

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Recent Economic Changes in the United States, Volumes 1 and 2

Volume Author/Editor: Committee on Recent Economic Changes of the President's Conference on Unemployment

Volume Publisher: NBER

Volume ISBN: 0-87014-012-4

Volume URL: <http://www.nber.org/books/comm29-1>

Publication Date: 1929

Chapter Title: VOLUME 1 Recent Economic Changes: Introduction

Chapter Author: Edwin Gay

Chapter URL: <http://www.nber.org/chapters/c4951>

Chapter pages in book: (p. 1 - 12)

RECENT ECONOMIC CHANGES

INTRODUCTION

BY EDWIN F. GAY

There is a measure of truth in the statement that the perspective of distance is analogous to that of time. The foreign observer imports his own preconceptions, and from the nature of his situation is likely to be inaccurate as to details, but he sees things in the mass. He generalizes on inadequate data, as must the historian, but it is often instructive to see through his eyes. What to the native is negligible matter of daily use and wont is lifted by the intelligent foreigner to the plane of a national characteristic or an important trend of social development. There have been many such travelers in the United States since the beginning of its history, and diverse have been their observations, but never has the flow of visitors and comment been so great as in recent years. Inquirers and writers from many countries, official and unofficial, literary folk and technicians, business men and representatives of labor, have come singly and in groups. During the last six or seven years, books, reports and articles, in many languages, describing, explaining or criticizing the economic and social situation in the United States, have appeared in unparalleled quantity. This has been heralded as the new Discovery of America.

Foreign Opinions.—Despite much divergence of opinion among these contemporaneous observers as to causes and conditions, there is marked unanimity as to the fact which is chiefly responsible for this extraordinary interest. They agree that of late there has been an “immense advance in America.”¹ Our visitors are “impressed, everywhere and every day, by the evidences of an ebullient prosperity and a confidence in the future.”² Even a skeptical Australian journalist who begins by doubting the very fact for which all other visitors are seeking the cause, namely the existence of high wages in the United States, ends by saying that “America has been experiencing a period of unusual industrial prosperity. Millions of people have found their earnings increasing at a more rapid rate than their standard of living.”³ The critical German trade-unionists,

¹ Sir Josiah Stamp, *Some Economic Factors in Modern Life*, 1929, p. 121.

² Ramsay Muir, *America the Golden*, 1927, p. 1.

³ H. G. Adam, *An Australian Looks at America*, 1928, pp. 35, 116

in their careful report, believe that American prosperity has within it the seeds of its later undoing, but they bear witness to the high earnings and effectiveness of the American worker, his mobility and freedom from class antagonism, and above all to the prevalent well-being and optimism of Americans in general.⁴ A German industrialist declares that, with an economic supremacy characterized by high wages and machine progress, the United States has become "the first power of the world."⁵

The consensus of foreign opinion concerning the present great American prosperity is evident to any student of this recent literature. But, though it might be interesting, it would certainly be a difficult and a time-consuming task to trace all the divergences of point of view and the differing degrees of emphasis as to the causes of that prosperity. Some of the travelers have returned home to spread the gospel of mass production, of automatic machinery and conveyers. But *Fordismus* and *Rationalisierung*, the slogans of these evangelists, have also been acrimoniously criticised. Ramsay Muir asserts, indeed, that "the methods of mass-production have not been introduced, and cannot be introduced, in the greater part even of American industry," but he elsewhere lays stress upon the factors of great natural resources and a great domestic free-trade market which have made mass production possible for the United States. England, by contrast, lives "by supplying the needs of world-wide markets, infinitely variegated," and must therefore make quality, not quantity, its aim.⁶ Dr. Heinrich Ludwig complains that his German compatriots have, since the war, studied American industry too superficially. Ford, he declares, is not typical of the new management methods in the United States, and scientific management (*Rationalisierung*) has been misconceived in Europe as concerned primarily with mechanical equipment. It is not American technique but American psychology which should be studied. Its chief characteristics, he asserts, are optimism tempered by statistics and experiment; its aim is stabilization; the secret of American success is its study of the market.⁷

America has become the arsenal whence weapons are drawn for both sides of embittered argument. It is, for instance, to some European protectionists a demonstration of the benefits of a high protective tariff; to other writers it is a proof in its free-trade continental market of the correctness of the commercial principles urged by the *laissez-faire* economists;⁸ and it is also a reinforcing support to the advocates of a

⁴ *Amerikareise deutscher Gewerkschaftsführer*, 1926, pp. 29, 48, 95, 193, 198.

