

University of Windsor

Scholarship at UWindor

Electronic Theses and Dissertations

Theses, Dissertations, and Major Papers

1-1-1969

West Germany: Economic policy in a "Social Market Economy".

Harmen A. Heyn
University of Windsor

Follow this and additional works at: <https://scholar.uwindsor.ca/etd>

Recommended Citation

Heyn, Harmen A., "West Germany: Economic policy in a "Social Market Economy"." (1969). *Electronic Theses and Dissertations*. 6564.

<https://scholar.uwindsor.ca/etd/6564>

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.

NOTE TO USERS

Page(s) not included in the original manuscript and are unavailable from the author or university. The manuscript was scanned as received.

188-190

This reproduction is the best copy available.

UMI[®]

WEST GERMANY : ECONOMIC POLICY
IN A "SOCIAL MARKET ECONOMY"

Submitted to the Department of Economics of
the University of Windsor in partial
fulfillment of the requirements for the degree
of Master of Arts.

by

Harmen A. Heyn , B.A.

FACULTY OF GRADUATE STUDIES
1969

UMI Number: EC52747

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform EC52747

Copyright 2008 by ProQuest LLC.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest LLC
789 E. Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346

ABD 0391

Approved by:

E. W. McCubbert

J. C. Strick

A. Bellinger

256975

ACKNOWLEDGEMENTS

My gratitude is extended in the first instance to the staff of the library of the Weltwirtschaftliches Institut of the University of Kiel, Germany. Without their assistance the material on which this thesis is based could not have been gathered in the short time available.

Thanks, likewise, go to Dr. Z.M. Fallenbuchl, Dr. J. Strick and Dr. R. Helling of the University of Windsor for their helpful comments and constructive criticism which ultimately shaped the thesis.

Finally the thesis owes its final typing to Mrs. D. Smith of Wellington, New Zealand. She must be congratulated for her perseverance in writing German phrases appearing throughout the thesis with her little knowledge of the language.

ABSTRACT

Since West Germany emerged once more as a sovereign nation after World War II, it has become known as a " Social Market Economy " to describe its economic policy making mechanism. This system places a strong emphasis on the free interplay of the market forces of supply and demand, tempered only by the need to eliminate its excesses by providing social benefits to the less privileged members of society. Theoretically, therefore, the " Social Market Economy " occupies the middle ground between the capitalist and socialist states. The thesis suggests a specific definition of the term as an observable entity.

West Germany's economy has functioned very successfully during this era, and it is generally believed that the practice of " Social Market " economic policy has been responsible. Although there is some truth in this assertion, the overwhelming evidence suggests that " Social Market " policy had little direct credit for the " Wirtschaftswunder ". The discussion is related to three criteria of economic performance, the balance of payments, price and monetary stability, and investment and capital formation. In these areas Germany's economic activity has been particularly exemplary according to its records. The analysis of the determinants of progress reveal why the actual causal process was largely independent of subjective factors, i.e. economic policy decisions and why specifically of " Social Market Economy " related decisions.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	i
LIST OF TABLES	ii
INTRODUCTION	I
CHAPTER	
I THE SOCIAL MARKET ECONOMY	5
II THE BALANCE OF PAYMENTS	27
The Structure of Trade	
Objective-Subjective Influences	
The Role of Economic policy	
Conclusion	
III PRICE AND MONETARY STABILITY	72
Price and Wage Movements	
Demand Pull Inflation	
Cost Push Inflation	
Inflation and Policy Response	
Conclusion	
IV INVESTMENT AND CAPITAL FORMATION	109
The Growth of the German Economy	
The Financing of Investment and Capital Formation	
Economic Policy and Investment	
Conclusion	
CONCLUSION	152
TABLES	156
BIBLIOGRAPHY	191
BIOGRAPHY	201

LIST OF TABLES

1. International Trade : German Federal Republic 1950 -1965 (in mill DM)
2. Merchandise Trade and the Balance of Payments: German Federal Republic 1958 - 1965 (in mill DM).
- 2A. Merchandise Trade and the Balance of Payments: German Federal Republic 1958 - 1965 (in mill DM).
3. Indexes of Main Imports' and Exports' Prices (1958 = 100), German Federal Republic 1958 - 1965 (in mill DM).
4. Most Important Exports and Imports Federal Republic of Germany 1958 - 1965 (in mill DM).
5. Origin of Main Imports, Destination of Main Exports, German Federal Republic 1958 - 1965 (in mill DM).
6. Capital Account: German Federal Republic 1958-1965 (+ = net increase in foreign assets).
7. Indexes of Wholesale Prices (1958).
8. Index of Germany's Consumer Prices (1958 = 100).
9. Index of Average Weekly Gross Pay (1962 = 100) of the Industrial Work Force by Sectors.
10. Index of Average Monthly Gross Pay (1958 = 100) of Salaried Workers in Industry and Trade.
11. Change in Labour Costs per Unit of Output of Selected Countries.
12. Index of Contractual Wages and Capacity Utilisation in Industry.
13. Proportions of Spending.
14. Indebtedness of the Public Sector (in mill DM).
15. Prices and Income Distribution.
16. Index of Productivity: German Federal Republic, Production per Hour of Employment (1958 = 100).
17. Index of Actual Contractual Earnings in the Economy (1960 = 100).
18. Housing Deficit Index (1000 = no deficit).
19. Discount Rates of the German Central Bank (Bundesbank).

20. Development of Gross National Product, in Money and Real Terms, and Percentage Change in Real Terms (in bill DM).
21. Index of Industrial Production by Sectors (1958 = 100).
22. Relative Growth Effects (1954 - 1962) (in per cent).
23. Investment as Percentage of GNP (current).
24. Gross Investment and Investment Exclusive of Housing Influence.
- 24A. Gross Investment and Investment Exclusive of Housing Influence. (continued).
25. Capacity, Orders and Turnover in Industry.
26. Investment and the Capital Coefficient.
27. Gross Invested Wealth of German Industry per Employee by Sectors (in mill DM, 1958).
28. Savings (in mill DM).
29. Gross New Turnover of Stocks, Bonds, Dividends and Return.
30. Bank Credit to Industry (in mill DM).
31. Investment in Housing (in mill DM).
32. Tax Privileged Depreciation Rates in Various Countries.

WEST GERMANY: ECONOMIC POLICY
IN A "SOCIAL MARKET ECONOMY"

INTRODUCTION

The purpose of this thesis is to evaluate the influence of economic policy on the economic development of Germany in the post-war period, particularly in the last ten years from 1957 to 1967. Three criteria have been chosen from the mass of factors which underlie the country's economic evolution, namely the balance of payments, price and monetary stability, and investment and capital formation. The reason for choosing these particular criteria is that they are generally believed to be the keys to the economic development of Germany that brought prosperity in the post-war years.¹ In addition, these criteria are very broad and allow much scope for policy decisions.

Economic policy will not, however, be analyzed only through its forward link, that is as a determinant of economic development, but also through its backward link. Backward linkage in this sense means motivation of economic policy. The West German economy is often referred to as a "Social Market Economy". It is understood from such a label that the economic policy practised by the government followed the guidelines of a specific economic system. The more precise intent of the thesis is

¹ The Economist, "The German Lesson", 15-21 October, 1966.

then to show both the evaluation of economic policy on Germany's economic development in general and the extent to which that policy was motivated by "Social Market" theory in particular, if "Social Market" theory was a meaningful reality.

In the analysis of the factors influencing the economic development of post-war Germany, a very clear step-by-step method must be maintained. First the influences that were subject to economic policy decisions must be separated from those that were not, the objective influences as they are usually called. Secondly, the respective evaluations must follow. Were the economic policy decisions and the objective influences conducive or not conducive to economic progress? Furthermore, it must then be determined whether those subjective factors, that is economic policy decisions, that did influence economic development were motivated by "Social Market" theory. Was this relationship beneficial or was it harmful to the economy? Finally, a judgment must be made of what on balance decided the outcome of economic development. Were the objective or the subjective factors predominant, and if the latter, were they "Social Market" oriented or not?

Since I do not presume to label West Germany a "Social Market Economy" a priori, the first chapter explores the meaning of this expression. The questions of how the idea of a "Social Market Economy" originated, how unique it was as an economic system in Germany and elsewhere and how it was actually incorporated into the system of economic policy in Germany are elucidated. Once the degree of the validity of the hypothesis that Germany does constitute a "Social Market Economy"

is established, economic policy can be evaluated in the context of the actual criteria of economic development.

The following three chapters are devoted to that purpose. The balance of payments is the first criterion. This criterion has set the stage for the overall development of the economy through its radiating effects to the other two criteria and so it precedes the stability and capital formation questions. A statistical account on the balance of payments is presented over the post-war period. The factors, structural or otherwise, that are important as the underlying elements of the balance of payments and the effect of policy on them complete the chapter. The other two chapters are similarly organized. Chapter three, which deals with monetary and price stability, explores the presence or absence of inflation in Germany during the same time, the behaviour of the economic agents responsible for the outcome and the reaction of the government to it. Chapter four, which deals with investment and capital formation, analyzes this major phenomenon of growth in Germany. The analysis of growth includes a sectoral breakdown of the components of the economy's product subject to growth as well as the causative elements behind evolution and the action of policy to reinforce or counteract their movement.

The thesis should clarify the intense intellectual struggle that has prevailed in Germany throughout the sixties on the question of economic policy. There is a widespread diversity of opinion among economists and politicians. There are those who consider that Germany constitutes a "Social Market Economy" and that it is this fact that

accounted for the economic resurgence of the country during the post-war period. Others agree that Germany is a "Social Market Economy" but hold this system responsible for the economic troubles that have beset the country in the sixties. Finally others insist that whether or not the country is or is not a "Social Market Economy" has had no connection with the economic policy followed.

CHAPTER 1

THE SOCIAL MARKET ECONOMY

In this chapter the meaning of the term "Social Market Economy" shall be investigated. The fact that only one country's economic system is referred to as such is not an indication by itself that one is dealing with a system that is different from any other. Thus, the concept must be defined and supplemented by a historical analysis of how it evolved to its present connotation.

Secondly, the extent to which the German economy took on the features of the "Social Market Economy" concept shall be determined. A theoretical system implies a certain institutional and legal framework as well as a certain behaviour on the part of those responsible for the execution of the system in practice. Again then the question must be answered; how unique has practice, or more specifically, economic policy made the German economic system?

The meaning of "Social Market Economy" involves a very complex philosophy of economic behaviour. The philosophy is based essentially on the competitive market mechanism, into which some protection is built for the less fortunate members of the economic community. There can be excesses to competition e.g. when bankruptcy leads to unemployment, which can lead to temporary hardships. Reuss, an expert on the German post-war

economy, acutely noted the essence of the "Social Market" principle when he stated that it was an economic system that worked through incentives at the top and through paternalism at the bottom, in other words, freedom of competition among large economic agents and protection of the lower classes of agents.² Its purpose was then, not only to secure the greatest degree of prosperity possible, but also to eliminate social conflicts, as those between economically different classes. It is in this sense that the system can be termed a philosophy of economic behaviour, rather than simply an order of economic relationships. Expressed in still another way, the essence of a "Social Market Economy" is not synonymous with its goals, for it includes non-economic judgments along with economic judgments in setting the criteria for specific goals. Further clarification as to the idea of "Social Market Economy" will follow from the analysis of its historical evolution.

The origins of the ideas on which the "Social Market" concept relies most heavily can be traced back to classical economic thought. Both Smith and Ricardo emphasized the supreme importance of the market principle as the "engine of progress and prosperity". These ideas constitute one half of the dual notion "Social Market". The attribute "Social" relates to the second half of the nineteenth century. During that era, the free market in Germany became the most concentrated one in Europe. Smith and Ricardo had pointed out that unless a free market, or perfect competition as it is now called, existed, resources were not distributed

²Frederick Reuss, Fiscal Policy for Growth Without Inflation: The German Experiment (Baltimore; The John Hopkins Press, 1961), p.61.

justly and efficiently. Consequently, opposition to the course of events in Germany arose. Religious doctrines on social justice, dated from the Middle Ages, were revived, and the onus was placed on the government to correct the injustices. "Staatssozialismus" or state socialism was advocated.³ When the German Empire collapsed in 1918, and the Social Democrats started the Weimar Republic, social reforms were extended, but the problem of competition in the market was left untouched. In fact, the great steel and chemical cartels in Germany were formed during this period. Finally, the era of nazism removed the last remnants of a free market economy. It was during that reign that the exponents of what later became known as the "Social Market Economy" formed their crucial ideas.

In 1945, the autocratic and totalitarian system was swept away and the "Social Market" supporters had the opportunity to bring their ideas to fruition. The continued electoral victories of the CDU party (Christian Democrats) were, however, the decisive factor that allowed the "Social Market" theorists to predominate in the re-shaping of the economy. If the Social Democrats had won the election in 1949, they would have instituted a social welfare state based on the British Labour party's model and would not have heard the "Social Market" advocates who stood in the ranks of the Christian Democrats for the most part.

Despite the fact that the "Social Market" protagonists were in general opposed to the Social Democrats and the welfare state they stood for, there is by no means complete harmony in their interpretation of "Social Market" theory. There are two distinct lines of thought on the

³ Reinhard Behlke, Der Neoliberalismus und die Gestaltung der Wirtschaftsverfassung der Bundesrepublik Deutschland (Berlin; Duncker und Humblot, 1963), p. 80.

subject. Walter Eucken, who until his premature death in 1950, was Professor at Freiburg University in Germany, is the originator of one line of thought, the "neoliberal" or "ordoliberal" one. Alfred Müller-Armack, Professor at Münster and later advisor to the economics minister, Ludwig Erhard, constitutes the other. Wilhelm Röpke at Geneva was another prominent economist, who thought along "Social Market" lines, but since his main work was directed less to theoretical economics than to specific problems, he cannot readily be classified as either in the Eucken or Müller-Armack tradition.⁴ The school of thought that Eucken formed, the Freiburg School, unfortunately did not develop very much after Eucken died, although there were several other contributors along the same lines.⁵ Müller-Armack, on the other hand, has tried to elaborate and clarify his own ideas. On account of his close association with Erhard, moreover, his influence must be considered at least equivalent to that of the Eucken School.

Eucken considered the "Social Market Economy" as the natural outcome of the requirements for economic and political order. Progressive concentration of economic power created "disorder" economically because it distorted the working of the price mechanism and lead to a maldistribution of resources. It lead to "disorder" politically because social injustices resulted. (He has fused the implications of classical economics and "Staatssozialismus"). If all economic processes were highly integrated, and if the whole economic order was interrelated with the state, law and society he reasoned, then the entire social order depended on the continued

⁴ Wilhelm Röpke, Ein Jahrzehnt Sozialer Marktwirtschaft in Deutschland und Seine Lehren (Cologne - Marienburg: Verlag für Politik und Wirtschaft, 1958), p.30.

⁵ Franz Böhm and Alexander Rüstow et al. ; see bibliography.

existence of the free market mechanism.⁶ What his economic "morphology" revealed had to be the prime concern of his "Ordnungspolitik", the search for forms of economic behaviour and institutions to be set up and the conditions for continued existence. The forms were those required for the institutionalization and preservation of the competitive order. Within this order, households and firms were absolutely free to carry on their business.⁷ He used emphatically the word forms of behaviour instead of processes. If processes were defined, the result would be a socialist economy, a "Zentralverwaltungswirtschaft"⁸ as he called it. The distinction essentially rests with the detail to which behaviour is specified, the implication being that only the broad lines of behaviour had to be dictated. This is the crucial distinction. He wanted a broad framework set up as a guide but not to specify its details. The forms which Eucken compiled were of two kinds, "constitutive" and "regulative". The former are those required for the establishment of a perfect competitive order and the latter, those assuring its continuation. The constitutive principles are the following:⁹

1. An operationally meaningful system of prices existing under perfect competition. The argument, in this regard, is the classical one for perfect competition, maximum output and minimum price.

⁶Behlke, Neoliberalismus, p. 57.

⁷Walter Eucken, Grundsätze der Wirtschaftspolitik (Berlin; Duncker und Humblot, 1961), p. 152.

⁸Behlke, Neoliberalismus, p. 45

⁹Eucken, Grundsätze, p. 160-7

2. Monetary Stability.

Eucken regarded this as the most important constitutive principle, essential economically to preserve the role of the price mechanism and politically to prevent social unrest.

3. Free access to all markets.

The neoliberals were of course free traders and wanted tariffs and patent rights etc. restricted in their extent to assure maximum market freedom.

4. Private Property.

This was a condition of individual freedom and of a competitive order based on performance. It should not, however, be used to limit competition. Complete liability of property in contracts was to be a move in this direction as well as assuring that profitability was based on economic performance and not on the legal position of the entity.

5. Stability of general economic policy.

What Eucken meant by stability was economic policy that did not vary too drastically from one period to another. For if it did, it would act as an exogenous force interfering with the market forces and upset the price mechanism's role as a signalling device. This leads to inefficiency and speculation, both of which encourage concentration. The threat of a sudden change in economic

policy increases the risk of any decision and so firms concentrate to spread the risk.

The regulative principles, on the other hand, must insure the preservation of the competitive order and correct its excesses, which cannot always be avoided. There are two regulative principles, namely:

1. Monopoly Restraint.

The preservation of the competitive order by necessity implies monopoly restraint. To accomplish this Eucken envisaged a commission independent of private or government interference to serve as the regulating agent.

The criterion he suggested to judge the degree of restraint was the uniformity of the products offered.

2. "Sozial" and "Vitalpolitik" or Human Welfare Policy.

Since the forms were to be established only as broad categories, minor infractions of social justice and income distribution were bound to occur, and so provisions had to be made to allow for corrective interferences on the part of the government.

Occasionally perfect competition was necessarily non-existent as in the case of natural monopolies and, at other times, it would not be just as in housing, for example. These negative interferences had to be likewise complemented and supplemented by positive corrections or "Vitalpolitik". "Vitalpolitik" basically means improving the social status of the

working classes. The capitalist process, according to the neoliberals, tended to downgrade the intelligence of workers, as it demanded only mechanical tasks from them. To counteract this tendency, they advocated worker-manager cooperation and expanded educational opportunities for the workers. The neoliberals were extremely conscious of the social and intellectual needs of man-kind apart from the material requirements. The economic relationship between management and workers in the competitive market could not make allowance for these needs and so government had to provide for them.

Further elaboration of the ordoliberal system is largely lacking. Eucken established only basic requirements and two criteria where government interference in the economic sector would be permitted. Instead of specifying further, his followers have restricted themselves to classifying any potential interferences as either market conforming or non-market conforming, according to whether they changed the market-determined supply-demand relationship or not. For example, a specific subsidy to one industry would be considered non-conforming, while general subsidization would be conforming.

Before turning to the Müller-Armack School reference should be made at this point to Röpke, for although his work was less theoretical, he spelled out the neoliberal forms in specific reform demands. For instance, he strongly supported the liberalization of foreign trade and the maintenance of monetary stability after the war. In this latter

capacity, he had considerable influence in pressuring for the revaluation of the Deutsche Mark in 1961. Monetary stability was for Röpke the essence of a "Social Market Economy". Erhard aptly voiced Röpke's thoughts in his own definition of a "Social Market Economy": An economy that was based on freedom in the realm of goods and discipline in the realm of money.¹⁰ Röpke reasoned accordingly because he believed that in Germany, as in most other European countries, there existed an inevitable tendency toward collectivism.¹¹ The slightest disorder in the economy encouraged such a tendency and the value of money was the most vulnerable point. He believed that only the Swiss had those characteristics which made them invulnerable to collectivism, the farmer-burgher traits as he called them.¹²

In all other cases, assurances for order had to be more strongly entrenched. In addition to the observance of strict monetary stability, Röpke believed that capital formation on the part of the working classes was very beneficial. The workers would only value freedom and order if they had an interest in the economy, which meant that they should take part in the investment process.¹³ Likewise, it would raise their sense of identity and status, both of which again guaranteed economic order further. And that was the main object of "Sozialpolitik". He did not

10. Ludwig Erhard, Prosperity Through Competition (London: Thames & Houston 1958), p. 3.

11. Wilhelm Röpke, "Belastungen der Marktwirtschaft: Im Abweichen von den Prinzipien Liegt die Gefahr", Die Politische Meinung, (August, 1963), p. 19. Collectivism here implies the leader and followers principle.

12. Ibid.

13. Röpke, Jahrzehnt...., p. 34.

emphasize monopoly restraint as much as did the neoliberals, but thought in terms of workable competition. He admitted that technical considerations of efficiency enlarged the permissible spectrum of competition beyond that envisaged by the neoliberals.¹⁴ In almost every instance he was somewhat more pragmatic and less doctrinaire than the Eucken school. Unfortunately, Röpke's death in 1966 set an end to his brilliant comments on theory and policy.

Müller-Armack remains today the only prominent "Social Market" economist who continues to expound and elaborate his views. However, because he has written on the subject for the last twenty years, his precise ideas on the "Social Market Economy" have also evolved with time, and so it is often difficult to determine exactly what he means by it. When he first coined the term in 1947, he defined a "Social Market Economy" to be one in which social progress and economic reform were the ultimate goals and competition the means.¹⁵ In other words, free competition enabled the achievement of the highest possible income. Once achieved, some of the income had to be redirected to those members of society who might have been hurt by the free functioning of the market mechanism, the unemployed, the sick, the aged, etc. The excesses or omissions of perfect competition needed to be curbed to achieve social progress. There is a noticeable distinction of emphasis between Müller-Armack and Eucken among the components that is important. The

¹⁴. Wilhelm Röpke, "Belastungen...", p. 27.

¹⁵. Alfred Müller-Armack, Das Grundprinzip der Sozialen Marktwirtschaft (Münster : Author, 1950), p. 1.

former emphasized the "Social " component, the latter the "Market" component. At the same time, the contrast shows the relationship between the two components. It is that of creation and preservation. Eucken was concerned more with the creation of the competitive order and Müller-Armack with its preservation. Hence, their respective emphases on monopoly restraint and "Sozialpolitik". There is, however, no fundamental disagreement between the two lines of thought.

Müller-Armack's tendency to accentuate the part that "Sozialpolitik" played in a "Social Market Economy" became even more evident in his later enunciations of the theory. He emphatically spoke of a second phase after 1962. From that time on Müller-Armack defined the "Social Market Economy" as a system of economic behaviour that had as task the removal of "tensions" between economic growth, personal freedom and initiative and social equilibrium or the solution of the class conflict. The scope has consequently considerably broadened in this phase, beyond the mere protection of the underprivileged economic units. The removal of tensions became synonymous with social politics or "Gesellschaftspolitik". The task of "Gesellschaftspolitik" was to secure the increasing maturity of society as well as economic growth. Immediately after the last war, this was accomplished simply by securing enough to eat. But in the mid-sixties, the solution to the problems of tensions in the economy was much more complex. A mature economy required mature individuals composing it. In other words, whatever problems the economy faced, creeping inflation or unemployment, the behaviour of the individual had to be such as to correct the problems. This is, moreover,

what Müller-Armack meant when he stated that whether or not the "Social Market Economy" was successful could never be finally decided but was confirmed solely by the continuing process of solving the internal conflicts of society.¹⁶ Contrasting this idea once more with the approach that Eucken used, it becomes obvious that Müller-Armack sees the "Social Market Economy" more as a dynamic concept, whereas Eucken envisaged it in comparative static terms. Both had an orderly economy and society in mind, where all individuals had high moral standards, and everyone had identity and status, but Müller-Armack was more interested in the individual steps in getting there. This is the dynamic approach. Eucken was, perhaps, also interested in the road to the perfect order, but he only elaborated on the imperfect and the perfect order. His forms were to do the rest. In his latest work, Wirtschaftsordnung und Wirtschaftspolitik, for example, Müller-Armack strongly advocated regional planning or "Raumpolitik" as a necessary further step toward social progress.

Such evolution of thought has, however, complicated the matter of trying to translate the "Social Market" concept into practical economic policy, that must largely be based on everyday economic data. In his earlier writings the aims of economic policy were clearly and simply stated. The "Social Market" principle meant insuring perfect competition, preventing unemployment and other difficulties to which the less privileged classes were particularly susceptible. The recent expositions almost completely

¹⁶ Alfred Müller-Armack, Wirtschaftsordnung und Wirtschaftspolitik (Freiburg, Brsg: Rombach, 1966), p. 300.

divorce the goals of the "Social Market Economy" from the goals of economic policy. As part of the so-called "magic triangle" of tensions only maximum growth was to be maintained, a fact which would allow even non-conforming interventions as long as they did not impinge on the economy's performance. How Müller-Armack came to this conclusion is quite difficult to ascertain. There can be various explanations. Either he feels that the question of social politics has become too theoretical to be included in general economic policy, or he is coming back to his original meaning of "Social Market Economy" emphasizing maximum national income, or it is his awareness of the real problems the German economy is facing in the sixties and which need concrete economic solutions applied to them which have brought about the alteration of thought. The latter explanation is probably most appropriate. Müller-Armack has, however, at the same time been ingenious in separating the ethical ideals of the "Social Market Economy" from the economic ones, allowing him to discuss a switch from one to the other without contradicting himself or without being inconsistent. The contrast with the neoliberal stand, of course, which is still what it was in 1950, is self-evident.

From this historical outline it becomes clear that the "Social Market" system represents a philosophy of economic behaviour. The concern with economic prosperity is principal in the writings of Eucken, Röpke and Müller-Armack. But all of them envisage something more than just the essentials for economic wealth. Social progress for Müller-Armack and social order for Eucken are integrally related with the economic

sphere. Economic goals are only partially the essence of the "Social Market Economy". They are behavioural guidelines but not the blueprints themselves. Unfortunately, the problem in such a case remains to proceed from the guidelines to the ends sought, and both Eucken and Müller-Armack have been extremely vague on this point. There are no operationally meaningful specifications beyond monopoly restraint, monetary stability and "Sozialpolitik". Müller-Armack, moreover, always believed that he need not really bother, for as he stated it, the "Social Market Economy" was one complicated in theory, but simple in practice.

As it is very difficult to shed more light on the essence of the theory on its own merit, further clarification should result from the comparison of the theory of the "Social Market Economy" with other capitalist economic systems such as the social welfare state or the contemporary American economic system. The "Social Market Economy" must be placed between these two approaches and somewhat closer to the American system. All three are derivatives of the nineteenth century confrontation of classical economic thought with socialist thought that arose as a result of unrestricted capitalism. Where socialist criticism was energetic or where capitalism was not strongly entrenched, democratic socialism emerged. The modern welfare state came into existence. The Scandinavian countries, Sweden in particular, and Britain under Labour Party rule are good examples of democratic welfare states. The essence of such states from the economist's point of view is that the emphasis of economic policy has been shifted from "supply" to "demand" as the means to secure growth, full employment, etc. This shift was

strengthened by the experiences during the Depression and by the writings of Keynes. The concept of the "Social Market Economy", on the other hand, was born of the same confrontation and compromise of classical economics with nineteenth century socialism. But the climate in Germany during the thirties was different than in Scandinavia or in Britain. The country had a totalitarian welfare state. Hence, as a reaction to collectivism and authoritarianism, another welfare state did not emerge after World War II, but one in which the emphasis was once again on "supply" as the driving force for economic progress. The entrepreneur and the capitalist, i.e. supply not the consumer, i.e. demand, were the forces forging renewed economic progress, however slight the distinction may have been at times. The time that the "Social Market" idea was propounded was decidedly of more significance, in fact, than the definitional novelty.

On the other hand, the distinction between the "Social Market Economy" and the American type economic system is more difficult to establish. From the point of view of the emphasis on growth, the entrepreneur is the key in both cases. But in this case, the difference occurs at the bottom of the economic and social scale. "Social Market" implies a greater degree of paternalism vis-a-vis the less privileged, a greater degree of collectivism. American tradition has been too individualistic at all levels of society to adopt such an outlook as prevails in Germany. The "Social Market" system allows, consequently, a substantial degree of government direction of the economic sphere which in the United States would be regarded as being strictly under the

auspices of entrepreneurial or trade union associations. Paradoxically, the paternalism incorporated into the theory of the "Social Market Economy" marks a great achievement for individualism in Germany when compared to the industrial order during the imperial and nazi eras. The combination of free competition and social welfare policies advocated by the "Social Market" theorists envisaged a very individualistic freedom, a freedom as implied in the British or American tradition. In the German context this was novel. In nineteenth century Germany and again during the nazi reign, freedom meant the free, conscious and dutiful submission to that already existing whole organism molded by history, the state and the nation.¹⁷ One could only be free in serving the state, not in serving oneself. By opposing this definition, the neoliberals at the same time destroyed the basis for the concentration of economic power. For if freedom was to be attained by submission to the whole, then in the economic sphere this meant the green light for economic cooperation and concentration. This had previously always been regarded as something natural and necessary by the entrepreneurs. As a result of the different attitude encouraged by the "Social Market" theorists, even if only in Germany, the idea is again new and worth noticing.

It has now been shown that the theory of the "Social Market Economy" is unique as far as the theory is concerned. It is neither the same as that underlying the welfare state, nor the same as that characterizing the American economic system. It must be emphasized, however, that

¹⁷ Franz Ottel, Untergang oder Metamorphose der Sozialen Marktwirtschaft (Stuttgart; G.Fischer, 1963), p. 60.

the distinctions are not absolutely clear cut. Opinions differ as to what comprises a social welfare state, and most certainly do they differ greatly as to what economic ideology the U.S. economic system is based on. Hence, in some matters, the "Social Market" concept will resemble the one, in others, the other. This is unavoidable. The conclusion that the "Social Market" theory is, nevertheless, distinct rests in the difference in the intent of the roles that the various economic units in society should play. The capitalist's incentive is definitely more relied on in the "Social Market Economy" than in the social welfare state, and there are advantages seen from collectivist action in a "Social Market Economy", specifically in the German context, which are alien to American individualistic spirit.

