

and Canada lag but a little behind these European powers in conformity.

"Austrian cycles were being assimilated closely to those of her western and northern neighbors in the decade before the war. Even British India and Japan have followed the European pattern of cycles without very striking divergencies.

**Rough Parallelism Appears**

"Whatever the causes of the recurrent fluctuations in economic activity may be, the annals suggest that these causes become active in all communities where there has developed an economic organization approximating that of western Europe. There appears to be a rough parallelism between the stage attained in the evolution of this organization by different countries, and the prominence of business cycles as a factor in their fortunes.

"One characteristic of the type of organization in question is the wide area over which it integrates and coordinates economic activities. Bare as they are and short their span, the annals reveal a secular trend toward territorial expansion of business relations and a concomitant trend toward economic unity.

"For example, the American annals show how often the fortunes of the North, the South and the West diverged from one another in the earlier decades after the adoption of the Constitution, and how these divergencies have diminished in later decades.

**Unity of Fortune**

"Not that business is ever equally prosperous or equally depressed in all states of the Union even now: always there are perceptible differences, and at times the differences are wide, particularly among the great farming "belts." Yet the annals picture the vastly greater population of today, spread over a vastly greater territory, as having more unity of fortune than had the people of the thirteen original states and the frontier settlements in 1790-1820.

"Broadly speaking, the annals support a similar conclusion for the world at large. The network of business relations has been growing closer and firmer, at the same time that it has been stretching over wider areas.

"The annals allow us to catch some glimpses of this double trend within the borders of a few countries besides the United States, and they show it clearly in the relations among different countries.

"As American business is coming to have one story, diversified by agricultural episodes, so, before the war shattered international bonds for a time, world business seemed to be approaching the time when it too would have one story, diversified by political and social as well as agricultural episodes in different countries."

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An Organization for Impartial Investigation

**NEWS-BULLETIN**

of the

National Bureau of Economic Research, Inc.