⁵ Carl Köttgen, *Das Wirtschaftliche Amerika*, 3rd edition, 1926, p. iii.

⁶ Ramsay Muir, *op. cit.*, pp. 73-76, 137.

⁷ Heinrich Ludwig, *Systematische Wirtschaft, Amerikanische Methoden, Deutsche Verhältnisse*, 1928, *passim*.

⁸ Yves-Guyot, "Les États-Unis d'aujourd'hui," *Journal des Economistes*, Vol. 87, (1927) p. 15.

European *Zoll-Verein*. Its high wages are both the cause and the result of its prosperity.⁹ The labor situation of the United States, so puzzling to the foreign workers who are surprised at the friendly working spirit in American labor-relations,¹⁰ furnishes grounds both for attack and defense in respect to trade-union policy. Some observers emphasize American individualism,¹¹ others our spirit of co-operation, our "unconscious socialism,"¹² while one economist shrewdly remarks that the pioneer's struggle with the wilderness simultaneously developed both of these apparently incompatible traits.¹³ We are assured that America is a land of contrasts, with great diversity of regions and races, and also that it is the home of a nation remarkable for its uniformity of tastes and its passion for standardization. Its people are massed increasingly in monotonous repetitive machine-labor; yet they show high intelligence and mobility in a free field for ambition. The condition of the farmer in the United States is called by Ramsay Muir one of the "spots on the sun" of the American heaven, and he thinks that in American agriculture, "there seems to be an arrest of development."¹⁴ But a German writer, not less observant, works out a coefficient of welfare higher for the United States than for Germany on the basis of the fact that while in Germany 43.3 per cent of the gainfully employed are required to feed its population, in the United States 29 per cent suffices to perform the same service. The agricultural production per man in the United States, he states, is 2.46 times greater than in Germany. Not counting tractors and other agricultural machinery which have brought such an accession of power and wealth-production to the American farmer, in the item of horses alone he finds the number per agriculturist in the United States to be 3.7 times that of Germany. To him, agricultural America seems "a blessed country."¹⁵

It is needless to enlarge on the numerous clashes in the testimony of the foreign observers. It is more to the point to indicate that, despite their varying origins and predilections, there is a considerable degree of concurrence, although with differing emphasis, regarding certain main factors in the recent economic and social experience of this country. These factors may here be briefly summarized.

1. The natural resources of the United States are unrivalled, especially those which are fundamental to modern large-scale industrialism. There

⁹ Exponents, illustrating these contrasting views in the German pamphlet-war, are Tarnow, President of the German Woodworkers' Union, and the *Vereinigung der deutschen Arbeitgeberverbände*.

¹⁰ See the Daily Mail Trade Union Mission to the United States, 1927.

¹¹ British Official Report, 1927, p. 15.

¹² Julius Hirsch, *Das Amerikanische Wirtschaftswunder*, 1926, p. 229.

¹³ Carl Köttgen, *op. cit.*, p. 56.

¹⁴ Ramsay Muir, *op. cit.*, pp. 16-19.

