The Long Term Economic Development of Germany

by

WOLFGANG F. STOLPER

CRED Reprints
(New Series)
No. 9

Center for Research on Economic Development
University of Michigan
Ann Arbor, Michigan 48104

Schrifttum

The Long Term Economic Development of Germany

By

Wolfgang F. Stolper

---

offmann, Walther G., Das Wachstum der deutschen Wirtschaft seit der Mitte des 19. Jahrhunderts. Unter Mitarb. von Franz Grumbach und Helmut Hesse. Mit 26 Schaubildern u. 325 Tabellen. (Enzyklopädie der Rechts- und Staatswissenschaft, Abt. Staatswissenschaft.) Berlin, Heidelberg u. New York 1965. Springer-Verlag. XXVI, 842 pp.

Professor Hoffmann has been a pioneer in the field of long term growth tudies. In some respects, this book is his crowning achievement. At the same ime, it is a challenge to the next generation. For this is not a work of interpretation. It is rather, to paraphrase another famous German scholar, to escribe how the German economy developed, "wie es wirklich war." It used o be fashionable to distinguish in economic theory between tool makers and ool users. In this book, Professor Hoffmann has certainly forged a whole box f tools. But there is a difference to the earlier distinction. These are not tools o be used with technical virtuosity and with lighthearted exuberance. Rather, Professor Hoffmann has surrounded each of his "tools" with careful descriptions nd indeed circumspection. It is probably too much to hope that his findings vill not be misused, but if misuse there is, it will not have been his fault.

The basic "tool" is the national product of Germany. Now in economics, "facts" are never simple. Virtually all our "facts" are synthetic concepts vhose meaning is determined by the manner in which we measure them. In the atural sciences, experiments are usually carefully described, the machinery ised, the temperatures, etc. are carefully set down to allow any other investigator to duplicate the experiment as well as to judge its meaning. In economics, alas[illegible] is not common practice, and other social sciences are, if anything, wors[illegible]fenders in this respect. The United Nations Yearbook of National Accounts Statistics is virtually impossible to use in a truly scientific spirit because of its virtually complete absence of methodological information on ndividual country estimates.

The reader has, therefore, every reason to be extremely grateful to Professor Hoffmann and his publisher for describing in great detail precisely what are the basic sources, what are the raw data available, and precisely what were the estimating procedures, precisely how the lacunae in necessary information were filled, and how sensible or reliable the investigators felt the procedures and results were. To be sure, all of this is not meant to be read like a novel but it is the information that any user of the statistics must have if he is not to abuse them.

The purpose of the investigation is to allow a judgement about the long-term economic development of Germany. "Germany" is defined as the area that during the particular period to which the data refer happened to be within its political boundary. This means essentially three areas: from 1850 or so to 1914, the Reich within 1914 boundaries. Between the two world wars the boundaries within the boundaries of 1925, (i. e., exclusive of Austria and the Sudeten area) but after 1934 inclusive of the Saar; after the last war the Federal Republic exclusive of West Berlin and the Saar. No estimates are made for the war years and the immediate post-war periods. And the methods of estimation which vary with the period and the availability of data are continued to 1960 even after sophisticated official estimates have become available. The latter decision is intended to allow a judgement on the reliability of the estimating procedures. Since the necessarily much cruder methods of Professor Hoffmann and his collaborators give results that are satisfactorily close to the official estimates for the 1950's, it can be presumed that the aggregate estimates for earlier periods for which no official estimates are available will not deviate too much from "wie es wirklich war."

The continued change in the geographic area to which the estimates refer makes interpretation nevertheless difficult. Most obvious is the understandable omission of East Germany for the 1950's. But even for the other periods, putting the data on a per capita basis does not entirely eliminate the effect which the major caesurae in German history have had. These caesurae have been real, and statistical techniques which, in the interest of "comparability" would gloss over them would necessarily be suspect. Just the same, there has been an east-west gradient in wages for a long time, together with a migration from the east to the west, suggesting that the impetus for growth has centered more in the west. In all large areas, regional developments are necessarily uneven. (There has also been a well known north-south gradient.) To the extent, therefore, to which the areas lost have had substantially different growth rates and growth potential from the average, this average must be affected. Obviously minor changes, such as the inclusion or exclusion of the Saar or even of Alsace-Lorraine will have only minor effects. But the big changes after each war were not quite so negligible.