The next step is necessarily the comparison of theory and practice. Theoretically, a case has been made for a unique system of economic policy. Whether Germany actually did follow the course set out requires an analysis of the legal and institutional framework brought into existence when Germany again became a sovereign state or thereafter. The legal issue aroused great interest in 1965 when Nipperdey, a prominent jurist, concluded after an investigation that the constitution of 1949 (Grundgesetz) was in fact a "Social Market" constitution.¹⁸ The predominant consensus does not go so far as Nipperdey suggested. The constitution of 1949 was a political compromise between the Christian and Social Democrats. No doubt the former had somewhat more influence, but the

¹⁸ H.C.Nipperdey, Soziale Marktwirtschaft und Grundgesetz, (Cologne; Heymanns, 1965), pp. 1-26.

constitution represents "a synthesis of polar economic ideologies and interests typical of a mixed economy"¹⁹. In other words, no specific economic system was favoured. Free enterprise was to reign in some sectors, while the government remained in control of others. Under the Bonn constitution, Germany has usually been referred to as a "Sozialer Rechtsstaat", a reference that has little economic meaning in itself, but which has been generally interpreted to allow for a greater degree of government intervention than a pure "Social Market Economy" would allow.²⁰ The crucial factor would then be whether the government refrained from intervening where it had the right or not. The constitution would definitely allow a de facto "Social Market Economy" to exist depending on the views of the persons in the government.

Apart from the "Grundgesetz", the only other broad piece of legislation passed in the economic sphere was the Anti-Cartell Law of 1957 ("Gesetz gegen Wettbewerbsbeschränkungen"). This law was to be the monopoly restraining document that a "Social Market Economy" could not do without. It was to control three types of competitive restraints; cartells, market dominating firms and price maintenance.²¹ The commission that supervised the economy, however, has not been able

¹⁹ Behlke, Neoliberalismus, P. 134.

²⁰ Arndt Teichmann, "Die Wirtschaftsordnung in der Bundesrepublik Deutschland" Deutsche Studien Nr.4 (Bremen; April, 1963), p.28.

²¹ Nipperdey, Grundgesetz, p. 25.

to deal effectively with competitive restraints. First, it has not always been able to identify them, and second, the approaching integration of the Common Market has made the consideration of competitive restraints in a single national market outdated. What has been done to prevent concentration in Germany is negligible. The cartell commission works with the concept of a zone of toleration as regards different degrees of competitive restrictions. In so doing, it is naturally not following the neoliberal demand of the absolute prohibition of competitive restraints.

Aside from its inadequacy as an anti-monopoly instrument in the eyes of avowed "Social Market" supporters, the commission and the law that created it do not represent anything unique internationally. Most western industrialized nations have similar controls. Hence, while there is no doubt that the law was motivated by "Social Market" supporters, it does not practically distinguish the "Social Market" system from the welfare state or the American economic system. In fact, the practice of monopoly restraint in Germany was never vigorously followed and has now turned into encouragement of monopolization, reminiscent of nineteenth century empire building tactics.

On the other hand, there are innumerable occasions where fragments of "Social Market" theory could be implemented. The day-to-day government business is a case in point. The presence of Ludwig Erhard as economics minister in the cabinet and Müller-Armack as his chief advisor in the ministry would have made this prospect a definite possibility. Both are avowed "Social Market" adherents and this bias

naturally had to exert itself in everyday economic, policy decisions. Again, however, the practice of their policy did not reveal itself to be much different from that followed in other western countries. There were no drastic interventions into economic affairs such as practices by industry apart from selective price controls in the early fifties. The government inherited a mixed economy; the ratio of the private to public sector had been set before the war and there was little to be changed as a result. Probably the proportions were weighted slightly in favour of the public sector through the massive government investments in industry during the thirties, and so the post-1949 government had some leeway to redress the balance. The previous regime had vanished but the remnants of its institutional framework remained and this framework allowed a much greater degree of centralization than the social welfare states.

The apparent contradiction between theory and practice of the "Social Market Economy" must be borne in mind, for it explains many confusions surrounding the operation of the system. The economic policy that was followed by the German government was guided by "Social Market" concepts not in the sense that certain economic institutions were created or certain laws established to implement a different economic system. The "Social Market" concept manifested itself in the attitude that those responsible for the execution of economic policy took toward the economic development of the country. As stated previously, the "Social Market" approach is a philosophical one. Endless attitudes follow from the two main principles, competition and social

betterment that can be shown only in the execution of day-to-day matters. Various features of the system are not distinguishable from a welfare state or the American economic system, yet anyone who has observed Erhard and Müller-Armack at work will realize the different style of trying to accomplish like tasks.

The problems that the German economy faced in the fifties and copes with now in the sixties are those experienced by all mature and growing economies. And the solutions in each case will also be similar. Thus it is difficult in any case to talk of basic differences in approaches to economic policy. All governments realize that they have a responsibility for ensuring full employment, growth, price stability and a fair income distribution even though there need be no legislation to that effect. But there are different ways of arriving at the same solutions, slight as they might be. The "Social Market" system is idealistic and individualistic in theory; the social welfare state is idealistic and collectivist, and the American system is pragmatic and individualistic. Such difference in outlook must inspire economic policy in distinct ways, part of the time if not all of the time.

How this inspiration made itself evident in German economic policy since the last war is the subject of the next chapters. That is not to say that "Social Market" ideas always influenced the originators of economic policy. It will be made clear when it did influence decisions and when other factors motivated economic policy. Likewise the results of economic policy shall be analyzed in this fashion. Was the "Social Market" spirit beneficial or adverse to the economy's performance when

256975

it was evident; were other economic policy decisions responsible or was it the objective structure of the economy which was the primary determinant of its performance?

Three determinants of the performance of the German economy in the post-war period have been chosen for analysis; namely, the balance of payments, monetary stability and capital formation. In each case, economic policy will be assessed according to the above criteria. The assessment is an evaluation of economic policy in Germany in general, but with special reference to "Social Market" influence.

CHAPTER 11

THE BALANCE OF PAYMENTS

The balance of payments will be the first question to be discussed with respect to the evaluation of economic policy. In order to evaluate policy correctly a careful distinction must be made first between objective and subjective influences on the German balance of payments. Objective influences are defined in this case to be those independent of government economic policy, while subjective influences are those arising out of economic policy decisions.

The balance of payments is also interrelated with the other two determinants of Germany's postwar success, namely price and monetary stability and capital formation and investment. For example, an excess of exports over imports increases aggregate demand, other things being equal, and helps to use more fully the existing productive capacity. It absorbs more fully the saving which the economy generates, since it makes possible an excess of saving over investment ($X-M = S-I$). Since the utilization of productive capacity is an important criterion for further investment activity, a positive trade balance is thus a factor encouraging it. It does not, however, ensure that investment will take place. In fact, an excess of imports over exports increases the volume

of goods and services and makes possible a higher volume of investment. The positive trade balance stresses the income generating effect influencing investment while the negative trade balance stresses the capacity creating effect. The relationship with stability arises from the fact that an excess of exports over imports increases the level of aggregate demand and along with investment and consumption determine the general price level, depending on their relationship to aggregate supply.

Before proceeding to the analysis of the balance of payments in the postwar era, a descriptive picture of the statistical background should be presented. For this purpose, the two main components of the balance of payments, the current and the capital account, will be separated. As summarized in Table 1, the current account of the Federal Republic has been positive from 1952 through to 1965. It reached the highest surplus position, 6.5 billion DM, in 1961 and the lowest in the first and last years mentioned. These years could hardly be classified as normal years. In 1948 and 1949, there was no Federal Republic yet and in the two following years, it was barely getting started. The highest deficit occurred in 1949 with a total trade value only a third of that three years later.²² The volume indexes of exports and imports, on the other hand, show that the volume of imports has increased progressively more than the volume of exports. Both the per capita and the total

²²United Nations Statistical Yearbook, 1966, (New York, 1965), The deficits for 1948 and 1949 were 1,247 and 3,524 billion DM respectively. This applied only to Bizone. Statistics are not available for the previous post war years.

indexes behave in this manner.

Looking at merchandise trade by itself (Table 2, columns 1, 2 and 3) it becomes evident that the favourable current account balance is primarily attributable to the merchandise trade component. In 1965, the current account surplus had almost disappeared, but the merchandise surplus remained at 5.1 billion DM. Since 1965, however, the trade surplus has once more risen considerably. In 1967, in particular, a new record was established. By August, the merchandise trade surplus had surpassed 10 billion DM and was expected to reach 15 billion by the end of the year. Whether this improvement is the result of the 1966 government change which installed a Christian-Democrat-Social-Democrat coalition for the first time since 1949 that counteracted inflation domestically and inspired new confidence after years of growing disillusionment in business circles, or whether 1965 was merely an accidental downward displacement from a rising surplus trend cannot be determined from the statistics alone. This question requires further analysis, which will follow shortly. Part of the explanation of why the surplus value is increasing rests with the price indexes of Germany's foreign trade (Table 3). The aggregate price index for imports has remained fairly constant from 1958 to 1965, while the price index for exports rose 6.7% during this span of years. The discrepancy is most evident in the last two years, when the volume indexes showed a strong trend in the opposite direction. To some extent, of course, the discrepancies are interrelated; price and quantity tend to move in opposite directions and stabilize total values.

What the disaggregation of the price indexes shows is naturally predetermined by the qualitative disaggregation of the exports and imports themselves according to main product groups and main origins and destinations. (Tables 4 and 5). Looking at the export product mix, the German predominance as a manufacturing goods exporter stands out clearly. The four top export categories comprise more than 50% of the exports, and all manufacturing exports together approach the 90% mark. Primary goods such as iron and iron products are stagnating, increasing by barely 20% in seven years, whereas machines, vehicles, chemical products and electrical equipment all more than doubled in value.

Imports, on the other hand, do not reveal as precise a picture as exports. Germany is a highly developed manufacturing country and so its import needs are correspondingly diverse. The country imports food-stuffs and raw materials that either are not found in Germany at all, such as tropical fruits, or not in sufficient quantities, such as ore, oil and wheat. Secondly, it imports secondary manufactured products that do not necessarily require the latest technology from cheap labour countries. Textiles are a typical example of this type of import. Finally, Germany imports those products which its technology has not yet mastered to produce, either because of lagging scientific knowhow or because of the limitations of market size. Computers are a good example of the knowhow question and they are imported to keep the country competitive in other fields. The market size problem is best exemplified by the machinery and chemical products categories. Although German industry is very efficient in these areas, the possibilities of economies of scale and the limited

size of the domestic market dictate some international specialization according to the principle of comparative advantage. Other highly industrialized countries would exhibit a similar pattern as regards their imports. How balanced Germany's import requirements are is attested by the fact that all the major groups of imports doubled in value between 1958 and 1965 (Table 4).

The geographic distribution of the West German trade produces a very simple picture. The primary destinations of German exports are its European neighbours, particularly those in the Common Market. The percentage of exports going to the latter rose from 25% in 1958 to virtually 30% in 1965. When the Efta countries are added the result brings the percentage above 50% for Europe. The only important non-European market is the United States, but it ranks only in fourth place. The United States is much more a source of imports (about 15%) than a destination of exports for Germany. Nevertheless, the European Common Market countries are Germany's principal suppliers of imports, and their importance is growing. The percentage of imports coming from these countries has increased from 22% to 40% from 1958 to 1965. Germany is thus much more dependent on Europe for its imports than for its exports, indicating perhaps that the country has reached a more refined state of production than neighbours. There are, likewise, indications that the trend to further trade with the EEC countries will be intensified, both because the countries are by nature complementary economically and because of the progressive liberalization of intra-Common Market trade.

Lastly, the sub-aggregates require some explanation. If total values of the individual categories composing the export aggregate are compared with the price indexes for the respective categories, it can be seen that only the machinery and electrical equipment price indexes move in the same direction as their values. In the case of chemical products, the price index fell while total value rose considerably. Vehicles display a stable price index with enormous value increases. In both of these last circumstances, the divergent movements are an indication of the amount of technological progress and economies of scale that had an impact on these industries.

The causal determinants of Germany's foreign trade which have created the preceding statistical picture must now be elucidated. In a study entitled "Germany's Persistent Balance of Payments Disequilibrium" Charles Kindleberger stated that its balance of payments, or more precisely, its surplus was determined by the nine following factors: (1) the structure of German trade, (2) the competitive situation in German markets, (3) the economic situation in Germany's trade partners, (4) the German propensity to export, (5) the docility of German labour, (6) German innovation and technical progress, (7) the German propensity to save and not to consume, (8) the deficiencies of the German capital market, (9) the beggar-thy-neighbour policies of the German government, including economic policy in general and the specific aspect of export promotion.²³ He probably exhausted all the

²³ Charles Kindleberger, "Germany's Persistent Balance of Payments Disequilibrium", Europe and the Dollar ed. R.E.Caves (Cambr., Mass: Harvard University Press, 1966), p. 44.

possibilities with this classification. Any other factor can be incorporated into one of these and so, a similar pattern will be used to investigate how important each one has been in the last decade. Moreover, the classification is suitable because in each case there is adequate scope for economic policy influence. The causal factors could be divided into three types; first, those where there is no room for economic policy, i.e. the objective factors, second, those where the objective and subjective factors overlap, and finally, those where the subjective policy influence is the overwhelming determinant.

The Structure of Trade

If there is one category in which the scope of government activity might be expected to be minimal (especially in a "Social Market Economy") the structure of trade should qualify. If the country had a favourable structure of trade then its exports had to be income elastic and price inelastic and its imports income inelastic and price elastic. It is important that both exports and imports be considered for the emphasis could just as well have been on the import deficit as on the export surplus. Unfortunately, this aspect is often overlooked. In Germany's case, however, the principal determinants can be said to lie with exports. As S.J. Wells put it: "The secret of German success in exports lay in its rate of growth, and the success in the rate of growth lay in exports."²⁴ The interrelationship constituted a continuous reinforcing circle. The all-important investment that rebuilt Germany

²⁴S.J. Wells, British Export Performance: A Comparative Study (Cambridge: Cambridge University Press, 1964), p. 75.

originated in the foreign export sector and pulled imports with it as a passive reactant.

Only lately can one speak of an independent import component, not as an adjunct or input to produce exports.

Let us then begin with the export side. There is no doubt that West Germany had and has the right export structure at the right time. In a study of the structural changes in the country's foreign trade, Hesse derived a correlation coefficient for the value of exports and world income for the period 1950 to 1960 which he found to be .9952, (regression coefficients: $X = 241.82 + 3.40 Y$).²⁵ The average annual growth rate of Germany's major manufactured exports was 6.7% between 1950 and 1966. Since world income increased much less rapidly during this period, Germany was able to increase its share of total world exports of manufactures from 10% to 20%.²⁶ When world income grew Germany's exports grew faster.

One of the main reasons is that the nation's short-run comparative advantage lay in the same direction as its long-run comparative advantage, specifically in contrast to the British position.²⁷ (The British economy lends itself well to comparison with West Germany's. The two countries have approximately the same size, the same population and similar industrial structures).

²⁵ Helmut Hesse, Strukturwandlungen im Aussenhandel der Bundesrepublik Deutschland (Berlin: Duncker & Humblot, 1962), p. 270.

²⁶ The Economist, p. iii.

²⁷ Wells, p. 76.

During the fifties, however, Germany had an advantage in relatively capital intensive, finished industrial products such as vehicles and chemical products. It was for these types of commodities that the longer run income elasticity of demand was high and price elasticity of demand was low.²⁸ Britain's advantage lay in semi-finished products which were confronted with the opposite position in world markets. Germany's exports in themselves reveal the phenomenon. Between 1958 and 1966, the exports of the very capital intensive products, vehicles and chemicals, rose by over 100% and the exports of semi-finished products, such as iron and iron products grew by only 20%. In addition, domestic production in Germany is becoming more and more specialized and differentiated in capital intensive, income elastic goods. It is a direction typically taken by rich developed countries, and it is bound to reflect itself in continued strong exports. Income elasticity of demand was then a definite advantage of the German product mix. But such goods were necessarily quite capital intensive even in the mid-fifties. Demand elasticity had consequently to be complemented by sufficient supply elasticity so that the demand could be met.

Thus, one should investigate whether the West German case naturally corroborates the usual assumptions made about factor proportions and foreign trade according to the Heckscher-Ohlin theory of comparative advantage. On the basis of war-time destruction of plant and machinery and the post-war flow of refugees to the Federal Republic,

²⁸ Wells, p. 76.

one would expect exports to be relatively labour intensive and imports to be relatively capital intensive. The greater labour supply reduced wages and the lesser supply of capital increased its rate of return. The only study of the capital and labour intensities of exports and imports on West Germany, however, reveals that, as late as 1954, trade made capital less abundant and labour more abundant, contrary to expectations according to the theoretical Heckscher-Ohlin model.²⁹ But it is possible, as Kindleberger has pointed out, that capital as a whole may be scarce and labour abundant, yet the marginal product of new investment is highest in familiar lines where it combines with existing equipment and trained management and labour.³⁰

Certainly, the familiar lines of export of the western part of Germany, particularly the Ruhr Valley, were of a capital intensive nature in contrast to the labour intensive, light-industry oriented eastern part of Germany. This disparity had been energetically enhanced by the nazi government's war-time structural intervention in the economy which sought to give the country a high degree of self-sufficiency. The intrusion gave East Germany a large part of light industry, and West Germany received additional capital intensive heavy industry. When the country was divided, enough capital had survived the war in the west to return to its traditional international markets. It will be noted likewise, that the heavy influx

²⁹Karl W. Roskamp, "Factor Proportions and Foreign Trade: The Case of West Germany", Weltwirtschaftliches Archiv, (1965) p.321.

³⁰Kindleberger, p. 46.

of refugees to the west exemplified not only the presence of more labour, but also of "human" capital.³¹ Much of this "human" capital had worked in armaments production during the war where it acquired many of the skills suitable for heavy manufacturing. Exports were essential because this capital would not have been employed elsewhere. There was no armaments production until 1955 to absorb the former military technicians and engineers in their familiar lines.³² On the other hand, the refugees that qualified in effect strictly as the factor labour were not all immediately absorbed into the productive sphere. Traditional lines of export, concentration of heavy manufacturing in West Germany, human capital skilled in armaments production, the absence of capital absorbing armament production, and the non-absorption of refugees labour consequently shaped the capital intensive production and export structure. After the basic heavy manufacturing sector, iron and steel, began to stagnate in the late fifties, the automobile, chemical, optical instruments, shipbuilding industries etc. assumed the responsibility for continued rapid growth. Most of these rapidly expanding industries were traditionally in the western part of the country. In some cases, however, entire industries previously located in the east, emigrated to the west. Part of the chemical trust IG Farben and the huge optical concerns Agfa and Zeiss are important cases. On account of this development, capital intensive exports grew consistently as a proportion of total exports from 75% in the fifties to 90% in the sixties.³³

³¹ Roskamp, p. 321.

³² Anton Zischka, War es ein Wunder? (Hamburg: Mosaik Verlag, 1966), p. 454.

³³ Kindleberger, p. 47.

The economic policies that other nations followed with regard to trade and economic development have been a further causal element in Germany's large trade surplus lead by the production goods sector. International tariff and trade restrictions are much less stringent where capital goods are concerned in contrast to consumers goods. Any country can produce consumption goods if this industry is given tariff protection, but only advanced countries can furnish technically complex goods. All mature countries have this advantage vis-a-vis the underdeveloped ones. The advantage was emphasized additionally during the fifties by both types of countries' efforts to promote investment booms through economic policy. The developed countries sought to raise the standard of living which was threatened by obsolescence (Europe mainly), whereas the underdeveloped nations desired industrialization and self-sufficiency. Since there was, at the same time, very little prejudice in the underdeveloped countries toward Germany because it had not been a colonial power, German goods enjoyed a particularly widespread reputation there. Krupp-built factories and Mercedes-Benz cars are among the most prestigious signs of economic maturity in these countries. The strong German export position among the developed countries, on the other hand, has been secured and extended since 1958 through German membership in the Common Market. Prior to its creation, Germany had already the advantage that its investment goods were subject to fewer restrictions than consumers goods.³⁴ Most of Germany's partners were

³⁴R. Carstens, Die Aufwertungsdebatte, Kieler Studien, Nr.63 (Tübingen: Mohr, 1963), p. 45.

less developed in the investment good field. The Common Market barriers to trade in consumers goods have likewise drastically receded, a fact from which Germany is benefiting increasingly. As a result of the initial concentration on capital and production goods and the success in their export, the economy achieved a high rate of growth and technical progress. Adding the benefits that German industry obtained from operating in the largest single national market in Western Europe, it is obvious that the country was able to adopt mass production techniques in the production of consumption goods to a greater degree than its neighbours. Prices are lower for a greater variety of products and exports are thus boosted in this sector. The automobile industry's success in exports is certainly derived particularly from this advantage. Only in the area of primary and semi-finished products are German exports being squeezed out. Often the German products cannot even hold the domestic market any longer. Coal production, for instance, has receded for export and domestic use in the face of rapidly rising costs. Higher protective barriers in the lesser developed countries and competition from inexpensive American coal increasingly imported into Germany are responsible.³⁵ The iron and steel industry suffers from very similar problems internationally and domestically. It is a key industry which every underdeveloped country insists on having and will go to any lengths to set it up locally. When steel must, nevertheless, be imported, Japan produces a high quality product for much less than it costs Germany, the United States or any other developed country to produce.

³⁵ Hesse, p. 276.

The imports development reveals alone from the statistics a very different picture and, in many ways, a much more obscure one. As mentioned above, until recently, imports played a passive role, a domestic resource-balancing factor to further investment and export. Usually there were no alternatives since the additional resources were not available in Germany at all, or their procurement was only possible at exorbitant costs. In addition the imports' function is discontinuous. Whenever they result on the basis of realistic competition, the amounts are absolutely large, but relatively marginal. If exports were strongly influenced by world income, imports might be expected to be influenced by domestic income analogously. That is not to speak of the direct influence of exports on imports itself, so much more so because the income derived from exports plays a strong role in contributing to national income. Hesse's correlation coefficient in this case comes to .977³⁶ (regression coefficients: $M = -23.88 + .27 Y$) and it is slightly increasing as the demand elasticity is also increasing, though at a much lower level than that of exports. In 1961, for example, the import elasticity was 1.15 while the corresponding export elasticity was -2.³⁷ The reasons for this discrepancy lie in part with the nature of the growth of exports, including domestic structural factors, and partly with domestic factor behaviour. In a world of rising incomes the import intensive industries just happened to be those which produced goods that were not too much in demand, and the goods that they had to

³⁶ Hesse, p. 250.

³⁷ Carstens, p. 76.

import previously were replaced by domestic substitutes. Germany is no exception in that synthetics, for example, have replaced so many raw material imports. It is only the imports of those raw materials for which no substitutes exist and which are vital to the economy which continue to rise steeply. Oil is a key import in this sense.

The income elasticity of imports is, furthermore, influenced by the domestic rigidities of supply. In a complex fully employed economy such as Germany, income increases beyond those made possible by productivity gains must spill over into imports. The more differentiated and specialized production becomes the more difficult it becomes to shift resources when tastes change. Imports fill the gap. Hence, the proportion of finished products imports rises in all likelihood. In 1960, the ratio of raw, semi-finished product imports was already 1:1:2.³⁸ Since that year, the proportion will have shifted further in favour of finished products. The economy was consistently at the full employment ceiling; in fact, the situation could be called one of overfull employment where incomes increased to the point where exotic imports begin to appeal to the average consumer. In any event the import elasticity probably has risen since the last time it had been estimated for the years 1950 to 1960.

Not only does the argument of limited ability to increase output in a full employed economy support this hypothesis, but there is also a socio-psychological justification. The individual German was

³⁸ Hesse, P. 256.

very restrained in his consuming habits until the early sixties. In most respects, such as calorific intake or consumption of imported luxury products, Germans ranked considerably below their neighbours during the fifties. One economist has stated that if Germany had had the British consumption pattern in 1960, it would have had to import 5 billion DM additionally, a sum that would virtually have wiped out the export surplus.³⁹ Until the sixties Germans still had a reconstruction mentality. After having lost everything in 1945 the people were very security minded so that consumption was restricted to a minimum and saving was encouraged. The experience of what seemed an endless boom throughout the fifties and sixties ultimately changed these frugal attitudes in favour of more demanding consuming habits.

Some of the discrepancy in the consumption patterns of Germany and Britain owes its existence, however, to the differences in agricultural protection in the two countries. Britain gave little protection and so imported extensively from North America and Australia, whose products were inexpensive in comparison to European prices. In Germany the agricultural sector was subsidized and the consumers paid the price. There is, indeed, considerable truth in this theory, for German food imports are rising as a result of the Common Market countries agricultural policy. German prices had to come down 10 % on the average and the additional demand at the lower price was to be met from imports. In one study its author has gone

³⁹ J. Markus, "Some Observations on the West German Trade Surplus," Oxford Economic Papers, XV (1965: I), p. 139.

so far as to insist that in Germany's case the expansion of imports in general following lower duties came largely at the expense of domestic production.⁴⁰ This hypothesis is undoubtedly more correct now than it was during the fifties. Frugality was the predominant outlook when purchases were in question at that time. It is then correct to conclude that domestic tariff barriers were and still are a hindrance to German imports, even though the country is one of the lowest tariff countries in the world. Nevertheless, one can really speak of hindrance only in comparison with the ease with which German exports enter other countries. In other words, if all international tariff barriers were removed, imports into Germany would increase relatively more than its exports to the rest of the world.

Before leaving the topic of the structure of German trade some remarks concerning the terms of trade must be made. They are at least a related aspect in so far as their influence on the balance of payments is concerned. They are more or less objective, independent of direct policy influence. Beginning with 1950, the terms of trade were against Germany in view of the rising world prices for raw materials in connection with the Korean War. At this time, the adverse terms of trade were of little significance to Germany because industry was just beginning to get on its feet again. There were enough basic materials in Germany to fulfill the requirements. In

⁴⁰ J. Wemelsfelder, "The Short-term Effect of the Lowering of Import Duties in Germany," Economic Journal, (March, 1960). p.97.

fact, they were occasionally exported to the United States. During the first three years of the economic boom that started in 1954, the terms of trade were constant and thus, the trade surpluses were not helped by favourable terms of trade.⁴¹ The unilateral tariff reductions in 1956 lowered the price of imports by the insignificant amount of 1.8%. During the next stage of the boom, 1958 to 1963, the terms of trade were in Germany's favour; export prices remained constant while import prices fell. The composition of trade basically determined this favourable development. Exports tended to display more price inelasticity of demand than imports. Thus, when the Common Market came into existence in 1958, imports had to become less expensive to compete in Germany and exports could retain the same price level to compete internationally.

In contrast to the role that income plays in determining exports and imports, that played by price is still negligible in comparison. The income and price effects actually worked in opposite directions on occasion. With falling import prices, quantities have decreased and with rising export prices, quantities have increased. To be more specific, the 5% currency revaluation in 1961 did not appreciably boost imports immediately thereafter, while exports continued to increase at an only slightly lower rate. It must be emphasized that this situation does not necessarily prevail in general but is determined by the composition of trade and consumption habits. Britain certainly undertook the 1967 devaluation to increase exports and decrease imports. The distinction is easily found: in the case of exports, Britain exports price inelastic capital goods proportionately less than does

⁴¹ Carstens, p. 28.

Germany, and in the case of imports, Britain has already been a more international market and so more price sensitive than Germany. It means that British exports compete with goods on a price more than on quality, and imports are likewise determined on a price basis, not because the domestic market cannot supply them or because there is something exotic about them. Finally, since 1963, the German terms of trade have remained constant, and the trade surplus cannot be explained by prices.

Summarizing preliminarily the evidence of the structural component of the economy's foreign trade, it must be concluded that it was very strong in a positive direction. Germany had in the fifties and still has in the sixties, the favourable product balance to find response in foreign trade, and it has it independently of government economic policy. Economic policy played no role in selective structuring for imports; it created a once-and-for-all tariff wall of medium importance within which imports were unrestricted and always overshadowed by the export sector.

The economic situation in Germany's trade partners is Kindleberger's third determinant of Germany's trade balance. What is really meant in this instance is the impact that other countries' economic policies have had on their respective economic conditions and consequently on their trade relationship with Germany. France and Italy are the typical cases where the respective domestic conditions affected the German trade balance significantly. In contrast to

Germany, whose government did not actively follow a full employment policy by the expansion of aggregate demand according to the Keynesian principle, France and Italy did so regardless of sectoral bottlenecks. Unequal rates of inflation move the balance of trade in favour of the country with the lowest rate. Thus in both cases, this encouraged exports from price stable Germany and discouraged imports into that country. The problem was quite acute in the years 1963 and 1964,⁴² and when France and Italy followed active stabilization policies in 1965, the result reflected itself immediately in the reduced German balance of payments surplus, both in the current and the capital accounts with these countries.

Objective - Subjective Trade Influences

The next group of factors to which Kindleberger referred, namely, the German propensity to export, the docility of German labour, German innovation and technical progress and the German propensity to save and not to consume, all constitute that realm of determinants where objective market influences and economic policy decisions can coincide. In the three previous explanations, the influence of economic policy on the part of the German government was totally absent. If complementarity of objective and subjective forces in this group of factors existed, the relationship must be clarified and then policy can be evaluated where it applied. The task is, however, somewhat difficult, for qualitative value judgments essentially identify the determinants. Quantitative data is not always available. The four factors can also be lumped together in one category because individually none of them is important enough to warrant separate attention.