¹⁵ Carl Köttgen, *op. cit.*, pp. 9-15.

is not only a continental width of fertile land, but there exist also marvelous deposits of coal, petroleum, iron and other essential minerals. The more critical of the foreign visitors are inclined to stress these bountiful gifts of nature, others weight more heavily the energy and organization which has utilized them.¹⁶

2. In this vast expanse of territory, historically so recently opened to European migration and settlement, labor is relatively scarce and wages are relatively high. The situation may be tersely stated, that "because American resources are abundant, they are wasted; because American labor is dear, it is economized."¹⁷ In the present undeveloped state of international wage statistics, it is natural that estimates of the higher range of American wages should vary. André Siegfried, in his somewhat impressionistic manner, says they are "often ten times as much as those of even a European,"¹⁸ while the more conservative German trade-unionists put the American wage level at about three times that of Germany and real wages two and a half times as high. But the European writers agree that there is in the United States a markedly higher standard of living and that this profoundly influences the American outlook.¹⁹

3. In consequence of the juxtaposition of rich resources and an inadequate labor supply, there has resulted a progressive development of labor-supplementing machine equipment, in agriculture, transportation and industry, and also a remarkable utilization of power. To some, this seems to be the chief explanation of the greater productivity of the American wage earner and hence of his higher standard of living.²⁰

4. Many observers hold that of even greater importance than the technical progress is the great domestic market, untrammelled by barriers of tariffs, language, or tradition of local or national jealousies. The resulting "mass consumption" makes mass production possible and profitable. The nation-wide market necessitates expanding agencies of distribution which are highly remunerative to their originators and which

¹⁶ I quote once more from Ramsay Muir (*op. cit.*, p. 2): Once these resources were developed "by means of man-power drawn from Europe and capital largely drawn from England, nothing could prevent America from becoming the most prosperous country in the world . . . This is the main, and the abiding, cause of American prosperity. It cannot be imitated." Julius Hirsch, (*op. cit.*, p. 27) does not hesitate to make a numerical ratio between the factors of nature and organization. He ascribes about two-fifths of the greater American productivity to natural resources and three-fifths to higher efficiency.

¹⁷ L. Chiozza Money, *L'Europe Nouvelle*, 1926, Vol. 9, p. 1528.

¹⁸ André Siegfried, *America Comes of Age*, 1927, p. 160.

¹⁹ *Ibid.*, p. 154. Siegfried asserts that the "enormously higher" standard of living in the United States is "now the chief contrast between the old and new continents."

²⁰ Cf. *The Economist* (London), Vol. 106, p. 522.

absorb a growing proportion of the gainfully employed.²¹ The character of the unified American market frequently leads to foreign comment on its surprising uniformity of demand. The American business man, according to a French point of view, "has standardized the individual in order to be better able to standardize manufacture."²²

5. The problem of correlating abundant resources, expensive labor, and unsurpassed machine equipment, to serve the greatest of markets, has put a high premium on management and organizing capacity. Scientific management in industry and commerce, apparently the resultant of emerging pressures, is thought by many of the foreigners writing on recent economic changes in the United States to be the chief contribution which this country is making to economic welfare and to be the key to its success. It is seen that the American effort is aimed at the "optimum" result, the proper balance of all the many factors in a business enterprise.²³ The preoccupation of the old-time manager with wages has given way to a concern for the manifold elements entering into unit costs. Such far-sighted management is becoming highly specialized; a new profession is entering into the structure of American industry.

6. In order to obtain the effective utilization of the worker's effort and to lower costs, American management has begun more systematically to improve industrial relations. It seeks to reduce the turnover of labor and the friction of labor troubles which disturb the smooth-running mechanism of industry. In a number of the larger concerns departments have been established to study and to deal with this problem, and this new specialization of personnel management has attracted favorable foreign attention. Some observers regard "the achievement of industrial peace between labor, capital and management"²⁴ as among the leading causes of American prosperity. But even those who speak in cooler tone agree that a great improvement in industrial relations has been effected. It is generally recognized that there has been a voluntary assumption by employers of heavy social charges in the establishment of benefits of various kinds, and there has continued since the war a considerable

²¹ The German trade-unionists remark that advertising, the appropriate tool for modern salesmanship in a wide market, is everywhere, in England, France, Germany and the United States, from 2 per cent to 5 per cent of the total cost of production. The larger absolute amount thus expended in the United States is due merely to the greater size of the market. But the size and uniformity of this market has led in the United States to more highly developed sales policies. (*Amerikareise*, p. 66.)

²² Pichot and Fournier, "Communication sur le voyage aux États-Unis," *Bulletin de la Chambre de Commerce de Paris*, July 7, 1928.