Nevertheless, one major conclusion stands out: the post-war period has been unique in German economic history — as it seems to have been everywhere else. Aggregate growth rate were substantially above what had been experienced before the Second World War. The growth rate of net social product in constant market prices of 1913 was 2.7% between 1850 and 1959. But it was 7.3% for the period 1950 through 1959 (p. 106). Now the last period is only ten years out of more than a century, and figures are not all that exact that decimal points can be taken dead seriously. But the decade of the sixties is now almost over and growth has continued at rapid rates and shows no sign of abating.

What can have happened? First, there have of course been year-to-year fluctuations in growth rates of substantial size both in the pre-World War II period and the post 1950 period. But, and this is an important "but," there have been no negative rates since 1950. There has been no depression of the 1928—32 type, when real net social product declined from RM 53.950 billion to RM 41.760 billion; or from 1874 to 1879, when social product in current prices Hoffmann gives no estimates in 1913 prices for these years — declined from RM 19.544 billion to RM 16.678 billion (pp. 825 sqq.). Nor were there the other many minor declines which economic historians or business cycle scholars like Spiethoff have noticed before, and for which the final tables 248 and 249 provide numerical estimates.

But the absence of actual declines is not something that can be considered an accident, anymore than the more traditional business cycles were due entirely to accidents. It is only possible to guess what may have happened and to sketch out the guess in very rough outline. There obviously has been an increased knowledge of what to do when a depression threatens and an increased willingness to do it — a phenomenon usually associated with the name of Keynes, though scholars like Schumpeter or Spiethoff did not consider depressions of the 1930 type inevitable. But there are also obviously objective changes in the economy that makes policies possible and effective which could not have been used or not used with the same effectiveness in the nineteenth century.

The point, if correct, is not unimportant. Anyone working in underdeveloped countries is aware of the limitation of central bank or fiscal policies. The economies just are not flexible and sophisticated enough. The implication goes further: when people complain that there is a growing gap between rich and poor, the statistics may support them, but the facts may nevertheless mean something quite different from what they think they mean. Underdeveloped countries now may grow less fast than developed areas now — itself a statement based on ignoring the very great variations in the performance of individual economies both developed and underdeveloped — but there seems little doubt that they grow faster than presently developed economies did during a comparable period of their history.

At the same time, Hoffmann's study which joins the long-term studies by Kuznets, for example, suggests also how long it really takes until an economy reaches the level where it can become truly master of its own fate. A considerable degree of sophistication in the economy has to have been reached, a high level of productivity, a high ability to adapt to changes of technology. Hoffmann's data provide certainly fascinating food for thought along such lines.

Thus, his estimates indicate that the real capital stock of Germany grew very rapidly from the 1850's to the First World War. But Hoffmann estimates it to be the same in 1955/59 as 1910/13 or 1925/29. Now, to be sure, it now refers to a substantially smaller area, and a smaller population in 1955/59 compared to 1910/13. But the real point which Hoffmann stresses and documents in detail is both the change in the structure of the capital stock (Table 10, p. 44) and of course, the continuous rapid technical change. At the beginning of Hoffmann's period about half the capital stock was in agriculture against less than 5% by 1955/59. Now 60% of the stock are in industry against 15% in 1850/54. Moreover, the changes were reasonably gradual to the Second World War. They have been dramatic since: a third of the capital stock in industry in 1935/38, two thirds now.

The implications of this change are rather startling. Hoffmann's data make abundantly clear that an enormous amount of technological change is embodied in these figures. Perhaps even more important is that such a high proportion of capital in industry seems to imply that the nation's capital stock is continuously renewed; that every few years there has been a complete change in the capital equipment with which labor has to work. And this seems to imply further that every few years there must be a radical change in the structure and the individual qualifications of the labor force. The figures dramatically illuminate what has happened to the process of "creative destruction" which Schumpeter has so brilliantly analyzed and about which Hoffmann himself has written in the past.

It may not be too farfetched to suggest that this constant rapid change that has been built into our economies — for there is every likelihood that the German data are paralleled in other highly developed and rapidly growing countries — not only is responsible for the increased standards of living, but also for much of the social unrest that we experience. The economy seems to impose strains as the social fabric in different directions as it solves the problems of unemployment and hunger. For each problem that is solved, seven new ones appear.

At the same time, the figures also suggest why economic development does take so long a time: it is not simply a question of building up the capital stock and to change its composition — although it is that too. It is really the problem of building an economy that can handle the continuous and rapid changes implied in such a changed distribution. The capital stock could be largely imported, for example, but no one would argue that if the advanced industrial countries gave without strings attached the industrial equipment as a gift to, say, Bolivia or even Colombia, growth problems other than perhaps the balance of payments problem would thereby be solved.