To Find Facts Divested of Propaganda

No. 21

474 West 24th Street, New York City

November 1, 1926

**Annals Reveal Growth of a New World Economy**

**International Forces Tending to Standardize Business Cycles**

**Conspectus of Business Cycles in Seventeen Countries**

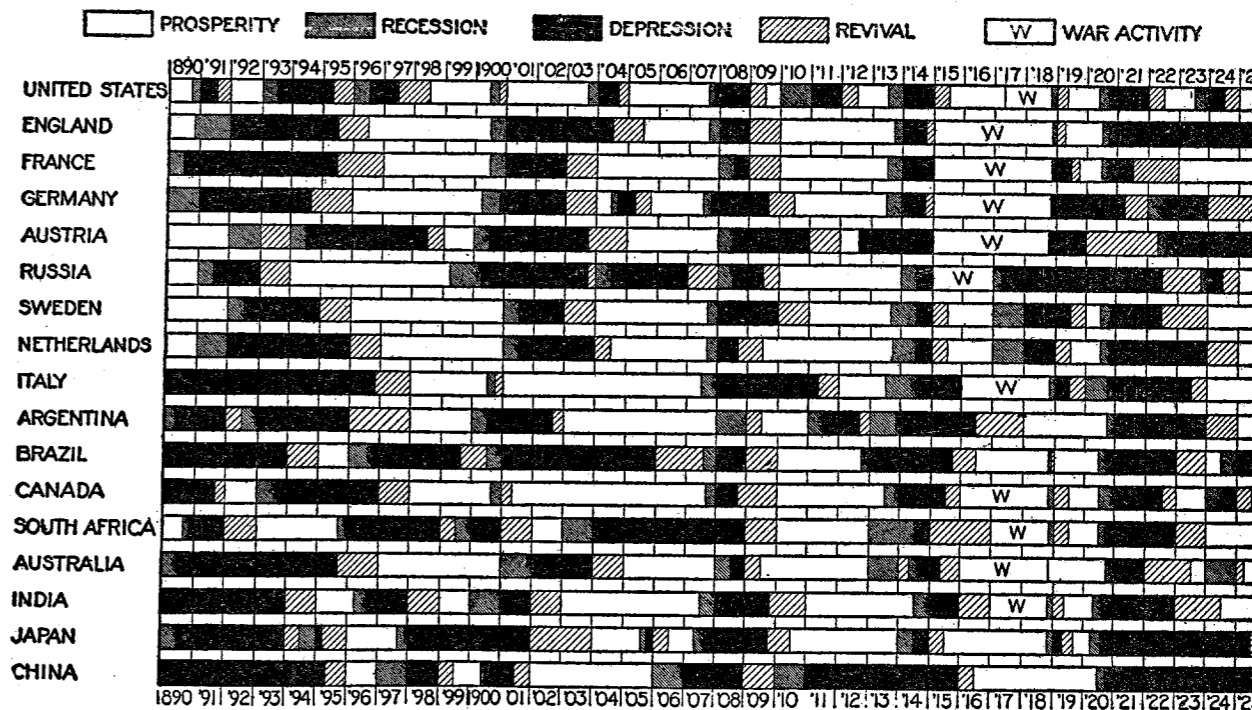


Chart from *Business Annals*, copyright 1926, National Bureau of Economic Research, Inc.

"A TREND in the direction of a world economy, in which all nations will prosper or suffer together, is discoverable today," says Dr. Wesley C. Mitchell, Director of Research of the National Bureau of Economic Research, in an analysis of the business records of seventeen countries for periods ranging in some instances as far back as 1790, which were compiled by Dr. Willard L. Thorp, and published by the National Bureau of Economic Research under the title *Business Annals*.

**Conspectus Facilitates Comparisons**

To facilitate international comparisons of economic fortunes, the annals of all the countries studied have been compressed into a single table, which is printed on pages 74 to 87 inclusive of *Business Annals*.

"The entries have the bleakness of statistical averages," observes Dr. Mitchell. "They do not

indicate the complexity of conditions prevailing every year within each country. For most purposes the fuller form of the annals given on later pages should be used rather than the conspectus. But it is only as we concentrate in each country upon the net resultant of its diverse conditions that we can gain a clear view of the international similarities and diversities. Even the conspectus is not simple enough to tell its own story; it needs to be analyzed and summarized, as the reader who looks it over will agree.

**Cycles Increasing in Importance**

"The importance of business cycles as a factor in national life was less during the closing decades of the 18th century than during the opening decades of the 20th century in England and the United States. At present there is a similar difference between these two countries and China, Russia or Brazil.

## NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

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The more highly organized a country's business, the larger the proportion of its people who live by making and spending money incomes, the more important become the recurrent cycles of activity. Let us, however, take cyclical oscillations for granted, disregard their relative importance, and inquire what influence the cycles in one country exercise upon cycles in other countries.

### International Sweep of Crises

"It has long been recognized that the great financial crises have an international sweep. Thus the conspectus shows that England and the United States shared in the crises of 1815, 1825 and 1837; that England, the United States and France (which now is represented in the annals) shared in the crisis of 1847; that these three countries, and Germany also, shared in the panic of 1857; that England, the United States, France, Germany and Austria shared in varying degrees the crisis of 1873.

"To these familiar facts our annals add that all five countries had mild recessions in 1882-84. Of the 17 countries included in the annals after 1890, 10 had recessions in 1890-91, 15 had recessions in 1900-01, 15 in 1907-08, 12 in 1912-13, 11 in 1918 and 14 in 1920.

"Further, the countries which escaped a share in these world reactions usually owed their exemption to still worse fortune. Thus South Africa and Japan had no recession in 1900-01 because they were already suffering from depression. The three countries of our 17 which escaped in 1920 were Germany, Austria and Russia.

### How Different Countries Fared

"Of course the experiences of the several countries were not identical in the years of crises and recessions. In the whole record there is no crisis which was equally severe everywhere.

"In 1873, for example, the United States, Germany and Austria suffered far more severely than England and France. In 1890, on the contrary, the financial strain was more severe in London than in New York or Berlin, while Vienna deferred its recession until 1892.

"The center of disturbance in 1900 seems to have been Germany; countries like the United States and Italy felt but repercussions of a foreign shock. In 1907 the gravest difficulties appeared in the United States.

"Probably the nearest approach to a severe world-wide crisis was made in 1920, and that case was obviously dominated by post-war re-adjustments. It is clear, however, that a financial crisis breaking out in any country of commercial importance produces financial strains in other countries and that even mild recessions like those of 1882-83 and 1913 spread widely.