²³ See especially the remarks of the German trade unionists, *Amerikareise*, p. 49.

²⁴ P. A. Molteno, "The Causes and Extent of American Prosperity," *Contemporary Review*, August, 1927.

interest in plans for workers' representation.²⁵ A corresponding shift in the labor-union attitude has also taken place which differentiates the American labor movement from that found in any other country. The new labor-union policy recognizes not the identity but the mutuality of interest between the two parties to the labor contract. This approach to better understanding on both sides is itself a sign of general change in the temper of the industrial community. The human aspects of the relationships of management not only with labor, but also with customers, competitors, and the public, are more stressed in word and in practice. There is a growing sense of social responsibility.

7. A related factor in American economic efficiency is the openmindedness of American management. Many visitors note with appreciation the freedom of access and information which they have found.²⁶ "What is raising the whole standard of management in the United States is the habit among employers of discussing their problems openly among themselves, of comparing the methods of one industry with those of another, and of founding associations for research and conference . . . They are not afraid to teach each other or too proud to learn from each other."²⁷ They are giving increasing support to scientific research and looking with respect upon university training.

8. Emphasis is unanimously laid upon the dominant national trait of optimistic energy, as an underlying element in these various phenomena of American economic activity. The individual in America is mobile as to place and calling; he is moving upwards.²⁸ He sometimes appears docile, but it is because he is tolerant of social inconveniences which his experience tells him are only incidental and temporary. The way to education and to promotion is wide open; indeed many ladders to advancement are available and their rungs are all intact, so that he may climb who will. We are told that this is the inheritance of the frontier; in spite of the fact that the agricultural frontier has disappeared, our visitors find still strongly persistent the same characteristic spirit of indomitable hopefulness.

Historical Parallels.—To the historical student many of the links in this interlocked chain of causation will be familiar. At least the premises from which our later developments may logically be derived lie far back in the national history. The vast resources have stimulated American imagination since the earliest settlements on the Atlantic coast-line;

²⁵ One of the best studies of the subject is H. B. Butler's report on *Industrial Relations in the United States*, International Labor Office, 1927.

²⁶ See, for instance, A. Detoeuf, "Les conditions de production américaine," *Revue politique et parlementaire*, Vol. 128; Carl Köttgen, *op. cit.*, p. iv.

²⁷ "American Industry and its Significance," *Round Table* (London), 1926, Vol. 17, pp. 264.

²⁸ On this point, note especially the testimony of the German trade-union report, which was based upon contact with American workers. *Amërikareise*, p. 95ff.

Washington, Hamilton, Gallatin and a long line of political leaders have voiced the national ambition for their exploitation. The visitors from Europe throughout the nineteenth century have constantly discerned the conditions of boundless opportunity limited by inadequate labor-supply which were the basic elements in the American economic problem, and they have described the same buoyant, experimental spirit moving toward its solution. Writers of the colonial period noted the competition to secure labor and its result in relatively high wages; they discovered that the rule imposed by the conditions of American agriculture, cheap land and expensive labor, was to make the goal not the greatest produce per acre, but the greatest product per man. The travelers of the early nineteenth century were struck by the skill, versatility, intelligence and ingenuity in mechanical inventions to be found among Americans of all ranks and conditions.²⁹ Mrs. Trollope, in 1832, conceded a grudging admiration for the "vast continent . . . and a busy, bustling, industrious population, hacking and hewing their way through it . . . nothing can exceed their activity and perseverance."³⁰ Early writers touched a note which later visitors, like Herbert Spencer, Matthew Arnold and Moritz Bonn, were to echo: "The mechanical arts are of necessity in constant progress, energy and ingenuity have ample scope, but the moral greatness of man is nearly undeveloped."³¹ The elasticity and resourcefulness shown in time of business crisis was noted by Captain Marryat who witnessed the panic of 1837.³² Later, just after the panic of 1857, Sir James Caird also wrote of the Americans: "though they may sometimes have a setback for a time, they will soon rebound and take a fresh start . . . there is plenty for all . . . The laboring population in America is not stable, it is a shifting, unsteady, improving, advancing mass."³³ Most of those who studied the United States before the Civil War, like those who came after, found a people imbued with a passion for work and regarding "business" not only as the absorbing concern of life but as the social activity most worthy of emulation and reward. To the cultured European, with his background of leisure as a social ideal, the concentration of Americans on their task of subjugating and organizing the continent has often appeared, naturally enough, to be at the best a regrettable undervaluing of higher faculties and at the worst a frantic, ignoble pursuit of money. But the settlers in this country, with their imported standards of living and their ethical tradition to uphold and strengthen in the face of formidable physical