⁴² Kindleberger, p. 45.

Propensity to export can denote a variety of meanings. One frequently used argument in support of a strong propensity to export states that since Germany no longer had any political or military power the only place for vigorous Germans to get anywhere was business. The domestic market was at first not big enough because of the low per capita income after the war, so that there was only the export sector. Zischka acutely observed when he wrote that the export push was identical with Germans' will to live.⁴³ Today remnants of this idea still remain; only it is no longer simply the will to live now but the will to be powerful again economically that underlies the export drive. German firms are meticulous about their exports. They often plan them for ten years ahead, and send their own contacts abroad instead of relying on the commercial representatives of the government.⁴⁴ Evidence of the strength of this export push was really shown by the response to the 1961 revaluation. Despite the additional 5% cost disadvantage to which exporters were henceforth subjected, exports rose the next year. Two explanations have already been given for this phenomenon: first, German exports are price inelastic and second, creeping inflation in France and Italy counteracted the price change. The third explanation is that the response to hold and increase exports was enormous. The additional cost burden was not reflected in export prices on account of a skilful system of price differentiation in world markets.

Domestic prices were raised in order to keep the export prices at pre-revaluation levels. The result was exact opposite of what the

⁴³ Zischka, p. 458.

⁴⁴ The Economist, p. xix.

revaluation was designed to do. One can then detect a double negative policy decision on the part of the government. Price differentiation was not to be allowed according to "Social Market" theory because it artificially distorted the market forces of supply and demand. Secondly, the action of raising domestic prices while leaving foreign prices at pre-revaluation levels was a direct move to counteract the policy decision's intent. Since the government stood by without taking any action, its response must be judged negatively. It permitted an action that was contrary to its belief and to its authority. Public denouncements of the action did not discourage it from being taken. In fact, Volkswagen increased its domestic prices exactly the next day after Erhard had denounced the policy in front of the auto company's board chairman, Nordhoff.⁴⁵ In this instance, export mentality was certainly a reality, but it would have been neutralized if the government had disallowed the price differentiation.

A further testimony of the German propensity to export was the acceptance of lower profit margins by industry when costs rose steeply in the early sixties just to keep up exports and investment. One student of the situation has concluded that the trade surplus was something to be achieved apart from keeping the rate of investment high and that it thus arose exclusively at the cost of consumption.⁴⁶ This cost

⁴⁵ Herbert Ehrenberg, Die Erhard Saga: Analyse einer Wirtschaftspolitik die keine War (Cologne: Seewald, 1966), p. 125.

⁴⁶ Alois Oberhauser, "Zahlungsbilanzüberschüsse und Einkommensverteilung," Weltwirtschaftliches Archiv, (1963: II), p. 296.

came to nearly 5 billion DM annually. The welfare of one group was sacrificed for the benefit of another, but the fact that it continued so long without resentment by anyone is a sign of how extensive the export mentality is.⁴⁷ The innate motivation to export stands out most emphatically. Not only were exports promoted, but they were promoted by sacrificing consumption.

The market organization reinforces the export mentality further. It was already noted that cost pressure on exports was met with price differentiation between the domestic and foreign markets and that constituted an imperfection of competition. Aside from the fact that it violated a principle of perfect competition, the use of price differentiation suggests a high degree of dependence of the larger West German firms on the export market. Indeed, the 100 largest corporations of the Federal Republic account for 50% of its exports and the largest thousand for over 70%.⁴⁸ The two giants in particular, Volkswagen and Daimler-Benz, receive 60% and 40% respectively of their sales revenue from exports. Such independence makes these enterprises decidedly export-conscious and ready to defend exports regardless of what the rules of competition imply. Since continued prosperity depends on increased exports, any government must face the realities of the international market. To compete internationally against the huge American corporations Germans have also expanded to comparable size in some cases.

⁴⁷ H.H. Lutzke, "Woran krankt unsere Wahrungspolitik?," Die Aussprache, XV (1965: 2), p. 40.

⁴⁸ G. Ollenburg, "Konzentration und Aussenwirtschaft", Die Aussprache, XV (1965: 5), p. 144.

In so doing, they have become oligopolists or monopolists in the smaller German market. This has been accomplished either by the acquisition of numerous small companies by the larger ones as in the chemical industry or by having publicly known working arrangements for cooperation in certain fields as in the automobile industry. The domestic market is divided by agreement and competition determines success in other countries. Market organization hence complements the innate export mentality of the business community.

Both innate export mentality and market organization have provided difficulties for those attempting to follow "Social Market" economic policy. The complementarity complicates the decision making beyond resolving the questions of the permissibility of price differentiation and the neutralization of revaluation. As long as tariff and trade restrictions exist, price differentiation is a necessity of competition. A firm has to compete in different countries with different prices. In some cases its profits will be low, and in others high. For example, Volkswagen could not sell its cars in the United States at as high a price as in Canada because the general level of prices for cars is considerably lower there as yet. Price differentiation such as this is not dumping either. Selling a product so that its price in another country is lower than that charged in the domestic market is considered dumping only if the foreign price is below the competitive price prevailing in that market so that injury results to the producers of that country.

The "Social Market" theory did not provide any guidance for making economic policy decisions that affect the international corpora-

tion. In Eucken's lifetime the international giant companies were much fewer. Concern as to their behaviour was not very prevalent. More importantly, however, the neoliberals saw the large enterprise in a different light. They were less worried about the companies' international competitiveness than their relationship with society. They feared that monopolization left society at the mercy of a few large enterprises. These are problems with which the sociologist is more concerned today than the economist. There has been only one attempt to explain the concept of consumer sovereignty in a monopolistic economic structure, namely, Galbraith's notion of countervailing powers. Large producer entities confront large consumer entities and so provide a check on each others' power. The government and the labour unions also provide some check on the giant corporations' practices today.

In its undeniable capacity of augmenting the export surplus, the German propensity to export was perhaps too strong for economic policy to cope with apart from the disagreement with "Social Market" theory. The export drive was so strong that it could virtually neutralize the revaluation. Since the revaluation was, nevertheless, relatively successful in stabilizing the economy externally and internally, it is difficult to say whether it was beneficial or harmful. Certainly, government economic policy should retain the upper hand. If the revaluation was designed to decrease exports, the government's lack of concrete response to the exporters' evasion of its designs must be considered a failure in a practical sense. This judgment must be upheld unless it can be proved that the government anticipated the attempted circumventing of its policy measure

and so, adjusted the rate of revaluation higher than what it intended. No evidence to this effect can be found, however.

Similar possibilities of conflicting doctrines arise from the connection of exports and German innovation and technical progress. The rationalization of production and innovation took place principally in the larger firms, which were not so susceptible to sudden changes in demand for their products, so that they could organize their production most efficiently no matter what investments for new machines, etc. were required.⁴⁹ This characteristic is much more important in Germany than in the United States. From observation European businessmen seem to invest for longer periods than their American counterparts, and so investments must pay their way much longer. Large firms are in a better position to undertake large capital outlays; they thus progress faster and export more. The theory of the "Social Market Economy" is silent on this question. Erhard has not interfered with concentration and the federal cartell office has been reluctant to proceed against big industry.

The docility of German labour and the German propensity to save and not to consume come more into the direct sphere of economic policy influence. Until the sixties, German unions were very sensitive when exports were being threatened, the cause of which relates to the immediate postwar era of codetermination. If the government had any say in regard to this matter, its influence was restricted to moral suasion. The 1949 constitution guaranteed autonomous collective bargaining "Tarifautonomie" to the contract partners, industry and the unions. The

⁴⁹ Kindleberger, p. 57

government never mediated disputes. The next chapter will elaborate on this issue more extensively. It will suffice here to say that the restraint practised by the unions throughout the fifties with respect to wage demands undoubtedly aided in the creation of a surplus for the producer, but if the producers would not have adjusted to lower profit margins their influence would have resulted in exactly the opposite in the sixties, for the wage increases granted in Germany since 1960 are the highest in Europe. Thus today one must regard this trait as an obstruction to the export surplus.

The propensity to save and not to consume, likewise is a main subject in a later chapter, and so its mention here in connection with exports shall be brief. Savings were the prerequisite without which the massive exports could not have been possible. The average propensity to save is high, especially among private households. These economic units contributed 37% of the total savings in 1963, based on an average rate of 10% of disposable income. The marginal propensity to save is also high, although in the mid-sixties it is probably declining. The cause has already been referred to as the desire for security, precaution and lately the quest for identity.

Savings occupy an important part in the determination of exports in the long run as well as in the short run context. In the long run, if savings constitute a high proportion of income, investment can be high both in the domestic and export sectors. Hence, exports will grow, raise income and set the same chain of events into action once again. While the long run significance is applicable at all stages of employment, the short run

connection between savings and exports takes on importance particularly at the full employment level at which Germany has been for the greater part of the postwar era. According to the theory of national income accounting, exports can increase at the full employment level without inflation only if there is (a) a corresponding decline in investment, (b) an increase in imports or (c) an increase in savings. ($X = (S - I) + M$). During the late fifties, investment was too profitable to be reduced and imports were stable. Thus, marginal savings were the flexible element that allowed exports to increase. In the sixties, the long run connection retains its former importance but the short run savings have declined in favour of an increase in imports. They are, nevertheless, still quite important and preferable to increased imports because any short run savings contribute to the long run export prospects.

Economic policy was an important factor affecting savings. Together with the psychological motives that were responsible for frugality they explain the high average and marginal propensities. Economic policy provided many financial incentives for saving above the already extensive precautionary amounts set aside by the public. The last chapter will present a thorough analysis of the details. The promotion of exports was not the only reason for which incentives were created. Exports were part of the general effort of reconstruction for which savings were required.

The Role of Economic Policy

The last part of this chapter will deal with those issues which exclusively or nearly exclusively involved the influence of government economic policy. Kindleberger has suggested that they were the deficiencies

of the German capital market and the beggar-thy-neighbour policies of the government. Since this last phase is a priori negative value judgment its connotation must be changed. The manner of presentation will also be based on two broad causal elements, direct government export promotion and the management of the capital account. The latter aspect will complement and complete the analysis that has up to now dealt only with the current account or even more specifically the merchandise trade balance. Export promotion has been consciously followed since the beginning of the Federal Republic in 1948. At various times this export promotion has taken the form of taxation privileges, special bank discount rates, export insurance schemes, and miscellaneous expenditures to foster better communication and information internationally.

On the whole, West German export promotion has receded ever since its initiation. The early fifties until 1955 were the most important era. Portions of the income from exports to the dollar area were income tax free, and the bills of exchange financing the exports were free of the bill tax.⁵⁰ This privilege ended in 1955 with the GATT convention, where it was agreed that no industrialized country was to grant tax privileges for exports. All that remains today in the German tax system is the rebate of the turnover tax, which has been arbitrarily set at 3.5% irrespective of the actual burden of the tax.⁵¹

⁵⁰ Wirtschaftsdienst "Soll und kann der Staat den Export fördern?", Interviews des Wirtschaftsdienstes, (October, 1966), p. 527.

⁵¹ R. Adouard, "Kehren die alten Handelsbilanz überschüsse wieder?", Wirtschaftsdienst, (October, 1966), p. 71. Since this thesis was originally written, Germany has switched to the value added form of taxation thus removing the ambiguity of this rebate.

As its counterpart, there is also an import equalization tax to equalize the burden domestically, that has, however, been differentially adjusted to reflect the actual burden more adequately.⁵² Again, this is not really a tax privilege but a competitive measure to prevent the cumulative tax from pricing the commodities out of the international market. In France such rebates come to 8-9%.⁵³

The reduction of discount privileges of exports by the banks began somewhat later when the surpluses were getting too large. Ninety day bills of exchange in the export business had been rediscounted by the German banks without the acceptance of the central bank and at rates in the particular countries concerned if they were below the rates prevailing in the Federal Republic. The costs were borne by the so-called "Plafonds B" of the central bank, containing 300 million DM and created by the treasury specifically for that purpose.⁵⁴ What remains of this credit system since 1957 is carried on by the "Kreditanstalt für Wiederaufbau" (credit institute for reconstruction) and the "Ausfuhrkreditanstalt" (export credit agency). The former has at its disposal a fund of 300 million DM out of the former ERP programme with which to aid in the financing of long term investments in underdeveloped countries. The second institution is a private bankers consortium engaged in the aid of medium-term projects, 6 to 48 months. The funds

⁵² Heinz Mesenberg, "Schwerpunkte der Steuergesetzgebung", 1961-65", Steuer und Wirtschaft, Nr.42 (December, 1965) p. 882.

⁵³ Adouard, p. 71.

⁵⁴ Carstens, p. 39.

came from the original "Plafonds B" of the central bank.⁵⁵ In contrast to the earlier period these agencies no longer are permitted to provide for continuous refinancing.

As export credit is, nevertheless, a fairly strong allocative support which is internationally frowned upon in debtor countries, the main efforts of German export promotion have shifted to export insurance in recent years. Other factors have, of course, contributed to this shift also. Export insurance is as close as one can get without distorting the competitive ideal of the "Social Market Economy". Insurance does not distort trade; it only reduces the risk, although there is some doubt on this issue. In addition, only the government can handle so vast a programme as international insurance. Finally, the development of the trade pattern in recent years has done much to bring insurance to the forefront of export promotion. Export insurance began in 1950 and has contributed very much to the success of the winning back of export markets after the war. The two agencies primarily engaged in this activity are the "Hermes AG" and the "Deutsche Revisions - und Treuhand AG", both credit insurance agencies having a public guarantee fund at their disposal.⁵⁶ It contained 120 million DM in 1950, and by 1965 it had grown to 17 billion DM, of which 16 billion DM was in active use.

The main function of export insurance in recent years has been to bridge the risk and the credit conditions in underdeveloped and communist

⁵⁵ Ibid.

⁵⁶ K. Hamann, and U.H. Habicht, "Zur Geschichte der deutschen Exportkreditversicherung," Neue Perspektiven aus Wirtschaft und Recht, (Berlin: Duncker und Humblot, 1966), p. 20.

countries. In absolute terms, therefore, export insurance does not play a major role. With the advent of Common Market integration, the relative importance of the underdeveloped and communist markets has receded. Communist countries demand very long credit terms of seven to eight years, and if the political risks are added, private insurance companies would not enter this field. In comparison with other countries, the German government insurance is small. For example, French and English exporters are covered to 90 - 95% for political risk and 85 - 90% for economic risk as compared with the meagre German rates of 15% and 20% respectively.⁵⁷ The success of German firms in still getting orders and completing them can then either be attributed to their love of risk, or to the good reliability of the debtor when dealing with German enterprises because he values their goods. Something should definitely be said for the latter. The problem in underdeveloped countries, on the other hand, is somewhat different. Here it is very difficult to draw the line between direct aid and export promotion, and because competition for exports is very intensive, there is every indication that a good deal of business is a donation to the exporter by the government.⁵⁸ But this phenomenon is not restricted to Germany alone. The American Export-Import Bank financed 11% of all U.S. exports through the foreign aid programme also. More precise information on this topic

⁵⁷ F. Berg., "Interviews", Wirtschaftsdienst, (October, 1966), p. 36.

⁵⁸ Rudolf Münemann, "Probleme der Kooperation bei der Exportfinanzierung", Vorträge des 17. Betriebswirtschaftler Tages, (Munich : Duncker & Humblot, Deutschen 1964), p. 181.

is difficult to obtain, and quantitative data legally obtained are virtually unavailable.

Finally, a word should be said about informational export promotion. Apart from 12 million DM allotted for fairs and exhibitions by the government, there has been very little activity. Private industry itself invests only 1.5% of its earnings in research of foreign sales opportunities. Not until recently has the new government proclaimed that the economics ministry hopes to receive ideas from private industry as to what sort of research should be financed by the government.⁵⁹ Erhard had remained unconcerned about this matter even in a year of meagre surplus such as 1965.

The quantitative effect of the export promotion aspect of the German trade surplus cannot be calculated. The impression that one obtains is that export promotion was helpful in the early years after 1949, but that in the last decade, it has affected trade only marginally. Moreover, the German system hardly had the scope of the British or French promotion, whereas German exports have grown much faster. Whether a greater effort would have improved the results further is unimportant. Germany did not need greater exports. The government's *laissez faire* attitude with the addition of a small dose of moral suasion was sufficient. Direct export promotion by a rich country will always remain marginal in the quest for international markets.

The management of the capital account is the most contro-

⁵⁹ Adouard, p. 73.

versial feature of the government's economic policy on the issue of the balance of payments. If Germany is ever referred to as having followed a beggar-thy-neighbour policy, the management of the capital account is generally the first argument put forth. Statistically, the judgment would seem to be supported. Not only has the current account been in Germany's favour, but the capital account has also been consistently positive. As summarized in Table 6, it was negative only in 1962. For the period 1958 to 1965 the answer to whether Germany really followed a beggar-thy-neighbour policy can only be determined from an analysis of the causes of the capital account surplus.

The underlying theme of the capital surplus is the dilemma resulting from an irrevocable conflict of domestic and foreign economic policy that Germany faced since 1954. Domestic price stability was given priority in economic policy decisions, and its price was paid in terms of ever increasing trade surpluses and capital inflows. Some observers see the origin of the problem in the undervaluation of the exchange rate which gave Germany a natural 5-10% advantage over its competitors.⁶⁰ But the situation became drastic when Germany reached full employment in the mid-fifties, and bottlenecks put pressure on prices. Whereas other countries fostered domestic expansion in comparable situations, Germany suppressed it and piled up surpluses to be used in creating even more exports, which in turn once again strained domestic stability. Concomitantly, the deficiencies of the German capital market added flames to the fire, as the central bank was unable to neutralize the surplus required to maintain permanently the domestic

⁶⁰

The Economist, p. xi.

stability.⁶¹ The insufficiency found expression in rising interest rates which drew large capital inflows with them. For a short time, the dilemma was accidentally remedied. Reaching a high point in 1956, a portion of the surpluses accumulated and was neutralized in the "Juliusturm" to an extent of 7.7 billion DM.⁶² These were originally planned expenditures for foreign troops stationed in Germany which were either not spent or not spent on schedule. After 1957, however, they were reduced and the surplus ceased to be neutralized. In addition, the surplus funds which the government was able to reach through the influence of the central bank on the commercial banks was only a segment of the total. The non-bank sector could not be reached at all by way of open market purchases and rediscount policy, used as it was to self-financing, and thus still more capital streamed in from abroad.

Remedying the balance of payments crisis by means of re-export of money capital, gold and foreign exchange, was considered for some time at this point. The notion had been brought up by German economists for several reasons: (a), it would put the German accumulations of gold and foreign exchange to work in underdeveloped countries, (b), it would help to alleviate the international liquidity crisis for which Germany was receiving a large part of the blame, and (c), it would neutralize the inflationary impact of the balance of payments surpluses.⁶³

⁶¹ Carstens, p. 62.

⁶² Ibid., p.37.

⁶³ Patrick Boarman, Germany's Economic Dilemma: Inflation and the Balance of Payments (London: Yale University Press, 1964), p.247.

In view of the structures and the economic policies followed by the underdeveloped countries in contrast to Germany, credit extension would, however, return to Germany like a boomerang. As Boarman states:

"Extension by surplus countries of credits to deficit countries which followed inflationary policies contained an economic booby trap. The soft currency countries frequently used the monetary "elbow room" provided to increase the general condition of over-expansion with its import-increasing export-decreasing consequences. As a result, the export credits made the deficits still bigger. The export of German credit abroad was nullified to the extent that the recipient countries returned the gold and exchange to Germany for the purchase of German goods."⁶⁴

The goods that Germany produced were especially in demand in developing countries. What were permanently exported were thus German goods for which no equivalent goods were received in exchange. The fact that Germany usually insisted on loans tied to German products virtually assured this reaction. Moreover, the process of reexport of foreign exchange in Germany itself forced real capital exports. What was reduced by the reexport of inflowing gold and currencies was not primarily income but bank liquidity. Thus a surplus in the balance of payments may be turned into a deficit, which did occur in 1959 but without thereby cancelling the original impact of the current account surpluses.

As already mentioned, even if the "boomerang effect" would not have been operative, the high interest rates prevailing in Germany in the late fifties would have reversed the flow of exchange again. The German rates were phenomenally high during this time. The average 1956-1961 long term interest rates were 6.55% as compared to 3.66% for the United

⁶⁴ Ibid., 248.

States and 3.18% for Switzerland.⁶⁵

Despite the impressive growth in investment in Germany throughout this period, there was still a great scarcity of capital. About 40% of all funds were directed to solving the housing problem, and further amounts were needed first to re-equip labour with new tools and later to overcome the scarcity of labour. Capital costs simply skyrocketed.

Only if the recipient countries used the credits to settle debts with other countries or international financial institutions, or if they neutralized them in their treasuries would the reverse flow of funds not have been inevitable. These policies did not begin to make headway in most countries until well into the sixties.

The boomerang effect, on the other hand, would not operate in the same way with regard to money inflows in the short or intermediate period. The outflows of credit were bound to turn into goods outflows while the inflows were not followed by real capital inflows. Credit inflows were mostly in the form of direct investments by foreign companies establishing subsidiaries to serve the European Common Market. These investments were constantly nourished by fresh inflows of capital, but they grew principally through reinvestment of retained earnings. Direct goods imports did not follow from this investment process immediately. Eventually, the additional investment contributed to a rising level of national income and so to more imports as determined by the marginal propensity to import. Similarly, the increased investment had this time undoubtedly strained some resources, raised prices,

⁶⁵ Ibid., p. 254.

discouraged exports and encouraged imports. The connection remains, nevertheless, indirect, whereas Germany's capital exports were subject to both the direct and indirect effects.

The basic dilemma continued until 1961. The trade surplus had increased every year; gold and foreign exchange were at an all time high and price stability was weakening. The economy had reached a point of fundamental disequilibrium. If prices were to be kept absolutely stable, the trade surplus would have had to reach a size that the other countries no longer could accept without retaliation. Consequently, the only way out if Germany was unwilling to inflate the price level and if the other nations were unwilling to apply restraint was to revalue, and this Germany undertook in 1961. Once more, it must be emphasized that the German case would hold in general in industrial countries practising restraint. There are notable exceptions; the United States and Switzerland are good examples that show that long run capital exports are possible. But it is primarily possible because most of the capital exports are reinvested profits accruing from their substantial foreign direct investments.

In his analysis of the 1961 revaluation, Carstens has shown that given the export and import elasticities of Germany, the normal reduction in the size of the balance of payments should have resulted and it did in 1962.⁶⁶ (Table 2, column 6 shows this). The current as well as the capital account (Table 6) contributed to the reduction. Exports rose only 3.9% (1961, 6.3%) while imports increased by 11.6% (1961, 3.8%). The next year, however, the same problems began to

⁶⁶ Carstens, p. 73.

reappear as in the late fifties. Inflation abroad was strong and German exports rose rapidly. At the same time, one revaluation established hopes for another one to follow. Exporters were eager to export before a second revaluation gave them an additional price disadvantage abroad, while importers held off purchases in the hope of acquiring them at lower prices following revaluations. 2.5 billion DM of liquid capital also entered the country in 1963 in expectation of speculative gains,⁶⁷ or one half of the German net exports of goods and services. But in contrast to five years earlier, revaluation was no longer needed. Some pressure was reflected in increasing domestic prices and a great deal in foreign leakages. Tourists accounted for 2 to 3 billion DM, foreign workers for another $1\frac{1}{2}$ billion DM in remittances, 1 to 2 billion DM went to underdeveloped countries, and 2 billion DM went abroad as net dividend remittances by 1965.⁶⁸ In addition, the foreign demand for German bonds received a halting blow with the 25 % coupon tax imposed in March, 1964. Previously, this demand was infinitely elastic whenever their price dropped below the foreign bond prices. So by 1965, the total balance of payments turned negative, (Table 2, column 6) and the problems all seemed to have solved themselves.

Before commenting on this aspect of government economic policy, one interesting point might be made. Carstens once again has pointed out that one half of the surplus on current account could be

⁶⁷ Hans J. Brems, "West German Problems, Price Discipline and Economic Integration", Quarterly Review of Economics and Business, (Winter, 1964), p. 55.

⁶⁸ The Economist, p. 28.

explained by a non-economic phenomenon, receipts from foreign troops.⁶⁹ (Table 2A). He insisted that because of their political nature, the troop receipts were not a permanent feature of the German economy. If they were omitted in calculating the balance of payments surplus, no appreciable surplus remained. But there is adequate reason to regard them as just as permanent a category as some nations regard shipping receipts.

Despite the dilemma, there is undoubtedly no country that would not gladly have changed place with Germany. Moreover, one cannot attribute the problem to the beggar-thy-neighbour policy deliberately pursued by the government. It did not follow its course primarily with surpluses in mind. After several historical experiences with domestic inflation, which deeply affected the "Social Order" theorists of the "Social Market Economy", a rigid course with regard to price stability had obviously to be the predominant concern. When the other countries do not share those opinions, they must be aware of the consequences. Not only did they encourage the German trade surplus accumulation by their stimulation of aggregate demand, but they put Germany in a position where it could do little to remedy the situation. For while a policy to expand exports by holding down prices and curbing domestic spending works well, a policy to increase imports and to improve the functioning of the capital market, both of which were expected of Germany, is usually unsuccessful.⁷⁰ Hence,

⁶⁹Carstens, p. 36.

⁷⁰Kindleberger, p. 58.

responsibility lay with the debtor not the creditor. The validity of this conclusion is poignantly shown by France and Italy since 1965.

The theory of Eucken and Röpke was followed to the letter by the government policy makers, and in their eyes the surplus must be viewed a triumph. One can support that position, calling it a "Social Market Economy" triumph, but of the short, not the long run. Steering a one directional course can be successful for some time. The "Social Market Economy" theorists and practitioners responsible for economic policy in Germany in the mid-fifties were probably too optimistic in believing that the "others" would revert to the German practice. Ultimately these hopes were dashed at a time when the domestic-foreign policy disequilibrium strained the economy to the limit. A decade of huge surpluses and their effects were beginning to disrupt the domestic social order. Here the Erhard administration was no longer master of the situation as the economy was sliding into greater difficulties than the traditional problem countries, France and Italy. Under such a reversal of the situation, even the best export structure, which Germany still has, is of little value. Little more needs to be said about that question, for it is the topic of the next section.

Conclusion

In this chapter, the attempt has been made to evaluate the influence of economic policy on the German balance of payments in the postwar era and to relate that economic policy to the ideas which underlie the "Social Market Economy". The balance of payments position has almost consistently been in Germany's favour. Of all factors analyzed,

the composition of trade stands out as the major explanation of success in foreign trade. The keys as to why Germany had the correct composition are its economic structure and its capacity for innovation and technical progress. Both in turn can be attributed to unique historical occurrences. The separation of East from West Germany gave to the West an economic structure whose comparative advantage was in capital goods production. These were in great demand in the postwar years. The war itself was the other historical incident that gave Germany an advantage. The technical experience gathered in such a vast military effort was of great value to German engineers and technicians in continuing technical progress after the war. Economic policy did not actively affect the structure of trade. If it can be said to have played a role, it was one of passive acceptance of the new postwar environment, which in fact, meant the encouragement of trade based on comparative advantage instead of renewed self-sufficiency. Such acceptance meant trade liberalization and proved successful.

The same criteria apply to the influences that other countries' economic policies had on German trade. The creation of the Common Market benefited Germany primarily because it was in the best position to adopt mass production techniques. In the less developed nations, German exports had none of the stigmas attached to them as those from the ex-colonial powers, France and Britain, or those from the neo"colonialist" Americans and Russians. Nevertheless, the general lines of economic policy were again an underlying theme. The German government was Europe oriented, a fact which contributed to the

establishment of the Common Market, while in the eyes of the third world it was a welcome change from one-country nationalism. Much of this new outlook was inspired by "Social Market" ideas in addition to the changed role that Germany could play after the war. In a vague sense, the two are really connected. Competition and comparative advantage were emphasized. Neither social welfare states like Britain nor the U.S. supported trade liberalization to the degree that Germany did. Classical economic theory triumphed when Germany exported successfully. One can, of course, say that economic policy was involved in all these issues, but the point is that the effect was purely secondary. Without the structural advantages to begin with, the export surpluses would not have resulted in all probability.

In addition, the propensity to export and the propensity to save were seen to play a role in the success of foreign trade. Economic survival as a mature nation meant exports and savings for the German economy after the war, a thought which still pervades the thinking of businessmen and workers today. The feelings were seen to be so strong that they even persisted against the economic policy of revaluation in 1961. That action paradoxically represents both the success and failure of "Social Market" doctrine. Competitiveness had been so strongly emphasized by "Social Market" theorists that German producers created a monopoly in the domestic market to remain competitive internationally. This was clearly not intended by Eucken or by Müller-Armack.

Direct export promotion was hardly a factor beyond the immediate postwar years. It takes only the form of export insurance now,

and in comparison to Britain, the U.S. and France, the German effort is far more limited. There is no significant economic policy decision nor "Social Market " doctrine in question when it comes to insurance.

Finally, the positive capital account was shown to be directly related to a fundamental requirement of a "Social Market Economy", domestic price level stability. The export surpluses resulting were important but incidental outcomes of such policy. Throughout the entire period that Erhard was economics minister and later when he was chancellor, price level stability remained his prime concern. One cannot, however, go so far as to consider the positive capital account an unmixed blessing nor can it be indefinitely prolonged without incurring bad feelings in other countries. Domestic stability was achieved at the price of cumulative export surpluses which had a cumulative inflationary effect that was progressively more difficult to neutralize. Eventually revaluation was the only solution.

