanding examples. Such situations are not desirable. They stimulate speculative activities and provide to enterprising individuals such easy ways of becoming rich that the slower and more cumbersome way of gaining wealth by organizing production is neglected, at least by some groups of entrepreneurs. In other words, some of the worst features of capitalism are still widespread realities in these countries. This explains the radical ideas held by part of the opposition to the governments currently in power.

3.44 / *Levels of Poverty*

Our general terms such as «developing countries» or «the South» should not let us forget that within this group of countries there are wide differences and

that poverty exists in all sorts of shades. Income per head may be less than $100 in the poorest and come close to $300 in some of the better-off developing countries, the latter on the border line of developed countries. Even though there are price level differences, real conditions in two countries such as Ruanda and Venezuela are not comparable. Latin America as a whole is at a much higher level than Africa and Asia. Some of the most relevant among the available statistics are collected in table 3.44.

TABLE 3.44

Gross national product per head in U.S. $, 1961
[1] Nominal and [2] Real, for Selected Countries

Country	[1]	[2]	*Country*	[1]	[2]
Ghana	140	210	Venezuela	645	645
Morocco	140	210	Bhutan	46	92
Tunisia	160	240	India	70	140
Gambia	55	99	Indonesia	99	150
Nigeria	84	134	Pakistan	62	125
Algeria	190	285	Malaya	368	552
Madagascar	101	151	Hong Kong	170	306
Ruanda Urundi	69	117	Jordan	126	189
Bolivia	87	122	United Arab Republic	150	225
Argentina	533	799	Gaza Strip	50	101
Brazil	268	375	Greece	383	613
Cuba	413	516	Spain	321	514
Mexico	297	415	Turkey	223	334

Source: P. N. ROSENSTEIN-RODAN, *International Aid for Underdeveloped Countries*, The Review of Economics and Statistics, XLIII [1961], p. 126.

3.45 / *Recent Successes*

Since World War II more deliberate action has been taken by the West to further the economic development of the South. During the colonial era such action was not absent. «Mother countries», as the strange phrase runs, did invest fairly significant amounts of capitals in these economies. It is true that they did so in their own interest. But it is also true that the interests of both mother country and colony were parallel up to a certain point. The crea-

tion of mining enterprises, or plantations, or railways, increased the incomes of the colonial countries also, even though payments of interest or dividend were made. If critics of colonialism maintain that mining enterprises exhaust the countries' wealth – which is true – this is due to a misconception of costs of exhaustible resources which the mother countries also applied to their own countries and not an intentional exploitation. Even so it requires compensation.

Even though the colonies' development was not neglected by the colonizing countries, it was not taken care of to an extent and in a way that today we would consider satisfactory. In many colonial countries total production rose hardly by more than the population, leaving the income per capita practically stagnant. It should be added that the medical improvements which were introduced usually increased the rate of growth of the population. It remains a question of taste, and hence of doubt, whether a more rapid increase of a population at subsistence level is better than a less rapid increase.

Since the Second World War some of the countries of the South adopted deliberate development policies, as we have seen. An outstanding case is India with her 400 million inhabitants. These policies were not without successful results. As already observed, during the ten years of the first two Five Year Plans the real income per head of India's population increased by 15 per cent, or some $1\frac{1}{2}$ per cent per annum. This may not seem very much, if we think of the absolute figures. Income per head amounted to some $60 in 1951; 15 per cent of this is $10 per head. Yet the pace of development was not quicker in the industrial countries during most of the nineteenth century. In the ten years discussed India did establish a number of important new industrial plants. Its later plans, beginning with the Third Five Year Plan, gave careful consideration to the encouragement of technical education and the establishment of other sectors of the metal industries both of which are vital to future growth.

Among the smaller developing countries, some of the more successful have been Iraq, Venezuela, Israel, Turkey, Rhodesia and Nyasaland, Greece, the Philippines, Burma, Mexico, Columbia and Ecuador, all with a rate of growth in gross national product of more than 5 per cent per annum between 1950 and 1958. It is difficult to give here an appraisal of the progress of each of these countries and it is well known that some of them have stagnated after 1958; for instance Venezuela and Turkey. But the figures quoted above show that substantial increases in production have been made possible.