²⁹ William Cobbett, *A Year's Residence in America*, London, 1818, Pt. II, p. 322; Pt. III, p. 528; Lt. Francis Hall, *Travels in 1816 and 1817*, Boston, 1818, pp. 176, 226; Fr. List, *Gesammelte Schriften*, Ed. L. Häusser, Vol. I, p. 148.

³⁰ Mrs. Trollope, *Domestic Manners of the Americans*, London, 1832. Vol. II, p. 136.

³¹ T. C. Grattan, *Civilized America*, London, 1859, Vol. I, p. 104; Vol. II, p. 105.

³² Captain Marryat, *A Diary in America*, 1839, Vol. I, p. 49.

³³ Sir James Caird, *Prairie Farming in America*, 1859, pp. 94, 117.

obstacles, were obliged to develop qualities that made not merely for survival but for the mastery of their environment.³⁴ With a supply of labor and capital always inadequate to meet the growing needs, they brought into play enhanced energy and alert ingenuity, and they eagerly seized and improved upon the new instruments of the Industrial Revolution. This was a one-sided development, for to them business became not a means to an end but an end in itself. But it became and has remained their greatest work of creative organization. Out of the historical necessities of the American situation have sprung the present economic structure, the social values and the peculiar national traits of the United States. Whether these have taken anything like a permanent mould it is too soon to say. It is certain that another century of development, under the altered conditions which the existing generation is witnessing, will blend new traits in the composite which is called national character. But prophecy's surest foothold is an intimate knowledge of past and present, and that knowledge as yet is not sure enough.

It has seemed worth while to place a few of the earlier travelers' observations beside those of the present time in order to emphasize the basic continuity of the American problem and of the economic and social organization which has been and is being evolved to meet its conditions. The present situation of the United States, remarkable as it appears to the inquiring stranger, may be regarded in future times as but one interesting stage in a lengthening series of somewhat similar episodes characterizing the economic history of this and other modern nations. The Industrial Revolution, of which this stage is a part, was not merely a sudden burst of industrial and commercial activity, occurring in England just before the threshold of the nineteenth century, and spreading by transmission or diffusion at successive intervals to other countries. It was rather a new organic growth, utilizing new powers over nature, and expanding over the world with an uneven but continuing acceleration. The external evidences of this growth we can visualize, but its inner processes we do not yet understand. The successive phases of its development we have only begun to analyze. In a living organism there are constant principles of change, could we but discover them, but there are, strictly speaking, no parallels—only general similarities. Each phase, though the fundamental processes of change are continuous, has its individual characteristics, its special direction and rate of movement, and its own "new" elements. Analogies must, therefore, always be accompanied by a warning proviso. Thus, when Ramsay Muir finds a likeness between "Detroitism," and early Victorian Manchesterism, he immediately adds that Detroitism is Manchesterism "adapted to new conditions."

³⁴ Michel Chevalier, *Lettres sur l'Amérique du Nord*, 1837, Vol. I, pp. 56, 84; Vol. II, pp. 374, 377; Alexis de Tocqueville, *De la Démocratie en Amérique*, 4th Ed., 1837, Part II, Vol. I, p. 70; Vol. II, p. 205.