In conclusion, the impression is that it was the objective economic factors that were on balance responsible for the strong balance of payments position. If economic policy did not leave a significant mark, it was primarily because the success was much more dependent on an economic philosophy than on precise policy. The economic philosophy was liberal and did not prevent the objective factors from playing their role. The emphasis on trade liberalization, competition and comparative advantage which inspire the "Social Market " theory were evidenced only in a passive way. Whatever economic policy was applied, it did not have any specific "Social Market" traits except in connection with monetary stability. The

conclusion is, moreover, unavoidable that no positive economic policy could have accomplished much more during the first twenty postwar years. But it does not imply that a new approach should not be warranted in 1968 to keep the favourable trade balance either from the point of view of economic philosophy or economic policy. All objective and subjective criteria are subject to change.

CHAPTER 111

PRICE AND MONETARY STABILITY

The objective of this chapter will be the evaluation of economic policy with respect to the second criterion of success in German's postwar development, domestic monetary and price stability. There are three types of possible inflations, demand pull, cost push and structural inflation.⁷¹ The chapter is an analysis of the factors that are responsible for these three types of inflation and what role they played in Germany. Government economic policy is an integral part of such an analysis by virtue of the role government plays in contributing to inflation and in responding to its existence.

The degree to which Germany's postwar economic development has displayed a certain price or monetary stability can be judged relatively or absolutely from statistics. Price stability means in any case the absence of inflation. The German inflation of 1923 acutely demonstrated the adverse economic, social and even political results of inflation. Consequently, the preservation of price stability is generally recognized now to be one of the major objectives of government economic policy. Certainly the government has the direct

71

The three-fold division of inflation classification is emphasized according to the more modern approach, primarily because it allows economic policy response.

influence through its control of the issuing of money.

In Germany, price and monetary stability were to be especially encouraged by economic policy. Both those who had lived through the 1923 inflation and the "Social Market" economists were ardent supporters of stability. The economics minister Erhard, as mentioned earlier, even interpreted the "Social Market Economy" to mean "freedom in the realm of goods, discipline in the realm of money". Price stability had to be the major policy consideration of any German government and particularly in a "Social Market Economy". There is no doubt, therefore, that the replacement of the Erhard administration by the Kiesinger-Brandt coalition in 1967 was partly motivated by the belief that Erhard and his "Social Market" economists were failing to solve the problem of creeping inflation. The apparent success of the fifties was not being duplicated in the sixties.

Price and Wage Movements

A brief statistical synopsis will outline how stable the price level has actually been. Tables 7 and 8 summarize the developments of the general wholesale and consumers price indexes and give a disaggregated picture of the major wholesale price index component as well as an international comparison. Both general indexes show substantial price increases after 1960 essentially concentrated into the years 1964 to 1966. During that span of years, the wholesale price index rose 3% annually, and the consumers' price index rose by 4% annually. The discrepancy with the average price increases during the fifties, which never passed beyond 2% , is noticeable. 4% price

increases are virtually the upper limit if the inflation is to be called creeping. A look at the disaggregated wholesale price index shows that consumption goods and building materials have generated the most significant price increases. Producers' goods price and basic raw materials and textiles, on the other hand, show less than average increases.

Labour costs are also signposts of price level stability, for if the Cobb-Douglas production function is acceptable in the German case, labour is the major input in a product. A look at Table 12 reveals that contractual wages increased at an even faster pace, 31.5% alone since 1962 or almost 10% annually since 1963. Weekly gross pay for workers and monthly salaries for white collar workers show similar tendencies at levels only slightly below the hourly pay increases (Tables 9 and 10). Furthermore, it can be seen from Table 11 that the increases which, of course, affect the cost of produced goods put Germany into one of the worst positions internationally, together with the British and the Japanese economies. It is interesting to note that both Britain and Japan are having the same problems as Germany. Britain is not, however, a growing economy while Japan is. Wages and price increases can occur in either growing or stagnating economies. The first year of the new government has been, on the other hand, very stable. Expected increases were only about 1½% until the end of the year 1967.

Inflation, as noted above, can be of demand pull, cost push or structural type and the remedies lie with monetary and fiscal policy, "Konjunkturpolitik" as it is known to Germany. Of the three demand-pull is most sensitive to monetary and fiscal policy measures; the other

two are less sensitive to them, and their correction often requires going outside of conventional policy.

In contrast to the decade of the fifties, the sixties show a definite decline in internal price stability, a decline that, nevertheless, compared favourably with the developments in other major countries. The instability suggests that the government either could not diagnose the causes of the creeping inflation, or could diagnose correctly but was unable to find the correct remedy, or it was aware of both the illness and the cure but was unwilling to do anything about them for political or other reasons.

Demand Pull Inflation

Let us begin with the traditional demand pull inflation, determine the extent to which Germany has been affected by it and examine the government's policy response. The Keynesian model of income determination identifies three components of aggregate demand, consumption, investment and government expenditures. Exports have been deliberately omitted in this model because their role has already been noted. One must be aware, however, of the possible connections of demand and supply. Changes in the supply of labour, for instance, cause changes in the level of aggregate demand. Consequently, Germany probably does not suffer from only one type of inflation but all three. The identification of the demand pull element is thus a problem in itself.

Although virtual full employment had been reached in 1956, noticeable demand pull inflation did not result until the beginning of the sixties. Until that decade, the economy had realized "the most favourable

development of its potential with a high micro-economic flexibility and a macro-economic full capacity".⁷² Inflationary pressure was there, provided by the huge capital inflows and the trade surplus, but the central bank and the government kept it under control as noted previously. After 1960, demand pull inflation could no longer be suppressed. While revaluation in 1961 temporarily slowed down the imported inflation, the domestic one was accelerated.⁷³

The origins of the demand pull inflation were found in the order of government expenditures followed by investment demand and consumption. Table 13 verifies this order of precedence. As a proportion of total domestic demand, government expenditures have increased from a low of 12.9% in 1956 to 15.6% in 1965. Much of this increment was accounted for since 1959. Investment has moderately increased its share of demand while consumption has displayed a persistent relative decline. The decline is, however, relative for column 4 shows that it has been increasing in absolute terms.

An examination of sector aggregates reveals also that prices have risen most where government expenditures were important. The construction sector above all has been influenced by government spending and its price index movement is correspondingly strong. The curtailment of the consumption share is particularly evident in the years 1960 and 1961,

⁷² Karl Schiller, Preisstabilität durch globale Steuerung der Marktwirtschaft (Tübingen; Mohr 1966), p. 10.

⁷³ Karl Häuser, "Das Inflationselement in den deutschen Exportüberschüssen", Weltwirtschaftliches Archiv, (1959: II), pp.243-67.

during which the investment share rose noticeably. Thus on the whole, consumer expenditures could not have contributed in any great measure to the demand-pull inflation at this time. The slight increases in their proportion in the following years were always overshadowed either by those of government or investment. What pressure there was, originated in specific sectors such as consumer durables and consumer services. Increasing differentiation of demand provide the basic explanation in this case. As for the investment demand component, which increased its share strongly in 1959 and 1960, the foremost initiating forces were a building boom and an inventory expansion, both encouraged by low interest rates, along with the general vibrant investment demand in the other sectors.⁷⁴ The weakening of the investment demand following from bad prospects in heavy industry, temporarily cooled the demand in 1962, only to begin anew in 1964 until the end of that year in which the building boom also reached a new height. Since the statistics for that year show a declining share for consumption, the conclusion is that investment always increased its share at the expense of consumption. If the correlation statistically is not too exact, it is because of the growing but fluctuating foreign workers remittances. These substantially stabilized domestic consumption expenditures.

On the other hand, the case of the government sector is different. In every year since the mid-fifties its share has expanded, absolutely and relatively, irrespective of the other two components. Slight

⁷⁴ Heinz Linzenmeier, Möglichkeiten und Grenzen der Konjunkturbeeinflussung durch aktive Bankpolitik, dargestellt am Konjunkturverlauf in der Bundesrepublik Deutschland, Dissertation, (Stuttgart: Seewald, 1964).

correlation exists only with investment, for as might be expected for through direct and indirect subsidies this component was encouraged to expand. For example, the building boom primarily achieved its enormous dimensions because of government subsidies. In 1962 these subsidies alone reached 16 billion DM.⁷⁵ And from that sector, effects radiated to all others by virtue of the nature of the building industry. In 1965, total subsidies reached 28.5 billion DM, almost 50% of the budget of the central government. Its own private investment demands naturally grew in step and added 4.5 billion DM of demand in 1964. The federal government's demand in the investment sector was overshadowed by the other two levels of government, the "Länder" and the "Gemeinden" (local governments). Construction came more within the jurisdiction of the lower levels of government. Their projects were more extensive but their purses were smaller. In 1964 the "Länder" added 8 billion DM or almost one-third of the total public investment demand of 28 billion DM. And the "Gemeinden" added another 16 billion DM.⁷⁶ The means of finance of the "Länder" was the central bank, through its so-called "Juliussturm II", and debt creation in the capital market. As Table 14 shows, the local governments increased their debt constantly, from 3.5 billion DM in 1964 to 4.6 billion in 1965, while the "Länder" followed with 1 billion DM in 1964 and 3 billion DM in 1965. The federal government remained relatively

⁷⁵ Linsenmeier, p. 134.

⁷⁶ Karl Hettlage, "Grundsatzfragen antizyklischer Finanzpolitik", Geldwert und öffentliche Finanzen (Ludwigsburg: Aktionsgemeinschaft Soziale Marktwirtschaft, 1965), p. 63

modest with only 1 billion DM of additional debts during the latter year. The capital market in effect was being excessively strained. The public demand for capital has risen from a total of 31 billion DM to 37 billion DM in 1965. Total savings had also increased by 6 billion DM. Since the increased public expenditures meant an increase of 11% over the previous year and revenue rose by 6%, private savings had to be tapped and drawn away from the private sector.⁷⁷ Hence the inflationary gap arose, and the government demand component bore the responsibility.

While the private sector has in the last few years not been the principal villain in unleashing the inflationary forces, it has nevertheless had to bear the consequences. The creeping inflation has fostered the "disintegration of the society", hinted at earlier. Differences in income and more so of wealth were accentuated. This social disequilibrium was as inadmissible as inflation in a "Social Market Economy". Statistically the statement is partially correct. It is accurate with regard to the formation of wealth. Already between 1950 and 1959, 17% of all household units received three-quarters of the total accrued net wealth; the average capitalist accumulated at that time twenty-three times as much wealth as the average worker.⁷⁸ Since then the results have not been substantially changed. Germany has thus achieved a more unequal wealth distribution than the United States though not comparable with that of under-developed countries.

⁷⁷ Heinrich Tröiger, "Die Finanzreform, Grundzüge und Leitgedanken", Offene Welt (November, 1966), p. 284.

⁷⁸ Ehrenberg, p. 44.

Government attempts to counteract the trend have not been very effective. In 1961, for example, the government put into effect the "law for the promotion of wealth formation", which was extended in 1963 and supplemented in 1965. The original law and its extension offer premiums for savings for limited amounts (minimum 240DM, maximum 480 DM) at rates between 22% and 28,3 depending on family size and length of deposit. The supplement, also known as the 312 DM law, is a more direct stimulus for wealth formation through which the worker is offered 312 DM annually by the employer, the determination of the type of asset being left to the employee.⁷⁹ In both cases a negligible percentage of those qualifying have taken advantage of the offer. The same disinterest was manifested with regard to the "Volksaktien" issues (peoples' stock). Workers were quick to purchase them at their below market prices but almost immediately resold them for a quick profit. The workers simply had no experience with the ownership of capital. For the "Social Market" supporters the rejection by the workers of capital ownership must be considered a blow, for they hoped that capital ownership would make them feel that they had a stake in the economy's future. If the social equilibrium lost its balance it was because labour did not take the initiative to overcome its inabilities. Labour could even be accused of augmenting the inflationary pressure by its actions and thus hurting itself. If workers had kept their "Volksaktien" instead of selling them and spending the proceeds, excess demand would have been reduced and real wages would not as easily have suffered. The argument is true only so long, however, as excess demand

⁷⁹ Mesenberg, p. 673.

is the cause of inflation and there is excess demand in those sectors where the proceeds are spent. The concentration of wealth in Germany has increased and was facilitated to do so by creeping inflation.

The distribution of current income, however, does not show a bias against labour. Table 15, column 3 shows that since 1960 the proportion of income going to non-self-employed labour has risen steadily. Conversely capital income is shrinking, despite the fact that investment has been increasing. The reasons are readily identifiable. The capital-output ratio has remained fairly consistent and profits have decreased. There is no logic in the argument that because national income in Germany had doubled from 1957 to 1967 that the share of labours' income should rise. Nor did the distribution in favour of labour have an adverse effect on price level stability. Government and investment were the sources of inflation more so than consumption. What matters is not the income distribution or the wealth distribution per se but how they affect the supply and demand relationship in any particular sector. Capital income affects primarily the investment component and labour income the consumption sector. Savings originate in both, but labour does not actively dispose of savings destined for investment. A forced redistribution of income could disrupt the regular market forces and lead to price instability.⁸⁰

⁸⁰ Wolfram Langer, Sicherung der Geldwertstabilität: Eine Aufgabe der Konjunktur -, Struktur - und Wirtschafts-politik Kieler Vorträge Nr.44, 1966 (Hamburg: Hoffmann und Campe, 1966), p.15.

In conclusion, the case of demand-pull inflation is quite clear cut. In the last six years the economy has been facing excessive pressures leading to demand-pull inflation, at first slightly on account of private investment demand and subsequently replaced by a stronger government demand. Moreover, in both cases the demand surplus was the original cause and not induced by preceding cost increases on the supply side. Finally, the strength of the inflation can be calculated from the observation that in the case of the local governments the discrepancy between the sources of revenue and the demand for expenditures exceeded 25% most of the time.

Cost Push Inflation

On the supply side of the economy it is cost induced or structural inflation which occur. Both originate on the supply side; the difference exists in the sense that in the case of the former the purely macro-economic supply inelasticities are the cause, while in the latter the inelasticities are micro-economic. Demand pull could be the initiating force in regard to structural inflation, but usually the consequent price increases are supply originated. Cost push emphasizes the total excess of demand for factors of supply, real or artificially created, while structural inflation emphasizes the differentiation of supply. The word excess demand always remains, but it is distinguished from the real demand pull inflation by virtue of the theoretical difference between the theory of derived demand for factors and the marginal productivity theory of factor demands. Inflation can arise in a specific sector without the existence of an excess demand for its products.

A brief statistical summary will once more introduce the analysis. Just as in the case of the demand side of the economy, from which data can be obtained on aggregate demand and its relation to supply in the realm of goods can be estimated, so on the supply side data can be obtained on the aggregate supply of factors and an estimate can be made of its relation to the demand. Supply is calculated from the size of the labour force and its productivity. Table 12, column 2 demonstrates that the active labour force has been growing but at a diminishing rate since 1960. The increase of 1.6 million employed can be attributed almost completely to imported labour. The actual supply, quantity employed multiplied by hours worked, has in effect slightly decreased despite the arrival of these foreign workers. The index of hours worked with origin 1950 = 100 has declined to 195 by 1960, and reached 88 in 1965.⁸¹ The native labour force in Germany itself is stagnating and will soon start declining (by 1970 = -300,000). The manpower market throughout the seventies will be marked by the absence of the war and postwar generations. The postwar baby boom was retarded until the mid-fifties. The situation is still one of full employment. The registered unemployment rates were 0.6% in 1965 and 0.7% in 1966.⁸² Productivity increases, on the other hand, have been substantial, 5.5% since 1958, on the average (Table 16), 3% annually during the sixties, but decreasing to 4% (preliminary estimated statistic) in 1966. Given the

⁸¹ Langer, p. 8.

⁸² Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1967.

static labour force and comparing the productivity gains with the increases in remuneration (Table 9, 10 and Table 12, column 1) reveals an unmistakable cost inflation. The wage index (Table 12) shows a 65% increase for the same period and even salary increases have followed closely with gains of 58%.

The discrepancy is in effect greater since contractual earnings increases fall consistently below actual increases by approximately 2% annually (Table 17). Combining this differential factor with the annual 10% contractual wage - productivity discrepancy yields an average cost increase of 3% annually. This follows from the additional requirement of constant capacity utilization. The manufacturing industry capacity utilization index still stood at 89 (Table 12, column 6), which may be taken to be the lowest point on the average cost function, at a point 10% below absolute maximum production. It would mean that for 1966 the cost increases must have been greater, for the index fell to 84, and that result corresponds approximately to the results in Table 11. Here is a clear evidence of cost push, for demand has actually receded as shown by the lower capacity index. It can be said that aside from some exceptional years in which demand fell the supply side has been increasingly pressured by the rising scarcity of the factors labour and land during the last decade, leading to excess demand and higher costs. The effect has been heightened by the asymmetric response of these costs, the ratchet effect, particularly labour to demand changes. Rapid capital stock accumulation counteracts the trend to some extent, but it is not perfectly substitutable for the other factors. Limited possibilities of substitution apply foremost to land, and so the construction industry has become

the leading cost push sector.

The exact relationship between factor prices, factor costs and product prices is difficult to calculate in the German case. The only attempt for the sixties has been undertaken by Adolf Franke.⁸³ For example, he has estimated that the 10.4% increase in actual wages from 1960 to 1961 led to cost increase of 4.5% which in turn resulted at that time in price increases of less than 2%, the difference reflected in lower profits.⁸⁴ Most of the increased prices originated in the consumption goods sector as a direct by-product where demand pull was relatively absent. (In the investment sector the latter was the original cause). After 1963 the rates were reversed. Cost push inflation increasingly pervaded the investment goods sector and demand pull took hold of the consumption goods sector. The total effect has lately been more determined by cost push than by demand pull.

The statistical data seem, moreover, to suggest that labour has been the primary culprit of cost push inflation. That argument must be substantiated by analyzing whether there have been direct attempts to curtail the supply, a question which immediately brings union policy to mind. In order to understand union activity in Germany, one must

⁸³ Adolf Franke, "Die Preis - und Lohnentwicklung in der Bundesrepublik Deutschland seit 1960," Weltwirtschaftliches Archiv, (1965: I), p. 126.

⁸⁴ Heinz Scherf, "Zur Frage der Beziehungen zwischen Löhnen und Preisen in der Bundesrepublik Deutschland 1951-61," Weltwirtschaftliches Archiv, (1964: I) The point is made in this article that the wages have their primary impact on the prices constituting the cost of living index, more so than on the retail price index.

first of all comprehend their institutional structure. German unions are strictly industrial unions; there are sixteen broad and individually independent groupings united together to form the German Federation of Unions (D G B). This structure has had a profound impact on union policy. The unions are strongest at the center. Collective management of the sixteen engages in collective bargaining to set the contractual wage rates ("Tariflöhne"). The unions are weakest at the plant level. It was not intended to be that way originally but was the consequence of the principle of co-determination with management. In all directorates of the large enterprises, one director is a labour union representative, but as director the bond with labour is weakened and the affinity with management is augmented. The benefit is, of course, that the rationale behind strikes has been undermined. The principle of co-determination and strikes are inconsistent. In effect, the number of days lost due to strikes drastically fell from 1580 to 40 during the period from 1955 to 1961, and today the frequency of strikes in Germany is still the lowest in Europe.⁸⁵ A further weakness at the plant level stems from the independent attitudes and outlook of the works councils who represent the unions at this level. The importance of this institutional feature, as far as this discussion is concerned, is that after 1954 it has created the tendency for actual plant wages to divert from the contractually settled wages, the so-called "wage-drift".⁸⁶ Wage-drift occurs whenever the labour market is

⁸⁵ Hans Lilge, Deutschland von 1955 bis 1963 (Hanover: Verlag für Literatur und Zeitgeschehen, 1965), p. 124.

⁸⁶ Scherf, p. 65.

very tight and the union structure weak. To attract new labour or to retain already acquired supplies, management will create new positions at higher pay that union contracts do not classify or it will pay bonuses for certain types of work. Thus the contractually settled wage tends to be below the actual rate of remuneration. For certain skilled jobs there is always a wage drift.

It remains to be seen whether the discrepancy in pay rates has had any bearing on the problem of inflation. Henry Wallich came to the conclusion in his study of the first postwar decade of German expansion that upward wage pressure which has been such a powerful force for technological progress in the United States has been largely lacking in Germany.⁸⁷ Undoubtedly the fact that the contractual wages were not those in force restricted the union influence in this direction. The flexibility introduced into the system by the wage-drift no doubt aided the employer. Studies have, however, shown wage drift occurred only in those sectors where the technological and organizational conditions allowed large productivity gains, and where the cyclical influence could virtually force it to exist, given the institutional framework of the union.⁸⁸ The reason for the absence of Wallich's force has been the more cooperative atmosphere of union - management relations and the tight labour market situation, which makes it desirable for both sides to progress technologically; for labour, to reduce the hours worked;

⁸⁷ Henry Wallich, Die Triebkräfte des deutschen Wiederaufbaus (Tübingen: Mohr, 1956), p. 213.

⁸⁸ Scherf, p. 75.

for management to fulfill the required demand of the market. In the process additional wage increases were granted to labour. The profit margin decreased but total profits increased.

It seems to be the general opinion among German observers of union wage policy, that its role has been more of substantiating than initiating significance,⁸⁹ and that wage pressure has been considerably alleviated by the strong increase in savings of the public. The wage increases which rise above productivity gains, a difficult hypothesis to prove in any case, have a greater chance of being realized, the higher is the marginal rate of savings of the wage increases. The excess increases are simply reabsorbed without demand creating leakages with growth detracting implications.⁹⁰ If any conclusion can be drawn from the preceding discussion it is that neither industry nor labour alone were the initiators of cost push inflation. All productive factors, but particularly land and labour, became progressively scarce while the demands for their services expanded enormously. The case was a mixture of demand pull and cost push; demand was excessive both at the product and factor levels. Once this was realized price and cost increases were inevitable. Unions were not overly active in pushing for wage increases but the wage drift compensated for their restraint. Costs rose and prices were subsequently adjusted upward also.

⁸⁹ G. Zeitel, "Bestimmungsfaktoren der Preis- und Produktivitätsstruktur", Strukturwandlungen in der deutschen Wirtschaft ed. F. Neumark, (Berlin: Duncker & Humblot, 1963), p. 680.

⁹⁰ Linsenmeier p. 135.

Structural Inflation

Finally, the problem of structural inflation must be clarified. Structural inflation is really demand pull seen microeconomically, but it also has important macroeconomic implications. Inflation is possible not only if there is a macroeconomic excess demand over supply at the full employment and capacity level of national income, but it is possible even when aggregate supply and demand are inequilibrium. The essence of inflationary tendencies is that they are attributable to the fact that money wages and prices in a modern economy are flexible upwards but rigid downwards.⁹¹ When demand rises, prices will rise, whereas in a sector where demand declines prices will not fall; in fact they will probably even rise. Monetary and fiscal policy can do nothing to solve the problem short of a reorganization of those sectors which have experienced declines to permit them to operate profitably at lower prices, and policy should counteract the increases where they have occurred by encouraging economies of scale. The committee of experts in the economics ministry formulated this requirement very simply in its 1965-66 annual report: "A stable price level necessitates growth, and growth necessitates structural change".⁹²

The contrast of declining and growing industries has quite obviously contributed to the phenomenon of structural inflation in Germany as in most other modern countries. The construction industry

⁹¹ W.C. Peterson, Income, Employment and Economic Growth (New York: Columbia University Press, 1962), p. 411.

⁹² R.Jochimsen, "Wechselwirkungen zwischen Stabilität und Wandel der Gesellschaft als sozialökonomische Bildungsaufgabe," Offene Welt, (October, 1966), p. 182.

and the services sector are good examples where demand increases have led to direct price increases, and the iron and steel industries are good examples where demand decreases have led to price increases. Both demand pull and cost push combined in the construction industry. Germany set a phenomenal pace in building an average 600,000 housing units a year in the last decade, (for comparison, France built 6000,000 in total since 1955), but the housing deficiency is still 20% (Table 18) and it is an industry in which there is little room for productivity gains. The general cost push condition holds, moreover, that the leading productive sectors set the pace for wage increases with the result that all others suffer cost and thus price increases equivalent to the difference in productivity between them and the most productive firm. In this particular industry, moreover, the costs are directly shifted to the consumer, so that the rent increases consistently account for about 25% of the increase in the cost of living.⁹³ The whole field of services ranks next to the construction industry in respect to price increases. For example, in 1954 the average German spent 21% of his income on services, whereas in 1965 this percentage had risen to 35%, the increase being partly occasioned by the change in demand but primarily by cost increases.⁹⁴ On the other hand, the German iron and

⁹³ W.Knauer and H.G.Hermann, "Die Wohnungsmiete" Wirtschafts- und Sozialpolitik ed.F. Dörge (Hamburg: Akademie für Wirtschaft und Politik, 1964), p. 149.

⁹⁴ Harald Jürgensen, "Preisstabilität im wirtschaftlichen Wachstum", Volkswirtschaftliche Korrespondenz der Adolf - Weber - Stiftung (Frankfurt, 1966), p. 3.

steel industry, on which the recovery during the fifties was based, represents the case where the declining demand has not lowered price. Prices have in fact been raised.

Of major concern in discussing the problem of structural inflation is the question whether there actually are any compensating price changes that counteract the "permanent" inflationary pressure. The answer unfortunately is not easily found because qualitative changes are always incorporated and their extent is not statistically identifiable. The chemical industry is the only major sector where prices have actually fallen while quality has improved. In the German oil refining industry prices have fallen very slightly for improved products. In the automobile industry as in most other consumer durables industries prices have remained constant but quality has vastly improved. Economies of scale provide the explanation. Quality improvements are indirect reductions in price. In most countries, moreover, productivity changes are not passed on to the consumer in the form of lower prices but to labour and management in the form of higher incomes. Unions prefer this approach because it enhances their power. Consequently structural inflation is a phenomenon that one has to live with. Aside from encouraging increased productivity in the hope that some of it will be reflected in lower prices, there is little even government policy can do.

Inflation and Policy Response

The German economy has been affected by all three types of inflations during the first half of the sixties as the preceding

analysis has demonstrated. One must not, however, exaggerate the degree of this inflation. Compared with other countries the German economy cannot be called inflationary (Table 7 compares the German performance favourably with those of her competitors). France, Italy and the Scandinavian countries all fared more poorly than Germany. The comparisons of the last years only, 1964 to 1966, put Germany on a level with France and Italy but certainly not in a worse position. The reason for the concern about inflation in Germany seems therefore to be unwarranted. Nevertheless, Germans are very sensitive about price increases on account of their historical experience with inflation, and thus their concern is understandable. Secondly, France and Italy are considered as traditional problem countries as far as inflation is concerned and hence no proper comparison. It is the United States performance that the German one is compared to because the United States is Germany's biggest competitor in world markets. If German prices rise, not only are domestic buyers dissatisfied, but the one-fourth of national product that goes abroad faces stiffer competition.

Finally, it is not being facetious to say that great concern is directly related to the government's practice of monetary and fiscal policy to restrain inflation. The apprehension surrounding this aspect of economic policy is astounding. Critique of the government has often been very harsh. Ehrenberg, Erhard's sharpest critic, went so far as to accuse him of having no ideas or concepts whatsoever in dealing with inflation.⁹⁵ Government forecasts predicted price increases,

⁹⁵ Ehrenberg, Saga, p. 440.

while at the same time they stated that no economic policy decisions were to be taken to prevent the increases. The market had only to be free of "competitive interferences" (Wettbewerbsstörungen).⁹⁶ After Erhard had such success during the fifties in holding prices, it is remarkable that he should have been accused of failure ten years later.

Even the experts in the government ministries, however, were at a loss as to what to do about the inflationary pressures after 1960 in the way of both monetary and fiscal policy. They were, indeed, aware of the fact that the economy faced a demand pull inflation, which meant that monetary and fiscal tools had to be applied, but there their work stopped. Since monetary policy had been reasonably successful in cooling the strained economy in 1956, it was naturally the first weapon chosen to control price and cost increases. From 1956 to 1959 monetary policy had been geared to expansion, these being stable years. The Bundesbank reorganized the capital market, lowered the interest rate, and gave selective credit injections to the steel industry and coal mining, a course which it suddenly had to reverse in 1960 when the building boom was in full swing. The discount rate was raised from 2-3/4% to 3% and the 10% bank reserve ratio was raised to 20%.⁹⁷ When the impact was found to be negligible, the bank raised the discount rate to 4%, the highest since the 1956 credit squeeze (Table 19). At the end of 1960, Blessing, the President of the Bundesbank, had to ease the restrictions in view of the international

⁹⁶ Ibid., p. 162.

⁹⁷ Linsenmeier, p. 120.

situation which caused capital to flow into the country. The discount rate was lowered to 3% once more. But even the virtual doubling of the discount rate and the high reserve ratio were not sufficient to curb the boom. Investments in housing still increased by 2 billion DM in 1961, considerable compared to 3.8 billion DM the previous year. The surprising fact about the situation is that Müller-Armack, the most notable "Social Market Economy" theorist in the government, was actually opposed to the restrictive policy in the first place. He seemingly contradicted himself, when he demanded that no expansion controls should be put on the investment sector.⁹⁸ In general, of course, inflation can be controlled by reducing any one of the three components of demand, consumption, investment or government. Since in this instance it was obvious that government and private investment were creating the inflation they had to be limited. The cost of limiting investment is reduced growth in the future, and hence most governments are reluctant to start with investment controls.