### Other Phases Propagate Themselves

"It has been less noticed that other phases of business cycles also propagate themselves. The long depressions of the 1870's, the checkered fortunes of the 1880's, the revival of the middle 1890's, the boom of 1906-7, the calmer prosperity of 1912, the hectic activity of the war years, and the severe depression

after 1920 had much the same international character as the crises to which attention is commonly restricted.

"Yet business cycles do not run a strictly parallel course in any two countries. Perhaps the best way to bring out the degree of likeness and difference in contemporary fortunes is to note the proportion of years in which conditions in different countries are described by the same terms in the conspectus, and the proportion of years in which conditions are described in unlike terms.

"An effort to carry out this plan shows that many years do not fall into either category. Business may be reviving in one country and already prosperous in another, depressed in one and entering depression in another; or conditions may be similar during the early part of a year and divergent in the closing months, or different at the start and convergent at the close.

### Three Types of Relations

"In such cases one cannot call the conditions quite similar or decided unlike. Thus it is necessary to recognize at least three types of relations between the synchronous phases of business cycles in different countries—agreement, partial agreement and opposition. Arbitrary definitions were adopted, and a statistical tabulation made of these relationships.

"Such a comparison of business conditions in the five countries for which we have annals running back of 1890 shows a preponderance of years in which the business cycles of the countries compared were passing through the same phases over years in which they were passing through opposite phases.

"As one would expect from England's position in international trade and finance, English cycles are more highly correlated with the cycles of other countries, than the cycles of other countries are correlated with each other. The closest agreements are found between English and French or English and German cycles; the loosest agreements are between Austrian and American cycles.

### Similarity of Phase Increased

"Further, it appears that the international similarity of phase in business cycles increased, on the whole, with the passage of time. The breaking of economic bonds by the war, and the tardiness of their restoration after the Armistice, interfered with this process of synchronizing cycles. But the non-economic factors, which played so large a role after 1914, had much the same character and influenced business among all the belligerents in much the same way, so long as hostilities lasted. Since 1918, economic fortunes have diverged more widely. Presumably the business forces tending toward convergence are gradually resuming their wonted sway.

"In treating the period when the annals include 17 countries, a more significant method of presenting the relations among their business cycles is feasible. For the cycles since 1890 have an international pattern simple enough to be carried in mind, and applied to the experience of one country after another.

## Idiosyncrasies of Cycles, and Recurring Features, Shown in Business Annals

**T**HE running accounts of business conditions in the various countries in all parts of the world, which are recorded in *Business Annals* just issued by the National Bureau of Economic Research, can be made to throw light upon many aspects of business cycles besides their duration.

For example, variations in the intensity of different periods of prosperity and depression, in the severity of successive recessions, and in the character of successive revivals are here revealed, though they are not expressed in quantitative terms.

The relations between the intensity of business fluctuations and their duration also appear, as well as the relations between intensity in one phase of a cycle and intensity in succeeding phases.

So, too, the annals afford many insights into the complexities of business expansion and contraction. Often they show what branches of trade led a certain movement and what branches lagged behind, what parts of a country benefitted or suffered most in a given cycle.

The exceedingly mixed relations between business conditions and agricultural fortunes receive much attention.

In one sense every cycle is a unique historical episode; the annals bring out many of the idiosyncrasies of particular cases, as well as the features which recur in case after case.

### Compared With Pattern

"Thus no country in our list has had fewer business cycles since 1890 than the international pattern calls for; but the majority of countries have had one or two more than that number. These additional cycles seldom result from failure to participate in the international movements of activity and depression, but rather from the intercalation of what we may call domestic recessions between the dates of international recessions.

"To take the most striking case: the United States had its share in all the recessions of the international pattern; but it also had domestic recessions in 1893, 1896, 1903, 1910, and 1923. When a country skips an international recession, it is usually because that country has recently suffered a domestic recession. Thus business was already depressed in Japan and South Africa when the international recession of 1900 began; South Africa and China escaped the international recession of 1907 for similar reasons; so too the European neutrals had recessions in 1917 and not in 1918.

### Backward in Economic Organization

"The countries whose business cycles diverge most from the international pattern are Italy before say 1907, Russia, South Africa, Brazil and China—all countries rather backward in economic organization and predominantly agricultural.

"The countries whose cycles have followed the international pattern most closely, on the other hand, are countries of highly developed industry, trade, and finance—England, France, Germany (until 1919), Sweden, and the Netherlands. Australia