And so, when we look back over a century of our own economic history for analogous periods of fairly continuous advance, without too minute regard for the fluctuations of the business cycles, we find certain groups of years which have points of likeness, and also of unlikeness, to the experience of the United States since 1922. There have been four previous periods of efflorescence. These correspond approximately to increases in contemporaneous economic activity in Western Europe. The first of the four periods of marked acceleration set in about 1825, with the recovery from the great fall of prices which followed the end of the Napoleonic wars, and, although there was one sharp break in 1834, this period of activity culminated in the boom of 1836. Then came the prostrating panic of 1837, the western crisis of 1839, and years of depression. Again, from about 1849 to the panic of 1857, broken by a mild recession in 1854, there were successive years of unprecedented prosperity. Immediately after the Civil War there was a time of hectic prosperity and great speculative activity, but with too many disturbing factors to rank the stretch from 1865 to 1879 among the notable periods. But from 1879, through the "fat eighties," though with recessions, to 1893, we may find a third remarkable forward movement. From 1898 to the crisis of 1907 there was a fourth long run of prosperity. In this case, the period of severe depression following the crisis was remarkably brief, and the country had several years of undramatic fluctuations before the curtain rose for the tragedy of the Great War.

Two of these four major periods, the second and fourth, were accompanied by new gold discoveries and rising price trends; during the first period, from 1825 to 1837, prices were gradually falling, and the third, from 1879 to 1893, experienced a marked and steady drop in prices. All of them show remarkable advances in the exploitation of the national resources, notably land occupation in the first three periods; in the last three, coal, iron and petroleum production at an accelerating rate in a world comparison, gold and silver production at a diminishing rate; in the last two periods the other mineral resources, copper leading, come into greater prominence. With each forward surge the demand for labor has grown and immigration has responded. Despite a migration of colossal proportions, such as the world had never known, the demand for labor was nevertheless maintained. Each period saw an increase in real wages, though more lagging and less pronounced than that which we have recently witnessed. All four periods contributed notable inventions and methods for economizing and supplementing human labor. With developing pressure there was a difference in the main direction of technological advance, earlier toward transportation and horse-driven agricultural machinery, later toward industrial equipment and a great extension in the mastery and use of power. The steady growth of the vast domestic market led in each period to inevitable changes in market-

ing and credit organization; the "orthodox" system of distribution, with its wholesaler, local jobber, and retailer, was clearly under strain in the second period and beginning to break in the third, while new forms and relationships were being established. Each phase of activity is marked by development of the banking system to meet the demands of rapidly growing industry and commerce; and each concluding phase of crisis, 1837-1839, 1857-1860, 1893-1896, 1907, gave the impulse to banking and monetary reforms. The pressure of expanding markets and of technological opportunity was necessitating even more conspicuous transformations in factory organization and in magnitude of enterprise. These changes, with the exploitation of natural resources on an ever-enlarging scale, called into being successive groups of business leaders, often, at each first break into new fields of opportunity, sharp and unscrupulous, ruthless and daring. Beside the great merchants of the earlier period there swarmed the new growth which Charles Dickens pilloried, but out of their ranks came the outstanding personalities, organizers of industry and finance, the railroad and lumber "barons," the steel "kings," the meat-packing and oil magnates of the third period, and the leadership, more sobered by power and responsibility, of the fourth. Finally, throughout all the four great waves of advance, and even in the troughs between, there has always been felt that upward movement of forceful energy, of optimistic ambition, which our foreign observers have so constantly noted.

So rapid a sketch does but faint justice to the many and complicated aspects of our economic development, and it can only indicate the answer, if answer be at all possible, to the question of similarity between our present phase and those preceding it. Fuller studies, both qualitative and quantitative not only of business cycles but of longer trends, are required, and there is reason to believe that the interest which these studies are exciting will result in more exact knowledge even of earlier periods where the source material is relatively scanty. But it will serve our present purpose to point out that most of the eight significant features of the existing economic conditions in the United States upon which we have found our foreign visitors in substantial agreement are also characteristic of former major periods of prosperity in our history. The fundamental conditions of our existence on this continent have thus far remained substantially unchanged, and the responses have therefore been similar, not so much in external form as in their essential character. Even the successive maladjustments of economic growth show, behind their external dissimilarities, an underlying likeness. With superabundant natural resources, for example, we have always been open to the charge of wastefulness, and this is easily explicable, but with insufficient man power it seems, at first thought, curious that we are now and have ever been wasteful of human life. That we should permit the