After the revaluation the economy cooled off once more until early in 1964. This time the Bundesbank did not apply the brakes until a year later (Table 19). Blessing argued that the more restrictive monetary policy was, the more inflation was encouraged. The cost effect of the higher interest rates predominated. (This justification was, however, provided by Schiller.)⁹⁹ The discount rate, raised to 4%,

⁹⁸ Alfred Müller-Armack, Die konjunkturelle Lage, das Stabilitätsgesetz und die nächsten wirtschaftspolitischen Aufgaben (Münster: By the author, 1966), p. 2.

⁹⁹ K. Schiller, Preisstabilität, p. 8.

took effect by mid-1966, one-and-a-half years later. It was the length of time it took to stop the price increase that demonstrated the weakness of the monetary policy this time.

The inability of the central bank to force the economy to contract through monetary controls is not peculiar to Germany, but is the phenomenon present in most countries with a strong commercial banking system. In the first place interest rates on short term loans have lost their significance with regard to investments because of the excess liquidity of the banks, and second, once the capital market functioned again the Bundesbank could no longer directly influence the interest rates there.¹⁰⁰ What remained was only its influence on long term rates, and in that case the large business had become less dependent on the market rates of interest. Not even open market operations were successful in view of rapidly increasing liquidity, nor the chancellor's "soul massages" "Seelenmassage", or moral extortations for restraint.¹⁰¹

Monetary policy had its place but alone it was only of limited effectiveness. When inflationary pressures were very slight a small dosage controlled the situation, but in the face of real booms monetary policy was a failure. The increased costs of investment arising from higher interest rates were compensated by the rising expectation of returns. To impinge on the degree of spending the rate would have to be increased by a significant amount, which is an undesirable solution because it deters certain long range investments from taking place.

¹⁰⁰ Linsenmeier, p. 177.

¹⁰¹ Ehrenberg, p. 71.

Schiller has also noted that the substitution of labour for capital could thus be encouraged in the long run and make a tight labour market even tighter.¹⁰² (The lower governments would, nevertheless, have been insensitive even to substantial interest rate increase). As an instrument to foster expansion, on the other hand, monetary policy never has had to prove itself.

If monetary policy alone is not effective as an anti-inflation policy it must be supplemented by fiscal policy. Unfortunately, in Germany what monetary policy sometimes accomplished was often undone by fiscal policy. Without any bias whatsoever it can be stated that fiscal policy represents one of the darkest chapters in German economic policy. Until the "Stabilization Law " was implemented in 1967, anti-cyclical fiscal policy was a chance occurrence in Germany. Keynes' teachings on the subject reached the German universities in the mid-fifties and the government approximately a decade later.

For most of the postwar period a fiscal policy to promote full employment and price level stability by anti-cyclical spending was not consciously followed. Fiscal policy was usually cycle-enforcing and determined by political objectives.¹⁰³ Erhard thought himself to be, in effect, not an economist as such but an economic psychologist, and this led him to be very sensitive to the demands of interest groups, especially as chancellor, at election time. The farmers were annually rewarded to the sum total of 11 billion DM, and

¹⁰² Schiller, p. 8.

¹⁰³ Linzenmeier, p. 178.

the voters received a substantial tax reduction for the 1965 election, regardless of the inflationary pressure persisting from the 1964 investment boom. What the central bank did to maintain stability, the government usually managed to undo again. Its cycle-pronouncing spending habits were remarkable. Beginning in 1948, a year of inflationary pressure, the federal budget showed a slight surplus that increased in 1949, a year of recession. During the Korean boom, the budget was deficitary. Three years of surpluses followed, correctly anti-cyclical, but after 1957 deficits dominated until the sixties despite the boom.

It was not until 1961 that the government's financial report demanded the legal institution of anti-cyclical fiscal policy. In the 1964 version it came to discussion and finally reached legal status as the "Stabilization Law" on August 5th, 1966, at which time most of the harm had already been accomplished.¹⁰⁴ And it was only the introduction of the annual economic reports and their pessimistic predictions which led the government to undertake this step. The reports were themselves already a great step forward, if one considers that for Erhard every quantitative prediction of economic development resulting from an economic policy was a step in the direction of a planned economy.¹⁰⁵ Fiscal policy was interpreted predominately to mean changes on the expenditure side, not on the tax side. The allies had imposed very high taxes after the war so that any tax changes were always one way. But extensive tax changes were rare. Taxes were mainly changed for specific

¹⁰⁴ Jörg Beyfuss, Das Stabilitätsgesetz: Wende in der Konjunkturpolitik (Cologne: Deutscher Industrieverlag, 1966), p.10.

¹⁰⁵ Ehrenberg, p. 140.

goals such as capital formation and privileges for certain industries not for broad fiscal policy ends, such as budgeting.

Fiscal policy might actually have fared better if it had been based on the principle of the balanced budget as the 1948 constitution in fact demanded. Along with the boom, Parliament and Government became accustomed to the high revenues of the high growth period, and whenever this growth levelled off they simply resorted to stop gap measures, short term budgets, tax privileges, easier credit conditions of all sorts, etc. to re-establish the condition of high revenues.¹⁰⁶ In the event that this policy was unsuccessful, they resorted to price increases, and the process analogous to a vicious circle was set in motion. Although the government preached restricting the budget to keep prices stable, in the end it let prices rise so that revenues would rise and the government could hold the line on the budget. After one cycle was over restraint was once again preached. If the vicious circle got out of control economic policy simply stopped the market mechanism from working altogether. For example, during the 1962 building boom the government ordered an absolute construction stoppage on all public and private building where more than one-third of the space was used for offices and on all luxury home building.

The problem at hand was admittedly really much more complex than the situation seems to suggest. The building boom got under way not primarily with federal government investment projects, but with

¹⁰⁶ J. Eick, "Überbeschäftigung um jeden Preis?" (Cologne: Deutscher Industrieverlag, 1966), p. 3.

those of the lower levels. Likewise, the deficits were incurred as mentioned previously, mainly by the local echelons. The reason that the federal government cannot be considered the sole culprit, despite its often perverse cyclical spending policy, is that constitutional rigidities prevent one fiscal policy for all three levels of government. The two lower levels, moreover, guard their privileges zealously to prevent a concentration of power in the hands of the federal government reminiscent of the years 1933 to 1945. Given the unquestionable predominance, moreover, of the government spending factor as the source of demand pull inflation, the conflict must be given ample consideration.

According to the Bonn Grundgesetz, financial matters are constitutionally instituted. Of interest in this particular matter are two principles of the constitution. One grants that the "Länder" have complete autonomy in their budgeting, a provision that cannot be changed.¹⁰⁷ The other defines the tax split among the different levels. In Germany there are both separate and joint taxes, i.e. all taxes except the income and corporation tax have been given to the individual levels and this one is divided on a quota basis.¹⁰⁸ But although the quota is supposedly flexible, changing it is virtually synonymous with changing the constitution, since the representatives of the "Länder" constitute the "Bundesrat" (Upperhouse in Parliament). Both provisions have consequently had the result that the revenue has progressively accrued in favour of the federal government, while the expenditure requirements have risen more for the

¹⁰⁷ Hettlage, p. 65.

¹⁰⁸ Heinz Haller, "Brauchen wir eine Finanzreform?", Stabilität und Aufstieg (Hannover: Dietz Nachf, 1963), P.93.

lower levels. These governments then had to create deficits to finance the expenditures fostering inflationary pressure, about which the central bank could do nothing. It could only attempt to counteract the rampant credit expansion on the part of the "Länder" and "Gemeinden" by curtailing the credit in the private sector. Such measures more than any others ultimately brought about the 1966 recession from which the new government is finding it so hard to emerge. The "Stabilization Law" of that year solved this problem, and henceforth cooperation in budgeting is the rule. The cooperation was accomplished because the provision on budgeting autonomy contained a clause whereby the lower levels of government could be forced to accept and engage in a long term planning of their budgets and to reach a decision on the division of the tax revenues every two years (Article 106, Par. 466).¹⁰⁹

The "Stabilization Law" put an end to the limited and directionless fiscal policy. The problem of wage policy, on the other hand, remains to be solved, and until that time cost push inflation cannot be attacked at its roots. Nor could it ever be entirely solved in a "Social Market Economy" that recognizes autonomous collective bargaining as a basic requirement for social and economic progress. Certainly the idea of wage pressure as a tool of technological progress finds its place here. But if cost push inflation becomes serious, and reduces the competitiveness of industry, the obstacles to technological progress might become insurmountable so that the intended wage-technology relationship can never take effect.

¹⁰⁹ Rolf Dahlgrün, "Die Problematik der haushaltswirtschaftlichen Unabhängigkeit von Bund und Ländern", Finanzwissenschaft und Finanzpolitik ed. F. Schäfer (Tübingen; Mohr, 1966), p. 27.

It cannot be claimed that the credit restriction policy of the sixties has had a negative impact on capital investments. When planning investment expenditures one has to look at Keynes but not forget about Harrod-Domar. Whereas in most developed countries the problem of overcapacity predominates, Germany still suffers from undercapacity, and tight money policy worsens the condition. The causal chain of reactions that is known as the purchasing power argument, did not live up to its expectations as the automatic remedy for growth.¹¹⁰ This argument was based on the logic of a cycle of occurrences. The economy was to be forced to grow by increasing wages, thus raising purchasing power and ultimately production. But because of monetary restriction, production was not expanded while wage incomes still increased; the results are inflation and undercapacity. This was the practice in Germany in 1966.

It was impossible for the government to restrict wage expansion to productivity gains. It is extremely difficult to calculate an objective and correct productivity index, and Erhard was not interested in pursuing the matter. He considered the establishment of guidelines as in the United States too much of an intrusion of the private sector. Moreover, and this point has been made already, wage contracts cannot differentiate among all firms according to their productivity gains. Arbitrariness of calculations and inflexibility of the bargains made have contributed immensely to policy difficulties. Finally, the

¹¹⁰ Joachim Grunau, "Lohnpolitik, Produktivität und Preisniveau", Ordo Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft (1965), p.118.

failure of Erhard's psychological approach accentuated the dilemma. His favourite words were that the goal of economic stability could only be reached if all participating persons and institutions in the economy behaved accordingly.¹¹¹ What he meant by "accordingly" was never defined. Occasionally he added the word moderation, but that term was, likewise, obscure. The only consolation for him is that the problem has not been solved concretely by the new government either. But taking over in a recession it has not yet really been confronted with the price problem. The new government has the advantage, however, that since it is a coalition in which the Social Democrats participate, labour listens more attentively when the government tries to use moral suasion.

Coming to the third aspect of inflation again, policy aimed at structuring the economy has not had price stability as its prime objective but growth, and that is the concern of the next section. It will suffice here to say that since the government directly influences or controls 50% of the capital in the economy its influence can be extended to each economic sector as required.¹¹² Unfortunately, throughout the sixties the government has not been able to maintain moderation, and hence stability. It has not been certain of which sectors to influence and those that it has influenced have usually suffered a greater degree of inflation than those left to private initiative. Coal mining comes to mind as the greatest failure in this regard. This industry has received billions of marks of subsidies to modernize and rationalize

¹¹¹ Ehrenberg, p. 122.

¹¹² Linsenmeier, p. 140.

its production but costs and prices are still rising. The government seems unwilling to face the fact that the industry can never be internationally competitive again because of the high mining and labour costs and that as a result most spending is in vain. The case of the construction industry is more difficult to evaluate. The private sector inflationary pressure still remains, as Table 10 demonstrates. The reduction in the restriction on rents that began in 1960 and the resulting increased rents in the so-called "white counties" (deficiency of housing less than 3%) have only slightly alleviated the excess demand until now.

Opinions on the conditions in the public sector are divided. On the one hand, most government experts attack the inflationary pressure arising from government investment and demand moderation in spending. Public building expenditures have to be reduced. The opinion is, of course, by necessity shared by the entire finance ministry, for when Erhard left the government there were no funds left in the treasury. The 1966 weapons agreement with the United States had taken care of that. There was not even enough money left for his community project ("Gemeinschaftswerk") of 3 billion DM. On the other hand, there are those who emphasize that there is a deficiency of public investments.¹¹³ From the point of view of the demands of a "Social Market Economy" the government has to be actively engaged in "Sozialpolitik". It has obligations of helping provide housing and educational facilities. These duties require public investment. Historical comparison shows, however, that

¹¹³ Harald Jürgensen, Stabilitätspolitik und Öffentliche Investitionen (Cologne: Deutscher Industrieverlag, 1966), p. 3.

the Federal Republic is investing a lower percentage of GNP than either the Weimar Republic or the Empire. Only in housing has the Federal Republic's effort excelled. In the remainder of the country's infrastructure, investments have been lower than in other comparable countries such as the United States and France in the postwar era.¹¹⁴ There has been an obvious bias in favour of directly productive investment in Germany. Social capital investments have been neglected. Requirements have been estimated to come to 260 billion DM until 1975, an average of 30 billion DM or 5% of GNP annually. If one considers that during the seventies the labour force will decline and the private sector continues to grow, price pressure would result if the social capital requirements were fulfilled. The only answer is that resources must be drawn away from the private sector by taxation. Such a solution has its own particular drawbacks again; the price is in terms of a lower rate of growth. In the next ten years much of private capital will have to undergo rejuvenation so that any diversion from this sector will have adverse consequences on the competitiveness of German industry.

Conclusion

The overall evaluation of economic policy as a counter inflation policy is negative. Before such harsh criticism is dispensed, however, the problem must be seen in perspective. Economies similar to the "Social Market" system are generally plagued with instability. It is a phenomenon inherent in the competitive mechanism. Market forces tend to fluctuate between surplus and scarcity, inflation and deflation

¹¹⁴ Ibid., p. 3.

unless prevented from doing so by anti-cyclical policy. The "Social Market" concept of anti-cyclical policy, "discipline in the realm of money", was clearly insufficient. The demand pull and structural inflations persisted in spite of monetary restriction. The rising expectations of return always neutralized the additional restraint. The persistence of cost push inflation, on the other hand, was facilitated by monetary restriction. The increased costs were added to the basic costs of production. It seems paradoxical that monetary restriction should encourage cost push inflation. The paradox is attributable to a confusion of demand pull and cost push inflation. The government was aware that monetary restriction was not applicable to cost push inflation but did not realize when the demand pull inflation of the early sixties turned into a cost push inflation in 1964. Hence it was trying to solve a cost push inflation by demand deflation and enhanced the cost push element.

Fiscal policy encountered even greater difficulties and as such it must be considered as having been detrimental to price stability. The origin of the problem is two-fold. First, there is the matter of the constitutionally defined financial autonomy of the three levels of government. This privilege has been so jealously guarded that a cooperative effort was virtually non-existent. The lower levels of government behaved in a cycle-enforcing manner. This characteristic, it will be noted, was not peculiar to Germany, but most federal countries face this problem. When the lower governments have money they spend it. They do not believe that they are responsible for the maintenance

of price stability, and the fields relegated to lower levels of government are such that if money is spent the government achieves a political advantage. Houses, roads, parks, etc., are such political investments which cities and provinces indulge in when they have money. In Germany prestige investments were very popular, and the governments did not mind borrowing vast amounts to achieve their goals. The federal government was not about to cut its spending either. It had political investments to make also. Agriculture and mining always received their subsidies and the American Defence Department consistently convinced the German government to invest more in armaments either in Germany or in the United States.

The second origin of the problem of fiscal policy relates to the unwillingness of the German government to accept the responsibility for anti-cyclical policy. Apart from the 1954 to 1957 period the budgets were always cycle-enforcing. To what extent the unwillingness is related to the principles of the "Social Market Economy" and to what extent it is related to Erhard's own ways of looking at government economic policy is not clear. The principles of the "Social Market Economy" are not very explicit on this question. Total emphasis lies on monetary policy. The essence of the "Social Market" philosophy would probably imply an adoption of a balanced budget. If the government diverted from a balanced budget over a period of years, it was by its own actions creating a deflation or an inflation depending on whether the budget was surplus or deficit. The government had to support the market system of competition. If in any year private industry was not investing enough here government had to accept that fact.

In practice, however, the government followed neither anti-cyclical fiscal policy nor balanced budget financing. Consequently the conclusion must prevail that Erhard did not follow Keynesian nor "Social Market" economic policy. He simply followed a wrong policy. Part of the explanation can be related to "Social Market" theory. The principles are too vague to provide concrete guidelines. Müller-Armack himself realized the vagueness of the "Social Market" theory for the practice of economic policy when he declared that the "Social Market Economy" had to be regarded as a semi-automatic mechanism which assumes economic policy direction but does not spell it out. Without proper direction the attempt to reach the social goals would have undesirable social results. Erhard could not escape the problem. His policy moves suggest indecision and reluctance to plan ahead. Planning meant the end of the market economy for Erhard. It was the last measure he would have resorted to. His attempts at moral suasion were equally unsuccessful. Demands for the removal of interferences to the competitive mechanism and exhortations for correct economic behaviour had little meaning to labour or industry in view of the fact that the government led the way each year with the greatest spending increases. The combination of the overemphasis on monetary policy, the unwillingness to accept anti-cyclical fiscal policy and Erhard's unsuccessful moral suasion thus gave the German economic policy a uniqueness that the other major free enterprise systems did not share. (The responsibility for the first two can be partly attributed to "Social Market" theory, and so the elements for wrong applications in the economy were present). It is astonishing that

inflation was not more serious than it actually was. The secret must be in the rapid growth and technical progress of the economy that effectively counter-balanced creeping inflation.

CHAPTER 1V
INVESTMENT AND CAPITAL FORMATION

The third and final criterion of German's successful postwar economic performance, capital formation, will be examined in this chapter. Investment as well as capital formation are really implied. Investment has a short run connotation as a major component in the process of income determination, while capital formation generally refers to the long run, including also the creation of productive capacity. Together, investment and capital formation, thus derive their principal importance from their connection with growth. If the German economy grew successfully in the postwar era it must almost certainly have accumulated adequate investment and capital. The rate of growth cannot, of course, be explained solely in terms of capital formation. Technological progress and qualified labour force are also important. Growth can occur even with zero capital formation if there are technological changes and innovations that increase productivity. Such a situation will be rarely encountered. In general, inventions and innovations occur at the same time as capital is accumulated. Because of the concurrence of progress and capital formation, because of the difficulties in quantifying technological changes and because technological progress

has already been commented on, capital formation and investment will be analyzed in this chapter as the principal determinants of growth. Kuznets has shown in fact that in many countries factors other than capital have been responsible for growth.¹¹⁵ Capital formation must be regarded as a partial explanation of growth.

The process of capital formation is in addition suitable for the purpose of this thesis on account of its sensitivity to economic policy. Government monetary and fiscal policy are vital considerations when investment decisions are made in the economy. Changes in interest and tax rates directly affect the profitability of an investment decision and hence the disposition of capital resources. Finally, the "Social Market" theory could have applications in the realm of capital formation oriented economic policy. The theory implies that the process of income determination, of which investment is a part, should be governed by the objective market laws and tempered only by "Sozialpolitik". The goals of "Sozialpolitik", the reallocation of some resources to the economically underprivileged can, likewise, only be followed by selective monetary and fiscal policies.

Connections between investment and capital formation, the balance of payments and price stability have already been touched on. It was mentioned in the previous section that an excess of exports over imports helps use existing capacity and this might stimulate further investment, and a deficit will raise the available amount of capital that can be used in the economy directly.

¹¹⁵ Simon Kuznets, Modern Economic Growth: Rate Structure and Spread (New Haven: Yale University Press, 1966).

Price stability and capital formation can also have a dual relationship. Investment in the income generating sense is a factor of demand and once the full-employment ceiling is reached, prices must rise. On the other hand, investment creates new capital or capacity in the long run and if this cannot be used, deflationary pressures result. Germany is considered to have profited through these series of relationships in increasing its investment and capital formation. Trade balance surpluses stimulated investment; investment produced capacity and kept production fairly reasonably within the limits of its capacity.

The Growth of the German Economy

As has been the case in the previous chapters, the claim of successful German capital formation and investment as regards growth must first be verified statistically. The success or failure of economic policy, whether it was "Social Market" oriented or not, will be evaluated thereafter. Table 20 summarizes the growth of the German economy from 1956 to 1966. In nominal terms, the size of the GNP increased by about 130% from 198.88 billion DM to 477.9 billion DM in that period. The increase in real 1954 terms amounted to approximately one-half of that increase, 75% or an average of 7% per annum. That performance has been surpassed only by Japan.¹¹⁶

The table also shows the exact annual increases, and from these it can be seen that the decade can be divided into three cycles.

¹¹⁶

U.N. Yearbook of National Accounts and Statistics, 1966.

The first years after 1955, when the growth rate reached a record 12%, were in the sign of a cooling off period not peculiar to Germany alone. The growth rates were still quite substantial. The German building boom of 1959 created the next expansionary phase. It reached its peak in 1960 and receded thereafter until the end of 1962, speeded up by the 1961 revaluation. The third and last cycle began with the investment boom in late 1963, reached a peak in 1964, and the recession that followed reached a trough in 1966. The decrease of 1% in the real GNP estimated by Die Zeit for 1967 is indicative of the serious growth problems the German economy is encountering. The overall decline in growth is discernable over the three cycles. The high points reached each time are successively lower, 12% in 1955, 8.8% in 1960 and finally only 6.6% in 1964. And the boom years became less in number each time while the recession years became more. The first cycle had four boom years, 1954 through 1957, the second three, and the last cycle witnessed merely a one year boom.

Before a judgment be passed on the growth pattern of the German economy and its continuation be predicted, it is worthwhile to remember that North America went through a similar postwar experience, only ten years earlier. Fears of secular stagnation were widespread in 1959 and were swept away by what became the longest period of growth in the postwar period beginning with 1960. In the second half of 1967 there were similar signs of a new era of growth in Germany but it is still too early to judge its permanence. The government that took over from Erhard certainly is staking its reputation on a new era of growth.

Now that the aggregate growth statistics have been analyzed the sectoral pattern needs to be examined. For this purpose the industrial production index (Table 21) has been chosen, for output best reveals real growth. With the exception of the mining component the various indexes show surprisingly minor discrepancies. The production and investment goods industries, of course, have expanded most rapidly, 90% and 83% respectively in the period 1956 to 1965.¹¹⁷ The consumption goods sector follows with a 70% increase in production. The construction industry ranks in fourth place with a 67% gain and mining is last with only a 3% increase. Thus, as far as these broad categories are concerned growth has been well balanced, more so in the sixties than in the fifties. If the aggregate index rises the sub-aggregate indexes rise also, and if it recedes the sub-aggregate indexes recede accordingly. The similarity of behaviour of the investment and consumer goods components is attributable to the preponderance of consumer durables in the latter category. Durables often behave like investment goods in Germany, more so than in North America. Within these broad sub-aggregates the movements are naturally quite diverse, ranging from increases of 248.2% for professional and optical instruments to -47.7% for shipping¹¹⁸ (Table 22). Solely in the construction sector is there little difference among the sub-components.

¹¹⁷ German national accounts statistics differentiate between production goods and investment goods. Machinery is a production good, while a plant is an investment good.

¹¹⁸ D. Mertens and W. Kirner, Input-Output Rechnung: Investitionsverflechtung in der Bundesrepublik Deutschland 1950-1970 (Berlin: Duncker und Humblot, 1967), p. 37.

Capital formation, it has been stated, will be the primary focus as to the cause of the growth. A first direct and important relationship arises from the proportion of the GNP that is invested annually. The statistics show that Germany is investing a slowly increasing proportion of its GNP. In the period 1950 to 1955 Germany invested an annual average of 20.4% of its GNP; from 1955 to 1960 the proportion rose to 22.8%, and during the first half of the sixties it averaged 26% as can be calculated from Table 22. Even in a recession year such as 1966, the boom year figure was reached. Only Japan once again has surpassed the German rate of capital formation. According to United Nations statistics, Japan has invested more than 30% of its GNP annually since 1953. During the complete period the three levels of government have been responsible for about two-fifths of this investment, direct and indirect, private industry for one-third and private households for one-quarter.¹¹⁹

Direct government investment is, however, now declining, its weight having been shifted to the indirect method. (Table 24)¹²⁰ A figure for the respective industry investment component can be taken from Table 23. It is difficult to estimate how much of gross investment in turn can be considered net investment. But it is certainly

¹¹⁹ Ernst Schneider, Investitionen und Kapitalbildung in der Bundesrepublik Deutschland (Düsseldorf: Mitteilungen der List Gesellschaft, 1963), p. 234.

¹²⁰ (Care should be taken not to compare the figures in all tables too exactly; discrepancies arise both because the different research institutes use different calculating techniques and because the newer estimates constantly revise the older estimates. For example, the subcategory figures for industry in Table 24 always exceed those in Table 25 somewhat).

more than 50% of the gross figure, which according to Krengel is the lower limit for replacement of capital to occur, anything lower signifying obsolescence.¹²¹

To have the correct awareness of the impact of investment it is not enough to reveal its volume but also its productivity. For this purpose one must turn to Table 26, which shows the capital output ratios up to 1963. The aggregate coefficient for the six years preceding that year increased somewhat, but really not significantly, and it shows a tendency to move over the cycle, decreasing in boom years such as 1960 and then rising again. In the last cyclical downturn, the coefficient has most likely crossed the 1.50 mark. This conclusion would agree with the comparison of the change in the total amount invested per employee (Table 27), and the change in the index of production likewise. Gross invested wealth increased by 38% in the period 1958 to 1964, which would have been between 20-25% more without depreciation, (the percentage is based on allowed legal tax amounts), while the index of production increased by 40%. That yields an incremental capital output ratio of approximately 1.36.¹²² As long as it is under 2

¹²¹ The average net investment I have calculated to be 60% or 77% depending on interpretation of gross investment in 1963. Gross investment in that year was 9.1% of capital stock. (Table 22, columns 1 and 2), while capacity increased by 7% (Table 21, column 2). If capacity increase is interpreted to mean capital stock increase, then net investment is 60% because the capital output ratio is 1.3 that year, but if capacity increase means actual production power increase then the proportion rises to 77% ($7 \div 9.1$). The former is probably more correct.

¹²² This follows simply on the basis of division, capital stock increases divided by output increases.

there is no question that the investment productivity is one of the highest in the industrial world, and it is a rate that can usually only be found in the early stages of development.

Returning once more to the sectoral analysis, Table 22 reveals the best details. Within the industry grouping, production and investment goods were by far the strongest areas of investment in absolute terms, with 50% and 47% increases in the period 1960 to 1966, respectively. But in relative terms the increase in the consumption goods industry was greater rising by 60% in this time span. However, the trend definitely indicates the continuation of the predominance of the production and investment goods sectors. This conclusion follows from the Mertens analysis which estimated the continuing investment trend until 1970. Apart from the construction industry these two fields retain above average annual growth rates of 6.7% and 7.2%. These figures are rather conservative since they show the growth with the housing construction industry excluded, and this will continue to be a rapidly growing industry in the future, despite its rapid 75% increase in the 1960-1966 period. Direct government investment is still strongly on the rise in absolute terms and will no doubt continue its trend, especially since the new government seems to be more planning oriented than its predecessor. The only surprising sector as far as future growth is concerned is the consumption goods sector, for which investments are even expected to drop. All other sectors behaved more or less as one would expect them in a mature industrial economy like Germany.

The sectoral breakdown in investment is approximately reflected by the capital output ratios. Differences result from different cycles and thus different capacity utilization levels. The rapid increases in the investments in the production, investment and consumption industries were bound to lead to increased capital output ratios when the cycle turned down after 1960. And since the consumption goods industry was slightly less cyclical, the increase in its capital output ratio was less. In mining, apparent sectoral stagnation and inefficiency have augmented the capital output ratio. The capital output ratio rose despite actual decreases in the annual amount of investment. The similarity of the major expansionary categories is likewise quite evident from the statistics on capital intensification as demonstrated by the capital labour ratios. The production, investment and consumption industries were subject to about 30-35% increases. Consequently, given that the output increases were not too different, the capital output ratios were also similar in magnitude. The only noticeable discrepancy among the three is the greater size of the raw material and production goods component, for which the raw material part is probably responsible, behaving as it does more like the mining component. Finally, the equal increases in capital per employee in absolute terms of the investment goods and the consumption goods industries under conditions of different absolute amounts of investment must be explained by shifts in the labour supply in the particular sectors.

The statistical synopsis on growth alone can be concluded in a positive statement. The German economy has grown more rapidly than

most comparable economies and Germany has also invested a higher percentage of its GNP than most of its competitors. Only Japan has done better in both circumstances. At the same time the accumulation and production processes have continued to display a high degree of technical and economic efficiency as demonstrated by the low capital output ratio, and finally growth has been of a very well balanced nature. 1966 was, however, a low point in the economic resurgence of the post-war era, but it is not being too optimistic to say that the growth and accumulation pattern up to now have established a good basis for another era of prosperous development. It must only be properly made use of.

The underlying explanation rests on the analysis of the economy's progress. Neither the mere quantitative volume of capital formation, nor its distribution among the sectors suffice in itself. What is important is whether capital formation has been conducive to growth and whether it will be conducive in the future. Government economic policy will be excluded for the moment. In the most general terms we can say that German economic growth during the fifties was conditioned by the ability of the economy to combine successfully increasing amounts of capital with labour as the source of increased efficiency. The continued success in the sixties was and is still conditioned by the increased substitution of certain reserves of untrained labour by an increasingly complex productive structure, the source of which is capital accumulation.¹²³ Structural change has become a basic necessity now and for the future.

¹²³ Dieter Mertens, Die Wandlungen der industriellen Branchenstruktur in der Bundesrepublik Deutschland 1950-1960 (Berlin: Duncker und Humblot, 1964), p. 65.