It is hardly possible to pursue this or may other lines of thought suggested by this work. Hoffmann lists the sources of his data — many of them very difficult of access — and is frank about the lacunae. Each reader will find different aspects of the book of special interest to him. Thus, this reviewer found the data on public savings presented towards the end of the book especially suggestive of the possible role of government in German development. Similarly interesting is the fact, stressed by Hoffmann, that the important savings by cities and communities are only imperfectly measured and that the necessary documents do not seem to exist any more, if indeed they ever existed. Thus the question whether the data could be improved must be answered: undoubtedly they can, but only with very painstaking labor and in many cases, unless dramatically new material becomes available, only marginally.

Hoffmann not only gives the broad sweep of development in the first part of the book but immense detail that is frequently fascinating in the bulk of the book (Part II, pp. 171—828). Some calculations are very difficult to interpret. I can understand easily enough what imports or exports of goods in constant prices measure, but I am not sure what meaning to attach to the "real" balance of the balance of payments. Some problems of interpretation of measuring particular concepts in constant prices remain. Every practioner of the art of national income measurement (of which Hoffmann is, of course, a master) is familiar with these problems, though it is disconcerting to find how many users of the statistics blithely ignore them. Or, it is difficult to believe that the productivity of domestic servant has not changed much between 1850 and 1959 (p. 685): there is, after all, more central heating now, so less coal is being carried; water is heated and cooking is done in a less labor intensive way, there are vacuum cleaners, and in general less housework seems to get the same end result. But saying this, does not suggest what else Hoffmann could have done.

No doubt there are many instances where a detailed examination of the figures leads to disbelief. The reduction in the tonnage of pulses consumed is rather dramatic. And while it is not surprising that potato consumption should have fallen, it is rather startling to find that vegetable consumption also has substantially decreased (pp. 624 sq.) I would also have expected a greater increase in beef consumption and a greater decrease in pork consumption than the figures show. Just the same, developments may have occurred as the figures indicate, and it is not likely that different estimates will change the end result significantly.

Other reviewers have made suggestions for improvement here and there. There seems little point to add to such a list. For the real point is that by providing the wealth of data and by the honesty of describing the procedures, Hoffmann has contributed not merely to the understanding of the development of Germany, but of the long-term growth process in general. Many of us who have neither the taste nor the energy for the painstaking and often thankless task of building up estimates from the ground up will have frequently reason to thank Professor Hoffmann when we use the result of his labor in the context of our less laborious and more "interesting" interpretative contributions. Let us honor him by not abusing the data he has recorded.

Center for Research on Economic Development
CRED Reprints

No. 1. "Nigerian Government Spending on Agricultural Development: 1962/3–1966/7" by Jerome C. Wells. (*The Nigerian Journal of Economic and Social Studies,* November 1967)

No. 2. "Major Issues of Wage Policy in Africa" by Elliot J. Berg. (Arthur M. Ross, Editor, *Industrial Relations in Economic Development,* Macmillan, 1965)

No. 3. "The Myth of the Amorphous Peasantry: A Northern Nigerian Case Study" by Polly Hill (Mrs. M. E. Humphreys). (*The Nigerian Journal of Economic and Social Studies,* July 1968)

No. 4. "Urban Real Wages and the Nigerian Trade Union Movement, 1939–60: A Comment" by Elliot J. Berg. *(Economic Development and Cultural Change,* July 1969)

No. 5. "Turkish Economic Development: The First Five Year Plan, 1963–67" by Wayne W. Snyder. *(The Journal of Development Studies,* October 1969)

No. 6. "Hidden Trade in Hausaland" by Polly Hill, (*MAN,* Vol. 4, No. 3, September 1969)

No. 7. "A Comment on Peter Kilby: Industrial Relations and Wage Determination" by John F. Weeks. (*The Journal of Developing Areas,* Vol. 3, No. 1)

No. 8. "Measuring the Effects of Belgian Budget Policies: 1955–65" by Wayne W. Snyder. (*Cahiers Economiques de Bruxelles,* No. 44, 1969)

No. 9. "The Long Term Economic Development of Germany" by Wolfgang F. Stolper. Review Article of Walther G. Hoffmann, Das Wachstum der deutschen Wirtschaft, (*Weltwirtschaftliches Archiv,* Vol. 103, No. 2, 1969)

No. 10. "International Financial Issues in Foreign Economic Assistance to the Less Developed Countries" by Robert M. Stern. (ed. Ian G. Stewart, *Economic Development and Structural Change,* Edinburgh University Press, 1969, pp. 47–70)

No. 11. "Money in a Developing Economy: A Reappraisal" by Wayne W. Snyder. (*The Review of Economics and Statistics,* Vol. LII, No. 1, February 1970)