rate of accident and crime to remain so much higher than in other civilized nations may spring from the reckless forcefulness with which we have attacked the difficulties of expansion. But there was a sign of change in the fundamental conditions of our national life when there emerged the conservation movement for the natural resources, and the slogan "safety first" for human life. Another serious maladjustment has been constantly observable in the extreme to which we have carried the swings of prosperity and business depression, the fierce bursts of speculative activity and the sharp reactions. Again, our environment and its needs may help to explain this feverish pulse-beat; yet here also another slogan, "stability," may be symptomatic of coming fundamental change. It is, furthermore, highly characteristic of all our periods of expansion that the rapidity and vigor of growth of some elements is so great as seriously to unbalance the whole organism. Each previous phase of prosperity has had its flourishing "new" industries, a different group each time, and each period has seen, or failed to see, other suffering members seeking readjustment or reduced to atrophy. With each successive advance, for instance, there has remained a farm problem and agrarian discontent somewhere in the rear. These rough dislocations in the past have made us exceptionally prone to scrap machinery and men. But quick adaptation and rapid mutation, perhaps biologically useful, our industrial society is now commencing to regard with more social concern.

The shiftings of psychological attitude, here indicated, seem to suggest that something distinctly different from our former experience is taking place. The chief characteristics of the present economic phase, agreed upon by our numerous visitors from abroad, are, it is true, evolved logically from what has preceded, and we are still finding answers along similar lines to a similarly constructed problem. But there seem now to be differences of degree which approach differences in kind. In this sense we may say that the unprecedented utilization of power and its wide dispersion by automobile and tractor, in which this country leads the way, is a new addition of enormous potentiality to our resources. With the general increase of wealth, the growth in the number of millionaires has been accompanied by a remarkable rise in the real wages of industrial workers, and a wide diffusion of investments. The profession of management is clearly emerging, and there is visible an increasing professional spirit in business, which springs from and entails recognized social responsibilities. The "self-policing" of business, with its codes of ethics, has been assisted by the recent development of trade-associations and the increasing influence of research and professional education. The strength and stability of our financial structure, both governmental and commercial, is of modern growth. The great corporate development of business enterprise, well marked in the fourth period of expansion, has gone on to new heights. It may be creating, as some think, a new type

of social organization, but in any case the open-mindedness of the public, and of the state which is its instrument, toward this growing power of business corporations appears to be novel in American history.

Here are the beginnings of new answers to the old problem. But more than this. Some of the basic elements of the problem are evidently in process of change. The resources of the country, still enormous, are no longer regarded as limitless; the labor of the world is no longer invited freely to exploit them. The capital flow has turned outward; private and public interests and responsibilities have a new world-wide scope. These changes must have far-reaching consequences and entail further and more perplexing adjustments.

But with such prognostications as to the possibilities of the future, or with recommendations as to control of tendencies of which the symptoms seem now discoverable, the National Bureau of Economic Research is not concerned. As a purely fact-finding organization, it has been employed, with the enlistment of a staff of specialists, in bringing together in summary form the best information it could find as to the recent economic experiences of the United States. It has not undertaken to make primarily a study of business cycles for the years studied in this report, although a brief examination of the period 1922-1929 shows that the cyclical fluctuations have been notably moderate. The National Bureau believes that the range of social vision may be widened and the sense of direction in economic and social change may be surer as a result of such periodic surveys as it has been invited to make. The difficulty of such an undertaking is obvious. When even the visible variables are so numerous and so differently weighted, and when proportions and valuations are rapidly changing, judgment as to what is most significant is subject to error. The survey of a shifting, dynamic complex must for purposes of study and presentation be broken into its chief component elements and thereby the reality of the interlocking relationships of all the parts may be obscured. Yet the task, even though at best it can only be imperfectly executed, is worth trying. The attempt which has therefore been made, in the chapters which follow, to furnish as objectively as possible the materials for a study of the recent economic changes in the United States, is justified by considerations both of practical utility and of theoretical interest.