For the whole period, moreover, the changing interrelationship of aggregate supply and aggregate demand have made their impact felt. In regard to the supply-demand interrelationship one can divide the period not into two but three. Such division is more exact than using only the fifties and the sixties as dividing lines, and they reveal more clearly the actual driving forces in the process. The first period of postwar growth continued until 1955, the second from 1956 to 1962 and the third one from 1963 to 1967, to continue, most likely, for another five years at the least. It will be noticed, in addition, that this classification does not correspond with the cycles described earlier, but that some turning points on the cycle are also turning points of the growth segments.

The first period was characterized by a surplus of labour. The initiating force that determined growth was demand, primarily investment demand for heavy machinery.¹²⁴ The problem of the structural imbalance resulting from the loss of East Germany was overcome by 1950 so that the productive machinery was able to start a growth process with a low average capital output ratio of .744 in 1950 when the Korean boom started. The export sector, it will be remembered, also was a key in this first real postwar expansion. To put this growth pattern into a theoretical framework, one can adopt the Harrodian model and say that from 1950 to 1955 G was greater than G_w . The actual growth rate exceeded the warranted growth rate, an imbalance which created an upward trend. In addition because the natural or possible rate was greater than the

¹²⁴ Winfried Vogt, Makroökonomische Bestimmungsgründe des wirtschaftlichen Wachstums der Bundesrepublik Deutschland von 1950 bis 1960 (Tübingen: Mohr, 1964), p. 20.

actual one, the upward trend was cumulative.¹²⁵

In the second period of growth the roles of supply and demand were reversed. Demand continued to be strong, but growth was determined by the limitations on the supply side, i.e. by the changes in productivity and labour supply. On the demand side, foreign investment demand even became stronger than the domestic demand and the demand for consumption goods was just starting to boom. Together, the three factors led to complete capacity utilization in the economy. In every industry the shortage of the labour supply led to full capacity operations. Because of the investment goods bias of exports, however, this sector was most hard pressed. The fact that this component was able to grow strongly in the second half of the fifties can be attributed to its initial head start, by virtue of which it was immediately able to gain a large labour supply to use as a cushion later, an important factor since productivity gains were increasingly difficult to make. The rising consumption goods industry was able to continue faced with a shortage of labour mainly because it was much more suitable for technological innovation and consequently productivity gains. For this reason temporary equilibrium was reached during 1959. Productivity gains were able to overcome the excess of demand, only to be upset by the ensuing building boom which made its effects felt as a general increase in the level of demand above that of the level of supply until 1962. To put it into Harrodian terms once again, during this period the following inequality held: $G_n = G > G_w$. The natural rate of growth, determined by

¹²⁵ R.F. Harrod, Towards a Dynamic Economics (London: MacMillan & Co.Ltd., 1963), p. 88.

capital accumulation, growth of the labour force and technological progress, was reached but it exceeded the warranted rate, that which left producers satisfied with their decisions. Thus there was a deficiency of investment persisting in most sectors, recreated from one period to the next by new possibilities arising from productivity gains and capital accumulation. A big export demand for investment and production goods plus a big domestic consumption goods boom went hand in hand in their quest for resources. Every year the importance of increased domestic capital formation rose. In the first years increases in productivity could still be achieved by increasing the efficiency of the work force through better organization for which the high discipline of the work force was a great aid, but thereafter increases in efficiency meant exclusively additional investment.¹²⁶

In the third period economic growth became a more complex phenomenon. Whereas in the first period growth could be referred to as demand determined and in the second as supply determined, whether demand or supply was the active force in the third period, depended on the sector in question. In 1962 the economy reached that point it had reached in 1959, but this time it remained there more or less permanently. From a macroeconomic viewpoint supply and demand were in equilibrium. Full employment persisted and the average productivity gain was just enough to balance the average increase in demand. But within the

¹²⁶ Unfortunately most statistical analyses on this question deal only with the period 1950-60, a reading of which gives the impression that the labour factor was much more important than it actually was, because averages are based on the whole period.

individual sectors distortions arose; hence structural adjustment became a prerequisite for growth. Investment and consumption demand were no longer at astronomical heights; the former was somewhat depressed after the initial reconstruction demand had been met, and the latter was also slowly beginning to be saturated, especially with regard to most household goods. Specific sectors, however, were subject to excess demand, while in others the supply immobilities counteracted the removal of the demand-supply discrepancy.

The demand side continued as the influential factor in the investment goods sector, and the influence pervaded the entire investment goods sector. Changes in the investment structure did not influence the level of demand until 1965.¹²⁷ The factors that did influence the structure of investment were, in effect, discontinuous capacity effects, but these were not strong enough to put a restraint on the fulfillment of demand or they did so for only a short period of time. Krengel has even expressed the fear that in the second half of the sixties demand might not be sufficient to induce new investments when the capital structure and its development must adjust to the new demands for a lower growth rate.¹²⁸ Since he has expressed that fear, economic development has proved the opposite. Investments in investment and production goods have risen at above average rates so that the total volume of investment

¹²⁷ Rolf Krengel, "Ursachen und Wirkungen der Strukturveränderungen des industriellen Anlagevermögens der Bundesrepublik," Strukturwandlungen ed. Neumark, p. 915.

¹²⁸ Ibid., p. 913.

has risen as a proportion of GNP also. And secondly, the demand for investment in general and in the production goods field in particular is just being touched by the electronic revolution in data processing that will henceforth determine "reality" in the economy as Mertens so aptly stated it.¹²⁹

The slackening of demand in sectors susceptible to such scientific advances in 1965 and 1966 was thus in part a signal, not that the investment goods industry was undergoing secular stagnation, but that it has over-expanded in the wrong direction and with the wrong means. The structurally favoured sectors have become synonymous with the capital autonomous ones, with very little resort to the labour factor. Consequently the emphasis on the importance of capital accumulation has been demonstrated once more as the key to successful growth, and it applies to the great majority of the investment goods industry's branches. The electronic revolution is one that can easily change the rule that the nature of basic technological processes is fixed and that productivity gains are no longer possible. All branches are subject to its influence where the demand is absolutely rising, for then it is worthwhile to replace labour by capital if capital is less expensive or if it is left over from use in the more productive uses. Whenever supply and demand are close to equilibrium the profitability norm will always act as a sieve.

In the consumption goods sector, on the other hand, the development since 1962 has been more problematic. Total demand and total

¹²⁹Mertens, Wandlungen, p. 167.

potential supply are in equilibrium, but the structural factor has been much more significant, so that in one case, demand has been the engine of growth and supply has been more than sufficient, and in the other supply restrained a sector's growth potential. In addition, due to inflexibilities in the consumption goods producing capital goods industries and immobilities in the labour supply the discrepancies could not be easily overcome, particularly since the demand structure was also constantly changing. The more rapidly the structure of demand changes, the less is the structural adjustment capacity and the lower are the growth rates. The process has gone so far already that even in the same branches of the industry distortions in the supply-demand relationship have arisen. In the automobile industry, for example, some models made by the same firm are in excess demand straining available resources while for others there is idle capacity. In the previous growth period this phenomenon was completely absent. Increasing complexity of the production process in turn accentuates the possible distortions further.

Although the conflict between the ever widening and changing demand structure and the increasingly complex productive process is inevitable in a mature and decentralized economy, it does not mean that the distortions created cannot be reduced or avoided. One way to do so is to produce not for eternity and invest large sums of money only to find the machine unwanted or obsolete shortly thereafter. The German industrialist is only slowly drifting away from that policy, but the slowness of the adaptation no doubt contributed if not directly to the lower growth rate of the consumption goods industry, at least to the long dragging out

process of the reduction. Demand has not yet changed so rapidly in Germany to force the entrepreneurs to see the illogic of "durability above all" motivated production.¹³⁰ (Part of the fault also lies with the government's economic policy in this regard as it will be seen shortly.) Undoubtedly Mertens and Kirner forecast capital consumption for the investments in the consumption goods industry until 1970 partially for this reason. What that development tends to, however, is a re-establishment of the conditions in the second "period" mentioned, except that this time scarcity is artificially created. It will consequently mean a reduction in total growth. Maximum total growth in Germany will be achieved through microeconomic structural adjustment. Non-invested resources are wasted because in a non-centralized economy with Germany's investment demands they will not be transferred to a more productive use.

It is, furthermore, not the aim of industry or government to sacrifice consumption purposefully for the sake of investment. Nevertheless, German industrialists have found that it is easier to survive in the field of investment goods, particularly where electronics has already made big inroads. The constant foreign demand for investment goods in turn reinforced the domestic one, and so the risk of investments in the capital goods sector was lower than in the consumption goods sector.

¹³⁰ It is, of course, difficult to prove this argument with the help of statistics. There is, however, an undisputable durability-mindedness present in Europe which is not so prevalent in American business circles. Wallich, for example, has observed that "many German businessmen find it difficult to accept the fact that obsolescence can make equipment value less while it is still in working order" (p. 337).

In Germany the investment goods sector consistently displayed a high degree of activity and thus slight fluctuations. The consumption goods industry was not less susceptible to upturns and downturns. The apparent paradox stems from the comparison of qualitatively different categories. The variety of consumption goods is greater than that of investment goods. Hence the consumption goods cycle, which is formed by adding up many individual up-and-down movements, has a less abrupt cyclical pattern. The investment goods cycle, on the other hand, does not comprise so many components and so appears to be more cyclically pronounced. The individual components of the investment goods sector have fluctuated, but because of the great surge in demand for investment goods, these fluctuations are movements around a rising trend. Absolute downturns have been rare. The fluctuations of the consumption goods sector have likewise been around a rising trend in the aggregate, but the demand for many specific items has decreased significantly.

The problem can best be resolved by generalizing the makeup of German industry into four categories as suggested by Mertens.¹³¹ These four basic categories of industries are (1) growth industries, (2) cyclical industries, (3) shrinking industries ("Schrumpfungsindustrien"), and (4) secularly stagnating industries. The chemical, oil refining and automobile industries are typical of the growth category. Their characteristic is a steep upward growth rate. The second group is constituted primarily by the iron and steel, rubber, non-electrical machinery and paper and paperproducts industries. These industries expand above

¹³¹ Mertens, p. 66.

average in the expansionary phase and below average in the contractionary phase. Ore mining and the textile industry are representative of the third class, whose peculiarity is that production increases but always at a lower rate of production. And finally, coal mining is the typical example of a secularly stagnating industry. Production actually declined.

It is from this point of view that the question of structural adjustment must be seen. If the demand outlook for investment goods seems more optimistic, it is because a large proportion of these goods are found in the first two classes, and many consumption goods industries are in the third grouping. From this classification it becomes, likewise, obvious that decreased capital investments in the consumption goods sector will accentuate the problems even further, for the dominant characteristic of the growth industries is their high capital dependency. There are, no doubt, exceptions, but their number is small. Structural change in the economy implies capital structure change, and expansion implies intensification of the capital component in the investment or in the consumption goods sector. Nevertheless, there are capital intensive investments that do not fall under the first class, and so if the German structure of investment since 1962 shows an all-round balance among the major components, the structural effect need not have been necessarily well-balanced in the positive direction, and indeed it has not been.

Occasionally throughout the discussion the word factor mobility has been mentioned. There is no question that capital mobility

among the sectors is most essential to a flexible adjustment among the sectors of the economy. The direction of its movement is determined by the varying degrees of productivity, i.e. profitability. Labour mobility has at some time, however, been of some importance, and so it deserves mention. One estimate has it that 14% of the productivity gain between 1950 and 1963 is attributable to the change in the employment structure, and predicts a reduction to only 6% in the period between 1963 and 1970.¹³² The latter figure shows the negligible importance of labour mobility relative to that of capital. The higher figure for the 1950 to 1963 period was, moreover, the result of the mass exodus from agriculture. Immediately following the war the influx of refugees into the agricultural sector had been unusually heavy because of the lack of employment in industry and the necessity to have food. Rationalization and mechanization of agricultural techniques as well as the industrial boom simply reversed the trend in the fifties and sixties. Within the industrial sector movements have in the last few years been very slight. Distinctly noticeable has been only the exodus from the mining sector to the investment and consumption goods producing sectors.

This analysis of the structural aspect of Germany's economic growth can be summarized with mixed conceptions. There is no question that the productive power of German industry remains unbroken in the mid-sixties, but the extent of its efficient application requires continual structural adaptation, in which the country has had only partial success.

¹³² Peter Schwane, Beschäftigungsstruktur und Wirtschaftswachstum in der Bundesrepublik Deutschland, 1950-63 (Berlin: Duncker und Humblot, 1965), p. 77.

There exist no fundamental structural problems at the present. There are, however, indications that the economy has overexpanded in some areas such as iron and steel and underexpanded in others such as electronics and computers. These distortions could become serious problems at a later date. Thus, it is often less costly for an economy to suffer a sudden drastic sectoral problem and shift rapidly than to experience the readjustment through a long drawn out process. As yet, the costs are not very high, if a positive structural policy ("Strukturpolitik") should be implemented.

Before turning to government policy efforts in this direction, the complementary aspect of the objective economic structure must be discussed. Attention was so far concentrated on the two main barriers, namely, capacity and employment, the former of which has been seen to be the principal important one. It is in regard to this barrier that its complement, the financial barrier, is important. Capital intensifying sectoral restructuring must be financed. The German success requires an analysis of how Germany has been collecting funds to finance the investment and what are likely to be the prospects in the future.

The Financing of Investment and Capital Formation

From 1950 to 1962 the main concern had to be the procurement of capital regardless of sectors concerned. In the initial stage of growth it was required to create employment, and once full employment was reached it was required to rationalize production techniques once labour had become a scarce factor. In the third period of growth since 1962, the structural changes in the industrial product mix also had an impact

on the financing of investments. It is no longer solely a problem to obtain capital resources but also to secure a sound financial structure for the investing enterprises.¹³³ Much of the risk of structural change is accentuated by unsound financing techniques which will be mentioned shortly, and unsound financing techniques in turn accentuate the problem of capital acquisition later on.

The two principal sources of industry finance are the banking and credit institutions and the stock market. Tables 28 and 29 reveal the quantitative importance of these sources. Savings are, of course, the ultimate source of finance, and so they will be mentioned first. They rose from 24.3 billion DM in 1956 to 110.7 billion DM in 1965, an increase of 460%. Comparing figures for investment and saving shows that savings always increased faster, since 1960 by 25% for example. Because Germany had a favourable balance on current account during this period savings had to be greater than investment by this percentage. Savings banks (Sparkassen and Girozentralen) always account for more than 50% of the savings followed by credit banks, credit co-ops and the postal savings system. Other minor capital collecting agencies include the building funds and mortgage banks, but these limit their activity mainly to the housing sector. The enormous rise in the volume of savings is attributable to private households. The amount of the households' share of current domestic savings rose both relatively and absolutely. From 1950 to 1963, for instance, it rose from 21% to 37% and is still rising.

¹³³ Ruprecht Melder, Die Geldkapitalnachfrage der privaten Wirtschaft (Freiburg i.B. Dissertation (no publisher) 1964), p. 26.

This development is the result of the steady increase in the ratio of private savings to disposable income, which also had risen from 3% in 1950 to 9.5% in 1963.¹³⁴ Particularly in 1966 the ratio increased to 12% of disposable income due to the pessimistic employment outlook. All of the increase in the share of households came at the expense of corporate savings, which were reduced from 47% to 21 % in the same time period. The government's share also rose from 31% to 43%.¹³⁵

The stock and bond market increased its relative importance as the actual supplier or mobilizing agent of these savings during the sixties as evidenced by the lower corporate saving ratio. Savings, in general, increased by approximately 110% while the turnover of stocks and bonds increased by 145% in actual value and by 160% in nominal value. Of the two, the increase of 300% in bonds turnover has accounted for the greatest part as compared with mere 45% in actual value stock turnover. (In nominal terms, the increase comes to only 25%.)

The decline in the self-financing of industry has been the most important development in the investment process, a factor which has had severe implications on the soundness of the financial structure. Since fixed interest securities have also regained pre-eminence in the sixties together with non-capital market loans, the credit worthiness of investors must be even better to qualify for investment funds. Schneider has observed accurately by stating that an enterprise is capable

¹³⁴ Kindleberger, p. 53.

¹³⁵ Ibid.

of financing through retained earnings is not creditworthy.¹³⁶ The old German rule states that the firms' own capital should always account for about 60% of total invested capital. In Germany this percentage was only 32% in 1961. Even with an additional new stock turnover of 1.2 billion DM Germany was far from the 60% mark.¹³⁷ The problem has unfortunately been fostered by government economic policy as a reaction against the excessive self-financement that took place in the early postwar years. At that time, however, any other method was impossible because no capital market existed, while the non-availability of commodities and the inelasticity of demand allowed an ideal self-financing through increased price. As late as 1956, 83% of all profits in Germany were reinvested. The rate of plough-back was especially high in the larger enterprises. Comparable figures for Britain and the United States in that year were only 50% and 44% respectively.¹³⁸ In addition, it was still the stock market that provided additionally required funds. This course only shifted after 1961, when the stock values fell, and fixed interest bonds became more important. The trend was initiated by the rising activity of the three levels of government borrowing at high interest rates. Since stock values fell, industry likewise resorted to this market. 9.6 billion DM was acquired by industry in this way, 2.5 times the amount of new stock issues.¹³⁹

¹³⁶ Schneider, p. 242.

¹³⁷ quoted from table in Melder.

¹³⁸ Melder, p. 95.

¹³⁹ ibid. p. 95.

Another 4.3 billion DM was procured on the basis of promissory notes outside of the organized capital market.

A further noticeable change occurring in the financing of investments has been the changing character of bank credits. Firstly, the banks' proportion of all credit granted doubled within the fifties from 35% to 70%. Since then the increase has only slightly continued. Secondly, short term credits are slowly replaced by longer term ones. Table 30 indicates the trend until 1962. The problem remains that the banking system is never the best source of long term investment capital, even though the German banking system has a long tradition of co-operation with industry. For co-operation in the early industrial era was based on the willingness of the banks to absorb large stock issues from industry and not to provide long term loans at fixed interest rates.

A concluding remark on this phase of Germany's growth and capital formation is consequently similar to that made on the actual investment in productive power itself. Just as the capacity of the productive power to grow was affirmed, so the capacity of the economy to finance the expansion can also be affirmed. (The former is really the outcome of the latter) Household savings alone can now finance 50% of total investments. If government and corporate savings are added there is a greater supply of liquidity than there is demand for. Similarly, the success of the investment process depends on choosing the right sectors in which to invest, a search that is in itself difficult enough. But if in addition, the financial mechanisms are not flexible enough to transfer the resources to those sectors, growth will not be

achieved. The problem arises through the rising ratio of household savings, the decline in corporate savings and thus the inevitable decrease in financing through retained earnings. Household savings are not directly invested by their owners, and the institutions holding them do not necessarily direct them to their most useful occupation. When the degree of self-financement is great the mechanism works automatically; the most productive enterprises save the most and immediately have investment funds at their disposal to undertake the investments once more. Growth is a two-step programme, first to find out which sectors are most productive and second, to make sure that investment occurs there.

Economic Policy and Investment

The success of government economic policy in encouraging the right reactions will now be analyzed. The "Social Market Economy" stresses that the price mechanism is the best regulator of supply and demand in the market, and that interventions in the market distort the price mechanism's function, leading to inefficiencies. Interferences aimed at structural change would seem to be excluded. The only exception granted is that intervention could be justified on social grounds as part of "Vitalpolitik". Whether the philosophy underlying modern structural interventions could, however, be classified as such is a question demanding a very broad interpretation. This philosophy states that the aim of structural policy is to leave the risk of profit or loss to the entrepreneur, but that it would be economically wrong not to

intervene if the total economic utility of government interventions is considerably greater than their financial cost.¹⁴⁰ Investments that would qualify under such interpretation are elasticity promoting measures, structural adjustment aids and complementary investments. To admit the possibility that they might be necessary is to deny the perfect functioning of the price mechanism. While no one would go so far as to insist on its complete perfection, not even the "Social Market" economists, the nature of the structural interventions implied would no doubt go beyond what they regarded as permissible. For direct structural interventions could be objected to if they were called forth merely to bridge sudden changes in demand. Today, however, the economy has become more interdependent, and this interdependency has become technically conditioned. The effort of a sudden innovation in one branch immediately spreads to others, but the price mechanism will not follow at once, or the magnitude of its change will not accurately reflect the new environment. Intervention is not justified in the modern version to promote social goals but to promote growth.

In the German Federal Republic, structural interventions have occurred for a variety of reasons. Their successes have also differed widely, sometimes very successful and at other times utter failures. Generally the interventions were more successful in the fifties than in the sixties. One of the most accomplished structural interventions by the government was the massive support for the public utilities, the

¹⁴⁰ Heinz Kohn, "Sektorale Strukturpolitik ist notwendig," Wirtschaftsdienst, (January, 1967), p. 87.

railroads and the coal and steel industries set up by the "Investment Aid Law", which was in effect from 1952 to 1954.¹⁴¹ In this unique venture of business cooperation with government 3 billion DM were allocated for investment as a direct result of tax benefits given to these industries, and the chain reaction that followed led to the first boom of the postwar period. The intervention definitely intended to increase the elasticity of supply to put the country back on its feet, as it were. The price mechanism was not allowed to run its course because it would have meant too high prices and that would have been against the social interest, so even as a "Social Market Economy" device the intervention could be justified. But there is no doubt that the underlying motive was the nationalistic sentiment for reconstruction and industrialization beginning with basic industry regardless of how market conforming the action was. Fortunately, in this case it could be justified on both grounds, but what is most important is that the intervention was successful. When the end is prosperity the means are rarely questioned later.

The typical example where no "Social Market Economy" principle could be used as justification is the shipbuilding industry. Subsidies were given because the prestige of an industrial country required a fleet, and because all other countries followed the same practice. And again in few areas was the continuation of subsidies and tax privileges so

¹⁴¹ Karl Häuser, "West Germany", Foreign Tax Policies and Economic Growth, National Bureau of Economic Research (New York: Columbia University Press, 1966), p. 124.

142
 successful in the fifties. Although shipbuilding is now a shrinking industry, Germany became the second largest shipbuilding country in the world.

Another area of reasonably successful structural intervention that does not quite fit into the logic of the "Social Market Economy" is agriculture. Beginning with the "Agriculture Law" in 1955, the government sought to increase the productivity of agriculture through rationalization of production of cultivable land and equipment. From 1956 to 1961, the principal era of the so-called "green plans" ("Grüner Plan"), 7.6 billion DM were spent for revenue increasing and cost decreasing measures and another 12.3 billion DM were spent in the form of general credits, subsidies and tax privileges.¹⁴³ Also by 1960 the number of farmers was reduced by a third vis-a-vis 1955 and that of farm labourers by two-thirds. Henceforth about a third of German agriculture was internationally competitive.

This was a strong structural adjustment, an elasticity of supply promoting measure and a complementary investment to increase the labour supply for industry all rolled into one. The impact was unquestionably beneficial. Moreover the government was quite willing to finance some of the cost via higher prices to the consumer, a move that was non-market-conforming and against the social interest according to "Social Market" theory. In this case then its logic is lacking. It

¹⁴² H. Busch, Steuerliche Entlastungen einzelner Wirtschaftsbereiche - Ein Problem der sektoralen Finanzpolitik, Dissertation (Cologne: (no publisher), 1965), p. 107.

¹⁴³ Lilge.

is not surprising for it is well known that the government's intervention in this sector was encouraged in part by the well-organized farmers' pressure group under Erhard's personal friend Rehwinkel, and that some of the subsidies coincided with national elections. The programme has never been completed to bring 100% of the units up to international standards of efficiency, requiring the exit of 2 million more farmers from their occupations.

The outstanding success in the housing programme has been the most positive "Social Market" inspired structural intervention. In the period up until 1966 there have been more than half a million units built annually, for Germany is the record holder internationally. The basis for this interference was clearly phrased in terms of "Social Market Economy" doctrine: the market economy after the war was too weak to produce social equilibrium, and so public regulation of production became necessary. Rents were kept below what they would have been, given the free interplay of supply and demand, and construction was kept at a rate above what it would have been, given the natural market forces.

The structural intervention has been carried out in four phases according to the legislation introduced. It began in 1950 and the last regulation was instituted in 1963. The first housing law in 1950 created three categories of housing; namely, the publicly financed, the tax privileged and the privately financed type according to the degree of restrictions on rents and the origin of the support.¹⁴⁴ During

¹⁴⁴ A. Hampe, "Strukturwandlungen in der Wohnungswirtschaft" Strukturwandlungen, ed. Neumark, p. 969.

this period which lasted until 1955, 50% of the investments in housing were financed by government funds and only 39% by private capital, mortgages constituting the rest. The second set of laws implemented in 1955 and 1956 moderated the restrictions on rents somewhat and encouraged more building of private homes. During this period the proportion of public funds was consistently reduced to 30-40% of the total and privately financed mortgages attained more importance. Quasi-cooperative building funds, ("Bausparkassen") were also slowly entering the investment business. The last two housing laws significantly cut the amount of public money engaged and the restrictions on rents. The first one in 1961 eased the restrictions on rents in tax-privileged and old houses, while the subsidization through public funds continued by means of low interest rates on loans. The principle of the "white county" was also introduced, which meant that where the excess housing demand was less than 3% the rent restrictions were cancelled on all old privately financed housing. This law was complemented in 1963 by a further law redefining the relationship between owner and tenant and revising the remaining rent restrictions which took the form of ceilings, upward to correspond approximately to the actual maintenance costs. From Table 31 it can be seen that although public investments always increased absolutely, they constitute only 20% of the total invested now. Much of the continuing success of encouraging the private capital to invest in housing stems from the cooperative nature of the investment process. Public funds were contributed conditional on sizeable concurrent private contributions. These contributions came about by virtue of the fact that consumptive expenditures were replaced

by investive ones.¹⁴⁵ After seventeen years of government direction the housing need has been met.

The other successful interventions are more or less of minor individual importance. The German tax system is filled with special provisions for privileges under certain conditions, such as those allowing higher depreciation allowances for sewerage investments and for water pollution control, etc. Since the early sixties, however, the Federation of German Industry has generally no longer demanded subsidies or special tax privileges. Its emphasis has shifted much more to demands for equalizing the starting conditions of industry in international competition than to structural aids.

An important field in which the intervention of the government has been very unsuccessful is the coal mining industry. Ever since the late fifties this industry has been plagued with overcapacity, partly attributable to the excessive expansion encouraged several years earlier. The mine owners, nevertheless, came up with "metaeconomic" arguments like the farmers and secured support for rationalization and consolidation programmes.¹⁴⁶ But in contrast to the agricultural sector a concrete programme was not set up until five years later. The structural aid funds did not improve the production process. Finally, in 1963 a structural plan came into existence, fostering the combination and shutting down of unprofitable mines, reducing the tax rates on undistributed profits to encourage modernization, and

¹⁴⁵ J. Höffner, Jahrbuch des Instituts für Christliche Sozialwissenschaften, (Münster: Verlag Regensburg, 1961), p.100.

¹⁴⁶ Mertens, p. 169.

promoting the use of coal in industry through accelerated depreciation rates for the construction costs of the factory using it.¹⁴⁷ At the same time different methods were used to retrain workers for other jobs or pension the older workers if they so desired. Still, productivity changes to this day cannot be witnessed and the workers resist moving to other industries. Erhard was never able to solve the problem while in office.

The example shows that a structural intervention designed to shrink an industry is always more difficult than an intervention with an expansionary purpose. The case of the coal mining industry in the two instances, 1952 and 1963, shows this contrast poignantly. And only a resolute government can succeed especially since contraction brings sociological and political complications with it. But worst of all, and this is the ultimate critique of the coal mine intervention, were the indecision and contradictions accompanying it. Subsidies were paid to economize on the one hand, and on the other the use of the product was encouraged. The opinion has often been voiced that the intervention did not aim for a positive restructuring but for the preservation of an inefficient overexpanded industry, and that is under any conditions irreconcilable with the premises of a "Social Market Economy". An almost similar condition prevails at this time in the shipping industry, except that it does not catch the eye as much as the traditional Rhr coal industry. One must, nevertheless, see the problems of an industry such as coal mining in international perspective. Most countries in the world

¹⁴⁷ Mesenberg, p. 678.

are presently facing a situation of high operating costs and excess supply of coal. Inexpensive hydroelectric power and oil and gas have placed the industry at a severe disadvantage that makes its ultimate contraction inevitable. What the German government can be reproached for are the endless delays that prevented any decisions from being finalized after intervention had been decided upon and the extent that Erhard was influenced by the mine owners to decide in their favour. Even agriculture, another "enfant terrible" of most developed countries proved to be less of a problem in Germany.

Whether contractive interventions will be successful in the future cannot be determined a priori, for much of the coal industry dilemma rested on Erhard's shoulders, and he is no longer in any executive decision making position. What is certain is that more similar problems will arise as more traditional primary industries will lose their competitiveness to newer ones. The steel industry has, fortunately, already taken the first step to consolidation itself after the High Commission of the EEC in Luxembourg allowed it to set up an all-embracing counting-house system, ("Stahlkontore"). The free competitive process is no longer of much help to such industries. The price mechanism has long lost its advantages there. There is much that the government can and must do in the future, if positive economic growth is to be maintained. So far it has been spared many a task; industry has been able to adapt fairly well on its own.

Now it is necessary once more to turn to the second step of the analysis of the growth process, the financial aspect. By its very nature government influence here is taken for granted. Monetary and fiscal

policy automatically have a certain effect on growth. From what could be seen from the statistics, government monetary and fiscal policy seem to have succeeded to a considerable degree in both creating the ability and the will to save in the postwar era, and both continue undiminished in the present. However, it was seen that the disposition of the savings was not always satisfactory. Of most importance for the financing of German growth have been the taxation system, in general, and the laws governing the capital market within it, in particular.

The characteristic of the German tax system is that it has gone very far in creating specific encouragements and discouragements in great detail to further a certain economic behaviour. It is a remnant in some respects of the allied occupation after the war. Taxes in that period were very high; for example, there was a 50% tax rate on an annual income of 25,000 DM, and the marginal 50% rate began at 9,000 DM.¹⁴⁸ When the allies refused the German government to undertake a general tax cut, it simply punctured the system, providing tax privileges for funds invested in certain areas, such as exports and public utilities. Hence businessmen were virtually compelled by the tax saving opportunities to invest at very high rates, for the tax savings rose cumulatively with the income bracket. Because the investments were at the same time financed by means of raising prices the amount of savings was further augmented. And the higher the income the higher was the saving. Naturally the large savings were achieved at the cost of a grossly unequal distribution of wealth, which still continues today. The unequal wealth distribution is now

¹⁴⁸ Hauser, p. 118.

encouraged, however, not by tax privileges for selective investment but by the degree of the progression of the income tax rate. The maximum rate which anyone must pay is 53% today, compared with 88% for the United States, for example, while at low incomes the rate increases much more steeply.

Fortunately, the social security system has taken much of the edge off the otherwise ruthless methods of taxation designed to finance the promote investment. At low levels of income the problem of insecurity as to sickness or accident is non-existent. As Reuss stated it, the system works through incentives at the top and through paternalism at the bottom. Moreover, if one compares the absorption by payroll taxes including social security taxes of income otherwise used for consumption with the savings of the public insurance funds, it is clear that the German social security system is an additional channel of savings that can be injected into investment, the fruits of which the middle and lower classes certainly partially reap.¹⁴⁹ The same held true throughout the fifties for the IAG funds, the equalization of burdens tax, which Häuser has estimated were saved and invested up to 50%.¹⁵⁰ Finally, not only did collective savings contribute potentially to investment by virtue of the customary discrepancy between absorption and savings, but the very collectivity gave an additional impetus, for it increased the lending capacity of the banking system.

In the sixties the procurement of savings was no longer strictly dependent on the existence of such an institutional system

¹⁴⁹ Reuss, p. 182.

¹⁵⁰ Häuser, p. 135.

that created forced savings. Savings other than those generated by the social security system were possible on the part of the middle classes. However, to organize them, higher interest rates for savings by the less privileged were paid if they kept them there for specific periods. The success can be shown in Table 28 and is considerable. Premium saving ("Prämiensparen"), as it was called, increased from nothing in 1959 to over a billion DM in 1965. The reason the government resorted to this means is attributable to the low popularity of securities among the less privileged. In order not to let the funds leak into consumption, a saving incentive had to be provided. Among the higher classes, the higher rates of saving and investment still continue.

While the government has thus had remarkable success in organizing household savings in latter years, it has not been equally successful in seeing that they are productively applied. As has been mentioned already, the problem lies in the fact that a 50% proportion of household savings is too great to carry for the still not fully developed capital market and the imperfect transfer system between the suppliers and demanders of credit. Corporate savings have been neglected in recent years, as can be seen in the rapid shrinkage of their proportion. The tax system has discriminated against this form of saving ever since the latter part of the fifties. It is in the discrimination toward corporate savings that a burden of the tax system is found. The discouragement of this form of saving is a misallocation of resources in an economy that must rejuvenate its economic structure at an accelerated

rate to remain internationally competitive. The decline in the proportion of corporate savings can be attributed first of all to the different and changing method of taxation of distributed and undistributed profits, and secondly to the lower depreciation allowances progressively instituted. During the early fifties the latter were high and constituted the principal weapon for encouraging corporate investment. They were especially effective as part of the "Investment Aid Law" of 1952. The high depreciation allowances were actually still higher as a result of rule that firms were able to use the "Teilwert" (partial value) appraisal method; that, a specific capital good was evaluated not on the basis of purchase price but on the basis of its value as part of the total production complex, a method leaving room for much administrative discretion. In 1958, however, the system was replaced by a more rigid scheme of regressive depreciation allowances limiting the minimum deductible amount in the first year to 25% and permitting a maximum value of 67.2% to be written off in five years. A new law in 1960 lowered the first year's allowable write-off to 20%, placing Germany internationally in the worst competitive position. (Table 32). In fact, German firms are not even taking advantage of the maximum permissible depreciation rates as Melder has shown.¹⁵¹ Hence they cannot be really suffering under the low rates, and it is a tribute to the firms ability to provide adequate finance at low cost. There are bound to be some firms to whom the low limit does, however, provide a restraint to their ability to expand. For the larger enterprises the value of higher depreciation allowances will certainly become clearer

151

Melder, p. 135.

the greater the replacement requirements will become.

The negative influence on corporate savings resulting from the altering taxation of distributed and undistributed profits has been generally of more importance. The first German instituted tax reform after the occupation era, known as the "small" tax reform, set the tax rate on distributed profits at 30%, and that on undistributed profits at 60%. Such obvious discouragement of financing through retained earnings was ended under the influence of the drastic need for investment funds beginning with the boom a year later in 1953. The tax reform of 1954, known as the "big" reform, changed the relationship to 30% and 45% for distributed and undistributed profits respectively. However, in 1958 the roles were drastically reversed to a 51% and 15% for undistributed and distributed profits. When in 1959 the stock market reform allowed the corporations the tax free change of undistributed profits into stock capital, the decline in self-financing was well under way. This law meant simply that the undistributed profits could be distributed tax free as shares, which limited the use of the funds for reinvestment. No change has since been made in the tax rates applicable to the effect that German companies are again in the worst position internationally with respect to taxation of undistributed profits. Erhard always believed that because of the fear of inflation and the unequal distribution of income it would be good to reduce financing through retained earnings further, regardless of the adverse effects on the industry's position.

And this occurred at a time when the transfer of private capital to investment was hampered. As the statistics show, since 1961 the volume of government fixed interest securities have increased enormously, funds which are not productively invested except in housing, where the government has been taking over mortgages. Because of the great volume the public sector demands the interest rates have likewise risen, and that naturally constitutes another block to the greater participation of industry in the capital market. The discrepancy between the supply and the demand remains. One cannot be certain whether those sectors which require the most investment funds will actually obtain them, and even if they can the price will be too high. This failure of the government to create a capital market must be regarded as one of its major faults. Even if the proportion of self-financing ever rises again to international averages, industry cannot do without a well functioning capital market to turn to if it needs funds to retain its high growth rate. The performance of the economy under these conditions is remarkable, but, and in this manner one can conclude every section in this analysis, it does not insure permanent continuation. Certainly the principle of the establishment of a good capital market should be regarded as market conforming in philosophic harmony with the "Social Market Economy".

Conclusion

In conclusion, the findings of this chapter should once again be summarized. Investment and capital formation were analyzed as growth influences from the point of view of objective factors and economic policy

influences. It was seen that West Germany has had a most successful growth record in the postwar period but that this record is being progressively jeopardized. Both objective and subjective influences are discernable as causes, and they are closely connected with investment and capital formation. The existence of a capital goods oriented economic structure was seen to have contributed greatly to growth. It meant large exports, economies of scale and great productivity gains that brought prosperity to the economy. In the consumption goods sector growth was achieved through technical progress and innovation under the pressure of a shortage of labour. Structural interferences on the part of the government were helpful in sectors that required expansion. Shipbuilding, housing, agriculture and primary industries owe their growth to government economic policy. Housing is noteworthy because the structural interference was an overwhelming success of "Social Market" theory. In the other sectors nationalism, the desire for reconstruction and lobbying were more important considerations, but these interventions must be regarded as secondary explanations relative to the objective factors as causes of Germany's growth.

Economic policy was more influential as far as the "financing" of investment and growth is concerned. The government successfully exploited the already present savings mentality of Germans, particularly at higher income levels. The action exemplified the essence of the "Social Market Economy", incentive at the top and paternalism at the bottom. Both factors were seen to have contributed to the savings effort, the regressive tax at the top, and the social security system at the bottom.

The progressive jeopardization of the growth of the German economy in the sixties could be explained similarly by the structural factors and the system of financing that underlies them. Whereas structure and financing did not require coordination in the fifties, when aggregate demand was always greater than supply, since 1962 it has become essential. The savings that result from incentive at the top must be applied productively. Economic policy has not been accommodated to fit the new requirements. It is, however, questionable whether the lack of accommodation was attributable alone to the hands-off attitude of "Social Market" theory on this point. At a time when growth industries are in great need of investment funds to finance their expansion, the government's tax laws are progressively discriminating against self-financement and the government's borrowing volume limits industries use of the capital market. In the immediate postwar era self-financing via prices had been the only possibility to get capital and it was permitted because reconstruction was necessary. Later Erhard feared inflation and income inequalities, and so he counteracted the practice. Thus taxes on retained earnings were raised and depreciation allowances lowered. This would indicate that the "Social Market" principle of countering inflation was the causal consideration. If discrimination against self-financement is to persist, only a better utilization of the rising household savings will secure the continuation of growth. Paradoxically this would require a more elaborate structural interference policy than the automatic device that self-financing provided. There are, in fact, signs that economic policy does tend in

this direction. The reorganization of steel industry in 1967 was an indication that henceforth competition was no longer required in the primary industries. German economic policy with respect to investment and capital formation has become on the whole less competition oriented than it might have had to be if considerations of inflation and income distribution had not become such vital questions.

CONCLUSION

In the introduction the object of this thesis was defined to be the evaluation of the effect of economic policy on Germany's economic development in the postwar period in general and in particular the extent to which that policy was motivated by the theory of a "Social Market Economy". In conclusion, some general comments should be made as to what was revealed in this purpose. The "Social Market Economy" itself was found to be not a system of concrete economic policy but an economic philosophy, idealistic and individualistic in its outlook. The pillars of the "Social Market" theory, competition and social betterment, primarily evolve through the philosophical attitudes of those responsible for the execution of the whole gamut of day-to-day economic policies. Exceptions certainly exist and they have been mentioned in the text.

Consequently, the successful development that the German economy has displayed in the postwar period was revealed rarely to rely on the tenets of "Social Market" doctrine. The positive and beneficial balance of payments position was above all accounted for by the favourable composition of German industry, its technical ability and the non-colonial ambitions of the country. Economic policy contributed little of positive

value; it was not necessary that it did. But the emphasis on trade liberalization and comparative advantage by the German government was inspired by "Social Market" theory. The European Economic Community that was thus helped into existence certainly stimulated the development of the German economy. It is, nevertheless, difficult to show it as a direct outcome of "Social Market" theory.

Similar logic holds for investment and capital formation. Their successful record of growth was the outcome of a fast growing capital goods oriented economy, German nationalism, the desire for reconstruction and the German saving mentality. The less successful record of the sixties can, likewise, be explained by these factors to a great extent. Economic policy played a somewhat more important role, however, than it did in the case of the balance of payments question. The industrial structure was favourable to rapid growth, but the government had to exploit and support this positive inclination by enabling the financing. Erhard's policy of "incentive at the top and paternalism at the bottom" was the propeller in the fifties, and it was directly inspired by "Social Market" theory. As long as all sectors of the economy required expansion and there was no problem of inflation this strategy worked quite well. When the sixties came along the danger of inflation and overexpanded industries, however, complicated the problem. Structural policies were required which necessitated intervention in many sectors that were contracting and special incentives to those needing to expand. With the exception of the contrived success in the provision of housing, the government's

economic policy has been unable to cope with this more complex problem. "Social Market" theory provided no guidelines in this regard and so could not be of help nor hindrance. It has had an influence only indirectly in the sense that "Social Market" motivated anti-inflation policy has discriminated against growth industries through progressively heavy taxation of retained earnings.

The problem of inflation has indeed provided the government with most of its problems of economic policy although not so much its economic development problems. The degree of inflation that Germany experienced since the war, particularly since the sixties, has not been excessive in comparison with other countries, but it has shown that economic policy has not been able to cope with the problem. The government's counter-inflation oriented economic policy has suffered from the overemphasis on monetary policy, the unwillingness to use anti-cyclical fiscal policy, the unsuccessful moral suasion attempts on the part of the economics minister and the division of levels of government. These defects are almost exclusively related to "Social Market" theory. After disastrous experiences with inflation in the past, monetary discipline became the watchword of the "Social Market Economy". Fiscal policy was not suitable for the competitive mechanism nor was much attention paid to it, for only a balanced budget was constitutionally legalized. The "Länder", moreover, did not have any sense of financial responsibility as they consistently went into debt regardless of the cyclical period.

Counter-inflation policy was consequently the most negative aspect of "Social Market" motivated economic policy and thus contributed strongly to the slowdown of the economic development of Germany in the sixties.

TABLE I

INTERNATIONAL TRADE: GERMAN FEDERAL REPUBLIC 1950-1965 (mill. DM)

1950	11374	8362	232	170	25	23	18		26	
1951	14726	14577	297	294	26	32	29	1	36	10
1952	16203	16909	325	399	31	36	35	6	40	4
1953	16010	18526	318	368	35	40	38	3	44	4
1954	19337	22035	380	433	43	49	47	9	53	9
1955	24472	25717	467	500	54	56	58	11	61	8
1956	27964	30961	538	593	60	65	64	6	70	9
1957	31697	35698	602	683	67	74	70	6	78	8
1958	31133	36998	584	694	72	78	75	5	81	3
1959	35823	41184	659	785	85	87	87	12	89	8
1960	42723	47946	771	865	100	100	100	13	100	11
1961	44363	50975	790	907	107	106	106	16	105	5
1962	49498	52975	869	930	123	110	119	13	107	2
1963	52277	58310	908	1013	131	122	126	7	117	10
1964	58839	64920	1010	1114	146	134	138	12	138	11
1965	70448	71651	1193	1214	169	145	159	21	136	8

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1950-1966.

COLUMN 1: TOTAL IMPORTS

2: TOTAL EXPORTS

3: PER CAPITA IMPORTS

4: PER CAPITA EXPORTS

5: IMPORT VOLUME INDEX 1960=100

6: EXPORT VOLUME INDEX 1960=100

7&8: PER CAPITA VOLUME INDEX OF IMPORTS
AND ANNUAL CHANGE

9&10: PER CAPITA VOLUME INDEX OF EXPORTS
AND ANNUAL CHANGE

TABLE 2
 MERCHANDISE TRADE AND THE BALANCE OF PAYMENTS
 GERMAN FEDERAL REPUBLIC 1958-1965(mill.DM)

I958	38134	30629	7505	48328	40490	7838	3598	4240
I959	42911	35159	6752	53549	46559	6990	3814	3176
I960	50385	41805	8580	62262	54820	7442	3960	3482
I961	53325	43558	9767	65241	58760	6481	3824	2657
I962	55464	49236	6228	68707	65677	3030	4336	-1306
I963	61103	51937	9166	75011	69080	5931	4289	1642
I964	68216	58562	9654	83549	78123	5426	4220	1206
I965	75455	70360	5095	91950	92345	-395	4152	4547

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1958-1966.

- COLUMN 1: MERCHANDISE EXPORTS
- 2: MERCHANDISE IMPORTS
- 3: BALANCE X-M
- 4: BALANCE OF PAYMENTS CREDITS
- 5: BALANCE OF PAYMENTS DEBITS
- 6: BALANCE X-M
- 7: PAYMENTS BY FOREIGN MILITARY
- 8: BALANCE OF PAYMENTS BALANCE - MILITARY COMPONENT

TABLE 3
INDEXES OF MAIN IMPORTS' AND EXPORTS' PRICES
(1958=100)

GERMAN FEDERAL REPUBLIC 1958-1965 (mill.DM)

IMPORTS

PRODUCTS	1958	1959	1960	1961	1962	1963	1964	1965
Textiles	100	98.6	105.6	104.6	101.0	107.7	112.0	108.9
Oil	100	91.1	87.6	78.8	76.7	75.7	72.4	69.1
Chemical Products	100	96.2	96.0	91.1	86.4	84.0	84.6	85.8
Mach'y	100	99.8	100.2	98.5	99.5	100.2	102.2	103.1
Refined & Prec. Metals	100	109.1	113.4	106.6	105.6	106.6	118.5	103.0
Ores	100	82.2	82.0	81.3	75.4	69.5	70.7	71.4
TOTAL	100	97.5	90.2	94.5	93.6	95.8	97.8	100.2

EXPORTS

PRODUCTS

Mach'y	100	100.3	103.2	107.0	108.8	112.9	116.1	121.1
Vehicles	100	98.8	98.2	98.6	99.5	99.5	99.8	101.3
Chemical Products	100	97.7	96.0	92.9	89.7	88.9	89.5	90.3
Elect'l Mach'y	100	100.4	101.3	102.9	103.5	103.7	105.2	107.5
Textiles	100	95.0	99.9	98.3	97.6	98.8	99.4	100.4
Coal&Coke	100	96.2	95.5	94.8	95.6	97.4	100.4	100.5
TOTAL	100	99.2	100.5	100.3	100.5	100.6	104.2	106.7

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1958-1966.

TABLE 4

MOST IMPORTANT EXPORTS AND IMPORTS
GERMAN FEDERAL REPUBLIC 1958-1965(mill.DM)

EXPORTS	1958	1959	1960	1961	1962	1963	1964	1965
Machinery	7560	7692	9065	10985	11778	12532	13779	15004
Vehicles	4838	5579	6327	6529	7098	8551	9742	10806
Chem.Products	4199	4936	5604	5887	6161	7033	8052	8895
Iron&IronProds.	5206	5807	4074	7555	4724	5152	5774	6455
Elect'l Mach'y	3183	3717	7386	4493	7349	7063	7742	8835
Textiles	1810	2072	2375	2427	2680	3179	3688	4057
Coal&Coke	1997	2036	2310	2253	2258	2424	2246	2079
Prof. Instrumts	1015	1125	1218	1299	1364	1699	1749	1815
TOTAL	6998	41184	47978	50978	52975	58310	64920	71651
<hr/>								
IMPORTS								
Textile	3597	3981	4970	4790	5428	5823	6449	7494
Oil	1965	2299	2885	3113	3829	4405	4951	5045
Iron&IronProds.	1191	2388	3030	2903	3209	3208	4118	4322
Fruit&Veg's	2270	2457	2650	2996	3502	3324	3624	4579
Refined Metals	1558	2076	2970	2766	2378	2413	3448	4409
Non-elt.Mach'y	1211	1516	2151	2740	3064	2981	3408	4357
Chem.Products	1579	1891	2448	2341	2506	2825	3457	4256
Ores	1709	1628	2344	2205	1830	1713	2226	2380
TOTAL	31133	36823	42723	44363	49498	52277	58839	70448

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1958-1966.

TABLE 5

ORIGIN OF MAIN IMPORTS, DESTINATION OF MAIN EXPORTS

GERMAN FEDERAL REPUBLIC 1958-1965 (mill. DM)

COUNTRY	1958	1959	1960	1961	1962	1963	1964	1965
IMPORTS								
U.S.A.	4193	4576	5974	6097	7033	7941	8066	9196
France	1595	2761	3998	4618	5270	5495	6270	7843
Netherlands	2500	3500	3638	3762	4196	4788	5350	6826
Italy	1698	2182	2631	3043	3745	3700	4468	6562
Belgium & Luxemburg EEC	1410 7193	1776 9843	2441 12708	2355 13778	2765 15966	3359 17343	4305 20393	5416 26647
U.K.	1351	1630	1956	1965	2351	2472	2782	3141
Sweden	1411	1533	1804	1930	2000	2014	2304	2472
Switzerland	1167	1432	1627	1612	1707	1722	1839	2226
EXPORTS								
France	2154	2970	4202	4777	5440	6432	7424	7792
Netherlands	2995	3465	4210	4755	4883	5718	6735	7391
Switzerland	2062	2408	2991	3620	3583	4142	4879	5741
U.S.A.	2642	3776	3723	3454	3858	4195	4785	5558
Italy	1853	2202	2847	3385	4106	5462	4592	4651
Belgium & Luxemburg Austria	2453 1847	2489 1960	2890 2444	3262 2686	3997 2757	4285 2938	4561 3295	4499 3798
EEC	9465	11126	14149	16129	18426	21897	23312	24333

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1958-1966.

TABLE 6

CAPITAL ACCOUNT: GERMAN FEDERALREPUBLIC 1958-1965

+ INDICATES NET INCREASE IN FOREIGN ASSETS

I958	5580	
I959	4044	
I960	6309	
I96I	3232	(mill.DM)
I962	-1317	
I963	355	
I964	2049	
I965	4003	

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1963-1966.

•

TABLE 7
INDEXES OF WHOLESALE PRICES (1958=100)

Year	Fr.	Ger.	Jap.	USA	Prodn Goods	Consn Goods	Bldg Mats Germany	Basic Mats	Texs
1955	81	97	99	93	96	99	96	97	99
1956	85	99	104	96	98	100	98	100	100
1957	90	100	107	99	100	100	100	101	105
1958	100	100	100	100	1000	100	100	100	100
1959	105	99	101	100	100	100	100	101	95
1960	107	100	102	100	100	100	101	101	100
1961	110	102	103	100	101	102	104	102	102
1962	113	103	101	100	102	104	107	101	102
1963	117	104	103	100	102	106	108	101	104
1964	119	104	103	100	104	106	111	103	106
1965	121	107	104	102	106	108	112	106	107
1966	123	109	108	105	108	111	113	108	108

Source: United Nations, Statistical Yearbook, 1965, 1966,
U.N. Monthly Bulletin of Statistics, October, 1967.

TABLE 8

INDEX OF GERMANY'S CONSUMER PRICES
(1958=100)

<u>Year</u>	<u>Index</u>
1955	94
1956	95
1957	98
1958	100
1959	101
1960	102
1961	105
1962	108
1963	111
1964	114
1965	118
<u>1966</u>	<u>122</u>

Source: United Nations, Statistical Yearbook, 1965, 1966.

U.N. Monthly Bulletin of Statistics, October, 1967.

TABLE 9
 INDEX OF AVERAGE WEEKLY GROSS PAY(1962=100)
 OF THE INDUSTRIAL WORK FORCE BY SECTORS

Year	Indy	Mining	RawMats& ProdnGds	I Gds	C Gds	Constn
1958	70.6	79.9	70.4	69.6	67.9	70.9
1959	74.4	81.2	74.5	70.3	72.1	15.1
1960	81.3	84.7	81.6	80.7	80.1	81.8
1961	89.7	92.0	90.6	88.4	89.9	88.9
1962	100.0	100.0	100.0	100.0	100.0	100.0
1963	107.5	106.9	107.0	106.0	109.0	109.5
1964	116.5	112.8	115.8	116.2	116.9	120.1
1965	127.9	126.3	126.4	127.2	128.3	131.5

TABLE 10
 INDEX OF AVERAGE MONTHLY GROSS PAY(1958=100)
 OF SALARIED WORKERS IN INDUSTRY AND TRADE

1958	100.0	100.0	100.0	100.0	100.0	100.0
1959	103.7	99.8	104.3	103.0	104.2	106.1
1960	111.3	104.1	112.9	119.6	112.5	113.9
1961	120.8	111.7	122.9	119.5	123.2	122.9
1962	130.9	120.7	132.1	129.3	134.0	140.1
1963	138.4	126.9	139.4	135.8	142.8	150.7
1964	146.6	133.5	147.7	143.3	151.7	164.1
1965	158.8	144.8	160.0	154.9	163.5	177.4

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1958-1966.

TABLE II

CHANGE IN LABOUR COSTS PER UNIT OF OUTPUT
OF SELECTED COUNTRIES

USA	0	0
Ger.	3%	5½%
Jap.	½%	5%
Can.	½%	1½%
Fr.	4%	1%
Italy	4%	3½%
GB	2%	5½%
	I958-64	I964-66

Source: Geschäftsberichte der Deutschen Bundesbank I963-66. Monatsberichte der Deutschen Bundesbank, I963-66.

TABLE I2

SELECTED INDICATORS

(BY COLUMNS)

INDEX OF CONTRACTUAL WAGES OF MALE AND FEMALE EMPLOYEES IN
 MANUFACTURING AND GOVERNMENT IN GERMANY (1962=100)
 EMPLOYMENT (IN MILLIONS)
 CAPACITY UTILIZATION IN INVESTMENT GOODS INDUSTRY
 CAPACITY UTILIZATION IN USER GOODS INDUSTRY
 CAPACITY UTILIZATION IN CONSUMPTION GOODS INDUSTRY
 CAPACITY UTILIZATION IN MANUFACTURING INDUSTRY

1958	75.7	18.2				
1959	78.5	18.5				
1960	84.1	20.3	90	90	91	89
1961	90.9	20.7	89	86	89	87
1962	100.0	21.1	88	89	89	88
1963	106.7	21.3	87	88	89	87
1964	111.3	21.6	88	91	90	89
1965	122.6	21.8	88	91	91	89
1966	131.5	21.9	83	88	87	84

Source: IFO-Institut für Wirtschaftsforschung, Die Wirtschafts-
 entwicklung der Bundesrepublik, 1964-65.

TABLE 13

PROPORTIONS OF SPENDING

Year	Govt Consumption	Investment	Private Consumption	1954=100 Index PC
1950	14.8	22.8	63.6	90.0
1951	14.8	23.0	60.3	98.0
1952	15.7	22.8	59.0	101.0
1953	14.9	21.4	59.9	99.0
1954	14.5	22.0	60.0	100.0
1955	13.6	26.3	58.3	102.0
1956	12.9	25.1	59.2	104.0
1957	12.8	24.3	58.7	107.0
1958	13.4	23.7	59.0	108.0
1959	13.6	24.9	58.2	110.0
1960	13.6	26.7	56.8	111.5
1961	14.7	26.6	56.9	114.6
1962	15.0	26.4	57.6	118.7
1963	15.7	25.8	57.2	121.4
1964	15.0	27.5	56.3	124.2
1965	15.6	27.7	56.9	128.1

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1955-66.

TABLE I4

INDEBTEDNESS OF THE PUBLIC SECTOR(mill.DM)

Year	Federal Govt	Länder Govts	Local Govts
1962	7285	3411	7440
1963	10251	3422	16800
1964	10910	4521	20310
1965	12069	7537	24900

Source: Geschäftsberichte der Deutschen Bundesbank, 1965.

TABLE 15

SELECTED INDICATORS

Year	Industrial Price Index 1962=100	Retail Price Index 1958=100	Labour Share of Income
1960	97.6	101	60.8
1961	99.9	103	62.5
1962	100.0	107	63.9
1963	100.5	109	64.5
1964	101.6	112	64.6
1965	104.0	115	66.0

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland 1958-66.

TABLE I6

INDEXES OF PRODUCTIVITY
PRODUCTION PER HOUR OF EMPLOYMENT
(1958=100)

Year	Mining	Raw Mats& Prodn Gds	I Gds	C Gds	Food	TOTAL
1960	119.0	122.3	114.7	118.0	107.1	116.6
1961	127.9	126.1	119.8	125.3	112.8	122.0
1962	138.5	135.6	124.1	135.1	118.5	129.3
1963	149.9	145.6	128.5	142.6	124.7	135.5
1964	159.3	162.2	137.2	153.5	132.6	147.8
1965	166.0	170.7	142.8	164.7	139.7	155.0

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1958-66.

TABLE I7

INDEX OF ACTUAL AND CONTRACTUAL EARNINGS
IN THE ECONOMY
(1960=100)

Year	CE	AE	Change in CE	Change in AE
1960	100.0	100.0	-	-
1961	108.5	111	8.5%	11.0%
1962	116.9	121	7.7%	9.0%
1963	122.9	128	5.2%	6.1%
1964	120.0	139	4.9%	8.9%
1965	137.7	152	6.7%	9.0%

Source: Geschäftsberichte der Deutschen Bundesbank, 1963-66.

TABLE 18

HOUSING DEFICIT INDEX
(1000 represents no deficit)

1960	681.9
1961	744.1
1962	809.9
1963	806.9
1964	773.4
1965	795.4

Source: Geschäftsberichte der Deutschen Bundesbank, 1963-66. Monatsberichte der Deutschen Bundesbank, 1963-66.

TABLE I9

DISCOUNT RATES OF THE GERMAN CENTRAL BANK

<u>Date</u>	<u>Rate(%)</u>
4.8.55	3½
8.3.56	4½
19.5.56	5½
6.9.56	5
11.1.57	4½
19.9.57	4
17.1.58	3½
27.6.58	3
10.1.59	2¾
4.9.59	3
23.10.59	4
3.6.60	5
11.11.60	4
20.1.61	3½
5.5.61	3
22.1.65	3½
13.8.65	4

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1955-66.

TABLE 20

DEVELOPMENT OF GROSS NATIONAL PRODUCT
CURRENT AND REAL
(bill.DM)

Year	GNP current	GNP constant 1954	% change
1955			12.0
1956	198.8	189.3	7.0
1957	216.3	200.2	5.8
1958	231.5	206.8	3.3
1959	250.9	221.0	6.9
1960	296.8	254.9	8.8
1961	326.2	268.6	5.4
1962	354.5	279.6	4.1
1963	377.6	289.3	3.5
1964	313.8	305.5	6.6
1965	449.6	323.2	4.8
1966	477.9	331.5	2.7
1967			-1.0

Source: IFO-Institut für Wirtschaftsforschung.
Die Zeit.

TABLE 2I

INDEX OF INDUSTRIAL PRODUCTION BY SECTORS
(1958=100)

Year	Mining	RawMats& ProdnGds	I Gds	C Gds	Constn
1956	99.2	94.4	91.5	93.1	96.6
1957	100.5	98.9	94.4	99.5	95.4
1958	100.0	100.0	100.0	100.0	100.0
1959	97.0	112.9	107.4	108.0	114.5
1960	99.6	129.5	125.0	118.9	117.4
1961	101.2	135.4	135.1	124.9	128.0
1962	103.7	148.1	141.3	136.0	141.3
1963	101.9	141.4	138.6	132.7	137.7
1964	105.3	168.4	153.9	156.1	158.9
1965	103.1	178.7	165.1	156.8	162.0

Source: Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1966.

TABLE 22

RELATIVE GROWTH EFFECTS 1954-1962

(in percent)

Sector	Nominal Growth	Real Growth	Price Factor
Mining & Raw Mats	77.5	55.1	74.5
Steel Industry	149.9	91.6	30.4
Machinery	167.1	112.6	25.6
Road & Aircraft Construction	108.6	105.6	1.4
Shipping	-31.9	-47.7	30.4
Electronics	161.6	148.8	5.2
Consumers Goods	99.1	66.0	19.9
Small Industry	123.4	44.1	55.0
Housing	186.8	88.3	52.3
Trade	172.1	113.9	27.2
TOTAL	158,8	92.2	34.5

Source: Input-Output Rechnung

TABLE 23

INVESTMENT AS A PERCENTAGE OF
THE CURRENT GNP

<u>Year</u>	<u>Percentages</u>
I960	24.1
I961	28.0
I962	25.6
I963	25.4
I964	26.5
I965	26.7
I966	26.4

Source: Die Zeit.

TABLE 24

GROSS INVESTMENT BY SECTORS

(bill.DM)

Sector	1960	1961	1962	1963	1964	1965	1966	1967*	1970*
Agric. & Forestry	4.91	5.58	5.68	5.61	6.62	7.80	8.20	7.20	7.80
Energy	3.25	3.68	4.34	4.75	5.36	6.00	6.40	5.80	5.80
INDUSTRY									
Mining	1.76	1.70	1.62	1.39	1.29	1.30	1.20	1.10	0.60
Raw Mats & Prodn Gds	6.53	7.29	7.83	7.88	8.12	9.50	9.80	8.90	11.50
I Goods	5.63	6.72	8.18	5.92	6.55	7.80	8.20	7.30	9.20
C Goods	2.49	2.62	2.82	2.69	2.99	3.80	4.00	3.60	3.40
Foodstuffs	1.57	1.77	1.95	2.07	2.26	2.30	2.40	2.10	2.00
Small Indy	2.21	2.64	3.10	3.00	4.90	5.70	6.10	5.40	6.40
Construction	2.46	2.95	3.61	3.83	4.44	4.50	4.30	3.88	5.90
Trade	5.30	5.49	6.53	6.40	7.40	8.20	8.90	7.90	10.30
Railroads	2.17	2.66	2.94	3.00	3.19	2.40	2.10	1.90	2.30
Shipping	0.88	0.99	0.83	1.03	0.98	1.10	1.20	1.10	0.90
Government	9.42	10.83	13.41	15.73	18.31	19.30	20.30	-	-
Housing	75.74	17.81	19.77	21.18	24.40	25.90	27.50	-	-
TOTAL	71.42	81.45	90.92	96.03	109.82	120.20	126.20	70.00	83.10

* estimated values

Source: D.Mertens, W.Kirner, Input-Output Rechnung: Investitionsverflechtung in der Bundesrepublik Deutschland 1950-70. DIW, Berlin.

TABLE 24A

INVESTMENT GROWTH
EXCLUSIVE OF HOUSING INFLUENCE

Sector	Growth Rate 1966-1970	Average
Agriculture & Forestry	8.5	2.1
Energy	8.2	2.0
INDUSTRY		
Mining	-45.4	-14.0
Raw Mats & Prodn Gds	29.8	6.7
I Goods	32.2	7.2
C Goods	-3.7	-0.9
Foodstuffs	-8.5	-2.2
Small Industry	19.2	4.5
Construction	53.5	11.4
Trade	30.1	6.8
Railroads	20.8	4.8
Government	-	-
Housing	-	-
TOTAL	18.8	4.4

Source: Input-Output Rechnung

TABLE 25
 SELECTED INDICATORS
 (BY COLUMNS)

GROSS CAPITAL INVESTMENTS IN INDUSTRY
 CAPACITY INCREASES IN MANUFACTURING INDUSTRY (in percent)
 INDEX OF ORDERS RECEIVED IN INDUSTRY (1954=100)
 INDEX OF TURNOVER IN INDUSTRY (1954=100)
 INDEX OF ORDERS IN INVESTMENT GOODS INDUSTRY (1954=100)
 INDEX OF ORDERS IN CONSUMPTION GOODS INDUSTRY (1954=100)

1955	9.3	10	137.2	133.6	149.5	124.0
1957	9.3	9	144.5	144.7	154.5	130.0
1958	11.9	10	145.8	147.6	155.4	129.9
1959	13.1	8	188.4	168.6	220.4	151.9
1960	16.4	11	204.3	189.1	264.5	150.7
1961	18.9	7	199.0	199.6	250.5	163.3
1962	19.8	8	208.7	215.4	250.9	172.4
1963	18.5	7	227.8	224.5	283.1	192.1
1964	19.9	9	247.6	246.2	311.3	195.5
1965	23.3	9	264.4	262.4	338.2	213.8
1966	23.3	7	253.3	264.1	322.8	193.8

Source: IFO-Institut für Wirtschaftsforschung.

TABLE 26

INVESTMENT AND THE CAPITAL COEFFICIENT

Investment	1958	1959	1960	1961	1962	1963
Gross Invt. in Industry	13526	14488	17974	20731	21397	19950
Gross Wealth in Industry	157225	166493	176660	189990	204160	217490
Capital Coefficients (K/O Ratios)						
Mining	2.79	2.95	2.92	2.92	2.95	2.95
Raw Mats & Prodn Gds	1.78	1.87	1.52	1.56	1.60	1.65
I Goods	1.00	1.01	0.96	0.99	1.07	1.16
C Goods	1.13	1.13	1.11	1.15	1.16	1.21
TOTAL	1.38	1.36	1.29	1.31	1.36	1.41

Source: Vierteljahreshefte zur Wirtschaftsforschung, 1965.

TABLE 27

GROSS INVESTED WEALTH OF GERMAN INDUSTRY
 PER EMPLOYEE BY SECTORS
 (mill.1958 DM)

Year	Mining	Raw Mats& Prodn Gds	I Goods	C Goods	TOTAL
1958	35933	34410	13029	11648	20329
1959	39406	35557	13837	12543	21442
1960	43559	35451	14186	13018	21861
1961	46541	36565	15049	13826	22847
1962	50388	39551	16403	14762	24482
1963	54202	42881	17782	15852	26317
1964	57565	45768	18679	17028	27931

Source: Vierteljahreshefte zur Wirtschaftsforschung, 1965.

TABLE 28
SAVINGS
(mill.DM)

Year	TOTAL	Tax Privd	Prem Privd	Savgs Banks	Cred Coops	Cred Banks	Postal System
1956	24276	2917	-	15606	3418	3782	1457
1957	29388	3785	-	18655	4140	4615	1822
1958	36102	4157	-	22882	5081	5698	2786
1959	44268	4045	558	27958	6267	7142	2783
1959*	45039	4051	565	28516	6306	7204	2793
1960	53114	3216	1408	33724	7554	8402	3274
1961	60424	158	2554	38525	8551	9313	3754
1962	69705	57	3972	44407	9843	10896	4204
1962*#	69874	56	3977	44407	10012	10896	4204
1963	81522	36	6026	51713	11925	12668	4701
1964	94212	-	7269	59713	14160	14681	5196
1965	110678	-	10396	69369	17080	17992	5709

* Saar added

*# Berlin added

Source: Geschäftsberichte der Deutschen Bundesbank, 1965.

TABLE 29

GROSS NEW TURNOVER OF STOCKS AND BONDS
DIVIDENDS AND RETURN
(mill.DM)

Year	Bonds		Stocks		Total NV	Div%	Ret%
	NV*	AV#	NV	AV			
1957	4204.5	4058.9	1631.7	1676.2	5836.2	7.43	4.15
1958	8127.1	7976.3	1339.5	1214.5	9266.6	8.64	4.64
1959	10048.1	9903.7	1383.0	1851.3	11431.1	9.28	3.29
1960	5372.3	5195.4	1904.5	2792.5	7276.8	10.63	2.91
1961	9620.8	9491.4	2192.4	3295.7	11813.2	11.79	1.96
1962	11944.5	11841.1	1506.7	2195.9	13451.2	13.17	2.49
1963	16584.5	16498.6	1015.7	1318.8	17600.2	13.65	3.44
1964	17802.4	17596.8	1608.4	2243.0	19410.8	13.44	3.16
1965	16221.9	15761.4	2445.9	3958.7	18867.8	13.24	3.08

* Nominal Value

Actual Value

Source: Wirtschaft und Statistik, 1958-1966.

TABLE 30

BANK CREDIT TO INDUSTRY
(mill.DM)

Year	Industry Short Term	Industry Long Term	Housing Long Term	TOTAL Long Term
1956	13706	9246	19557	42866
1957	13694	10222	22661	48805
1958	13781	11535	26276	58806
1959	13882	13672	31650	68211
1960	16354	14320	37076	77910
1961	19769	17202	43219	91737
1962	21065	20897	50554	108961

Source: Monatsberichte der Deutschen Bundesbank, 1963.

TABLE 3I

INVESTMENT IN HOUSING

(mill.DM)

Year	TOTAL	Public	Capital Collectors*
1956	10300	3600	4408
1957	10860	3800	4290
1958	11550	3900	4766
1959	13950	4200	6640
1960	13740	4600	2923
1961	17810	4110	9226
1962	19770	4890	10706
1963	21400	4810	11939
1964	24500	4900	13670
1965	26000	5000	14950

* Comprises mainly savings banks, mortgage banks and building funds.

Source: Deutsches Institut für Wirtschaftsforschung, "Die Finanzierung des Wohnungsbaus in der Bundesrepublik durch Kapitalsammelstellen im Jahre 1965." Vierteljahreshefte zur Wirtschaftsforschung, 1965.

TABLE 32

TAX PRIVILEGED DEPRECIATION RATES IN
VARIOUS COUNTRIES
(in percent)

Country	Write Off First Year	Write Off Five Years
Belgium	22.5	92.5
Canada	30	71.4
France	25	76.3
Germany	20	67.2
Italy	25	100
Japan	45.5	68.2
Netherlands	26.2	85.6
Sweden	30	100
UK	55	91

Source: R.Melder, Die Kapitalnachfrage der Privaten Wirtschaft.

BIBLIOGRAPHY

BOOKS

- Abel, Kurt, Exportförderungsmassnahmen konkurrierender Industrieländer. Schriftenreihe der Industrie- und Handelskammer, Frankfurt/Main, 1965.
- Behlke, Reinhard, Der Neoliberalismus und die Gestaltung der Wirtschaftsverfassung in der Bundesrepublik Deutschland. Berlin: Duncker und Humblot, 1961.
- Beyfuss, Jörg, Das Stabilitätsgesetz: Wende in der Konjunkturpolitik. Cologne: Deutscher Industrieverlag, 1960.
- Bethusy-Huc, Viola von, Das Sozialleistungssystem der Bundesrepublik Deutschland. Tübingen: Mohr, 1965.
- Blessing, Karl, Wachstum ohne Inflation. Vortragsreihe des Deutschen Industrieinstituts, Cologne: Deutscher Industrieverlag, 1966.
- Boarman, Patrick, Germany's Economic Dilemma: Inflation and the Balance of Payments. New Haven and London: Yale University Press, 1964.
- Böhm, Franz, Reden und Schriften, Karlsruhe: Müller, 1960.
- Wirtschaftsordnung und Staatsverfassung. Tübingen: Mohr, 1950.
- Busch, H. Steuerliche Entlastungen einzelner Wirtschaftsbereiche - ein Problem der sektoralen Finanzpolitik. Dissertation, Cologne, 1965.
- Carstens, R. Die Aufwertungsdebatte. Kieler Studien, Nr. 63, Tübingen: Mohr, 1963.
- Deutsches Institut für Wirtschaftsforschung, Strukturelle Vorteile des deutschen Exports begünstigten Expansion. Berlin: Duncker und Humblot, 1966.
- Ehrenberg, Herbert, Die Erhard Saga: Analyse einer Wirtschaftspolitik die keine war. Stuttgart: Seewald, 1965.
- Eick, J. Überbeschäftigung un jeden Preis? Vortragsreihe des Deutschen Industrieinstituts. Cologne: Deutscher Industrieverlag, 1967.

- Erhard, Ludwig. Prosperity Through Competition. London: Thames and Houston, 1958.
- Hucken, Walter. Grundsätze der Wirtschaftspolitik. Berlin: Rowohlt Verlag, 1961.
- Föhl, Carl. Kreislaufanalytische Untersuchung der Vermögensbildung in der Bundesrepublik Deutschland und der Beeinflussbarkeit ihrer Verteilung. Tübingen: Mohr, 1964.
- Gehrig, H. Ein Makroökonomisches Modell für die Bundesrepublik Deutschland. Munich : Schriftenreihe des IFO Instituts für Wirtschaftsforschung, 1963.
- Gross, Johannes, Die Deutschen. Frankfurt/Main: Scheffler, 1967.
- Harrod, R.F. Towards a Dynamic Economics. London: Macmillan and Co. Ltd. 1963.
- Haupt, S. Löhne und Preise. Heidelberg: Pfeffer, 1965.
- Hesse, Helmut. Strukturwandlungen im Aussenhandel der Bundesrepublik Deutschland. ed. Heinz König. Berlin: Duncker und Humblot, 1962.
- Hiss, Dieter. Kosten und Preise in der Bundesrepublik 1950 bis 1960. Deutsches Institut für Wirtschaftsforschung. Berlin: Duncker und Humblot, 1963.
- Höffner, J. ed. Jahrbuch des Instituts für Christliche Sozialwissenschaften. Münster: Verlag Regensburg, 1961.
- Stabilitätspolitik und öffentliche Investitionen. Vortragsreihe des Deutschen Industrieinstituts. Cologne: Deutscher Industrieverlag, 1966.
- Jürgensen, Harald. Stabilitätspolitik und öffentliche Investitionen. Vortragsreihe des Deutschen Industrieinstituts. Cologne: Deutscher Industrieverlag, 1966.
- Kirsch, G. Geplante Marktwirtschaft- eine Utopie. Cologne: Deutscher Industrieverlag, 1966.
- König, Heinz. ed. Wandlungen in der Wirtschaftsstruktur in der Bundesrepublik Deutschland. Berlin: Duncker und Humblot, 1962.
- Kulreshta, S.S. Economic Development of Modern Powers: U.S.S.R., Great Britain, U.S.A., Germany and Japan. Allahabad: Kibab Mahal, 1966.
- Kuznets, Simon. Modern Economic Growth: Rate, Structure and Spread. New Haven: Yale University Press, 1966.
- Lampert, Heinz. Die Wirtschafts- und Sozialordnung der Bundesrepublik Deutschland. Munich: Olzog, 1966.

- Langer, Wolfram. Sicherung der Geldwertstabilität; Eine Aufgabe der Konjunktur-, Struktur- und Wirtschaftspolitik. Kieler Vorträge. Hamburg: Hoffmann und Campe, 1966.
- Lilge, Hans. Deutschland von 1955 bis 1963. Hannover: Verlag für Literatur und Zeitgeschehen, 1965.
- Linßenmeier, Heinz. Möglichkeiten und Grenzen der Konjunkturbeeinflussung durch aktive Bankpolitik, dargestellt am Konjunkturverlauf in der Bundesrepublik Deutschland seit 1948. Dissertation. Stuttgart: Seewald, 1964.
- Maddison, Angus. Economic Growth in the West. New York: The Twentieth Century Fund, 1964.
- Melder, Ruprecht. Die Kapitalnachfrage der privaten Wirtschaft. Dissertation. Freiburg i. Br., 1964.
- Mertens, D. Die Wandlungen in der industriellen Branchenstruktur in der Bundesrepublik Deutschland 1950-1960. Deutsches Institut für Wirtschaftsforschung. Berlin: Duncker und Humblot, 1964.
- Mertens, D., Kirner, W. Input-Output Rechnung: Investitionsverflechtung in der Bundesrepublik Deutschland 1950-1970. Berlin: Duncker und Humblot, 1967.
- Müller, H. Die Exportförderung der Bundesrepublik Deutschland in kritischer Sicht. Dissertation. Marburg, 1961.
- Müller-Armack, Alfred. Das Grundprinzip der Sozialen Marktwirtschaft. Münster, 1950.
- Die konjunkturelle Lage, das Stabilitätsgesetz und die nächsten wirtschaftspolitischen Aufgaben. Bonn, 1966.
- Wirtschaftsordnung und Wirtschaftspolitik. Freiburg i. Br.; Rombach, 1966.
- Nipperdey, H.-C. Soziale Marktwirtschaft und Grundgesetz. Cologne: Heymanns, 1965.
- Ortlieb, Hans-Dieter. Das Ende des Wirtschaftswunders. Unsere Wirtschafts- und Gesellschaftsordnung in der Wandlung. Wiesbaden: Steiner Verlag, 1962.
- Ottel, Franz. Untergang oder Metamorphose der Sozialen Marktwirtschaft. Stuttgart: G. Fischer, 1963.
- Peterson, W.C. Income, Employment and Economic Growth. New York: Columbia University Press, 1962.
- Rasch, H. Die Finanzierung des Wirtschaftswunders: Der Weg in die Permanente Inflation. Stuttgart-Degerloch: Seewald, 1966.

- Reuss, Frederick. Fiscal Policy for Growth Without Inflation: The German Experiment. Baltimore: The John Hopkins Press, 1963.
- Röpke, Wilhelm, Ein Jahrzehnt Sozialer Marktwirtschaft in Deutschland und seine Lehren. Cologne-Marienburg: Verlag für Politik und Wirtschaft, 1958.
- Ist die deutsche Wirtschaftspolitik richtig? Analyse und Kritik. Stuttgart: Kohlhammer, 1950.
- Wirrnis und Wahrheit: Ausgewählte Aufsätze. Erlenbach-Zurich: Rentsch, 1962.
- Roskamp, Karl. Capital Formation in West Germany. Detroit: Wayne State University Press, 1965.
- Schiller, Karl. Preisstabilität durch globale Steuerung der Marktwirtschaft. Tübingen: Mohr, 1966.
- Schlembach, H. Die Industrie am Kapitalmarkt. Cologne: Deutscher Industrie-Verlag, 1967.
- Schneider, Ernst. Investitionen und Kapitalbildung in der Bundesrepublik Deutschland. Düsseldorf: Mitteilungen der List Gesellschaft, 1953.
- Schwane, Peter. Beschäftigungsstruktur und Wirtschaftswachstum in der Bundesrepublik Deutschland 1950-1963. Deutsches Institut für Wirtschaftsforschung. Berlin: Duncker und Humblot, 1965.
- Stolper, Gustav. Die deutsche Wirtschaft seit 1870 (fortgeführt von K. Häuser und K. Borchardt). Tübingen: Mohr, 1966.
- Sturmthal, Adolf. Der Einfluss der Lohnpolitik auf Produktivität und Preisniveau. Cologne: Bund Verlag, 1963.
- Workers Councils. Cambridge, Mass.: Harvard University Press, 1964.
- Vogt, Winfried. Makroökonomische Bestimmungsgründe des wirtschaftlichen Wachstums der Bundesrepublik Deutschland 1950-1964. Kieler Studien. Tübingen: Mohr, 1964.
- Wells, S.J. British Export Performance: A Comparative Study. Cambridge: Cambridge University Press, 1964.
- Zischka, Anton. War es ein Wunder? Zwei Jahrzehnte deutschen Wirtschaftsaufstiegs. Hamburg: Mosaik Verlag, 1966

ARTICLES

- Abs, Hermann. " The German Capital Market." The Banker, (October, 1966), 680-685.
- Albrecht, K. " Aktuelle Fragen der Kredit- und Finanzpolitik." Offene Welt, (October, 1965), 293-303.
- Arndt, K.-D: " Einkommens- und Vermögensbildung in der wachsenden Wirtschaft." Stabilität und Aufstieg. Hannover: Dietz Nachf., 1963.
- " Investitionsstruktur, Angebotspotential und Gesamtnachfrage." Strukturwandlungen einer wachsenden Wirtschaft. edited by Heinz König. Berlin: Duncker und Humblot, 1964.
- Audouard, Rolf. " Kehren die alten Handelsbilanzüberschüsse wieder?" Interview. Wirtschaftsdienst, (February, 1966), 69-75.
- Braun, Kurt. " West German Policies for Averting Unemployment." Lessons from Foreign Labour Market Policies. Washington: Government Printing Office, 1964.
- Brems, Hans J. " West German Problems, Price Discipline and Economic Integration." Quarterly Journal of Economics and Business, (Winter, 1964), 51-55.
- Christmann, A. " Wirtschaftswachstum und Lohnpolitik im Jahre 1967." Wirtschaftswissenschaftliche Mitteilungen, (April, 1967), 92-103.
- Dahlgrün, Rolf. " Die Problematik der haushaltswirtschaftlichen Unabhängigkeit von Bund und Ländern." Finanzwissenschaft und Finanzpolitik. edited by F. Schäfer. Tübingen: Mohr, 1964.
- Dörge, F.W. " Schleichende Inflation." Wirtschafts- und Sozialpolitik. edited by H.-D. Ortlieb and F.W. Dörge. Hamburg: C.W. Leske Verlag, 1964.
- " Das Problem der Geldwertstabilität." Offene Welt, (October, 1966), 297-318.
- The Economist. Intelligence Unit. " The German Lesson." October 15-21, 1966.
- Ehrenberg, Herbert. " Eine neue Wirtschaftspolitik der Bundesregierung." Gewerkschaftliche Monatshefte, (February, 1967), 101-104.
- " Neue Wege in der gewerkschaftlichen Einkommenspolitik." Frankfurter Hefte, (June, 1965), 774-779.
- " Stabilisierungsgesetz und soziale Marktwirtschaft." Gewerkschaftliche Monatshefte, (November, 1966).

- Etzel, F. " Soziale Marktwirtschaft nicht freie Wirtschaft und nicht Dirigismus." Monatsblätter für freiheitliche Wirtschaftspolitik, (May, 1966), 282-284.
- Eucken, Walter. " Deutschland vor und nach der Währungsreform." Vollbeschäftigung, Inflation und Planwirtschaft. Zurich: Schweizerisches Institut für Auslandsforschung, 1951.
- " Krisen und Autarkie." Autarkie. Berlin: Deutscher Bund für freie Wirtschaftspolitik e.V. , 1932.
- Firnkorn, Jürgen. " Grundgesetz und Soziale Marktwirtschaft." Wirtschaft und Wettbewerb, (July, 1966), 567-586.
- Francke, Adolf. " Die Preis- und Lohnentwicklung in der Bundesrepublik Deutschland seit 1960." Weltwirtschaftliches Archiv, 1965, 112-132.
- Giersch, H. " Wachstum, Inflation und Konzentration." Die Aussprache, May/June, 1965, pp. 203-210.
- Grunau, Joachim. " Lohnpolitik, Produktivität und Preisniveau." Ordo: Jahrbuch für die Ordnung von Gesellschaft und Wirtschaft, 1965, 111-139.
- Haller, Heinz. " Brauchen wir eine Finanzreform?" Stabilität und Aufstieg. Hannover: Dietz Nachf., 1963.
- Hahn, H. " Unterschiede der Entwicklung von Produktivität, Lohn- und Preisniveau in den einzelnen Wirtschaftsbereichen der Bundesrepublik Deutschland." Strukturwandlungen einer wachsenden Wirtschaft. edited by Heinz König. Berlin: Duncker und Humblot, 1964.
- Hamann, K., Habicht, U.H. " Zur Geschichte der deutschen Exportkreditversicherung Neue Perspektiven aus Wirtschaft und Recht. Berlin: Duncker und Humblot, 1966.
- Hampe, A. " Strukturwandlungen in der Wirtschaft." Strukturwandlungen einer wachsenden Wirtschaft. edited by Heinz König. Berlin: Duncker und Humblot, 1964.
- Häuser, Karl. " West Germany." Foreign Taxpolicies and Economic Growth. National Bureau of Economic Research. New York: Columbia University Press, 1966.
- " Das Inflationselement in den deutschen Exportüberschüssen." Weltwirtschaftliches Archiv, 1959, 243-267.
- Hautmann, B. " Erkenntnisse über die westdeutsche Investitionsfinanzierung seit der Währungsreform." Die Unternehmung, (January, 1966), 1-17.
- Helmstaedter, E. " Increasing Returns of the German Economy." Jahrbücher für Nationalökonomie und Statistik, (December, 1963), 473-500.

- Herder-Dornreich, P. " Marktwirtschaft und formierte Gesellschaft." Die Politische Meinung, (November,1966), 59-67.
- Hettlage, Karl. " Grundsatzfragen antizyklischer Finanzpolitik." Geldwert und Öffentliche Finanzen. Ludwigsburg: Aktionsgemeinschaft Soziale Marktwirtschaft, 1965.
- Jochimsen, R. " Wechselwirkungen zwischen Stabilität und Wandel der Gesellschaft als sozialökonomische Bildungsaufgabe." Offene Welt, (October,1966), 132-136.
- Jürgensen, Harald. " Preisstabilität im wirtschaftlichen Wachstum." Volkswirtschaftliche Korrespondenz der Adolf Weber Stiftung, (March,1966), 1-4.
- " Strukturelle Wandlungen der deutschen Wirtschaft." Universitas: Zeitschrift für Wissenschaft, Kunst und Literatur, (April,1965), 413-422.
- Kindleberger, Charles P. " Germany's Persistent Balance of Payments Disequilibrium." Europe and the Dollar. edited by R.E. Caves. Cambridge Mass.: Harvard University Press, 1966.
- Köhler, Claus. " Ist die deutsche Zahlungsbilanzpolitik angemessen?" Wirtschaftswissenschaftliche Mitteilungen, (May,1965), 114-118.
- Kohn, H. " Sektorale Strukturpolitik ist notwendig." Wirtschaftsdienst, (February,1967), 97-100.
- Knauer, W., Hermann, H.-G. " Die Wohnungsmiete." Wirtschafts- und Sozialpolitik. edited by H.-D. Ortlieb and F.W. Dörge. Hamburg: C.W. Leske Verlag, 1964.
- Krengel, Rolf. " Industrielle Perspektiven der nächsten fünf Jahre." Konjunkturpolitik, (January,1962), 50-61.
- " Produktionsvolumen und Produktionsfaktoren der Industrie im Gebiet der Bundesrepublik Deutschland." Vierteljahrshefte zur Wirtschaftsforschung, 1964, 1965, 1966.
- " Ursachen und Wirkungen der Strukturveränderungen des industriellen Anlagevermögens der Bundesrepublik." Strukturwandlungen einer wachsenden Wirtschaft. edited by Heinz König. Berlin: Duncker und Humblot, 1964.
- " Wachstumskomponenten der westdeutschen Industrie." Konjunkturpolitik, (January,1959), 8-24.
- Losacker, L. " Wirtschaftswahrheit: Wende in der Lohnpolitik." Die Politische Meinung, (July,1962), 41-45.
- Lutzke, H.H. " Woran krankt unsere Währungspolitik?" Die Aussprache, (February,1965), 38-45.

- Markus, J. " Some Observations on the West German Trade Surplus." Oxford Economic Papers, 1965, 136-146.
- Mesenberg, Heinz. " Schwerpunkte der Steuergesetzgebung 1961-1965." Steuer und Wirtschaft, (December, 1965), 673-688.
- Michalski, Klaus. " Die Aussenhandelssituation der Bundesrepublik Deutschland." Wirtschaftsdienst, (December, 1966), 203-209.
- Müller-Armack, Alfred. " Soziale Marktwirtschaft." Handwörterbuch der Sozialwissenschaften. Stuttgart: G. Fischer, 1953.
- " Wirtschaftspolitik in der Sozialen Marktwirtschaft." Der Christ und die Soziale Marktwirtschaft. edited by Patrick Boardman. Stuttgart: Kohlhammer, 1955.
- Münemann, Rudolf. " Probleme der Kooperation bei der Exportfinanzierung." Vorträge des 17. Deutschen Betriebswirtschaftler Tages 1964, 179-190.
- Oberhauser, Alois. " Zahlungsbilanzüberschüsse und Einkommensverteilung." Weltwirtschaftliches Archiv, 1963, 286-300.
- Ollenburg, G. " Konzentration und Aussenwirtschaft." Die Aussprache, (May, 1965), 143-149.
- Ortlieb, H.-D. " Ende einer alten oder Beginn einer neuen Ära der Wirtschaftspolitik." Wirtschaftsdienst, (December, 1966), 645-648.
- Posse, H. " Lehren des Aussenhandels." Monatsblätter für freiheitliche Wirtschaftspolitik, (April, 1966), 212-220.
- Radspieler, Antony, " Die Bedeutung der Kennedy Runde für Deutschland und den Welthandel." Überwindung der Wettbewerbsschwierigkeiten im europäischen Raume. Berlin: Deutsche Gesellschaft für Betriebswirtschaft, 1964.
- " The West German Economy." Current History, (May, 1966), 259-299.
- Riffel, Paul. " Betrachtungen zur Wettbewerbspolitik." Monatsblätter für freiheitliche Wirtschaftspolitik, (May, 1967), 275-278.
- Röpke, Wilhelm. " Belastungen der Marktwirtschaft: Im Abweichen von den Prinzipien liegt die Gefahr." Die Politische Meinung, (August, 1963), 17-29.
- Roskamp, Karl. " Factor Proportions and Foreign Trade: The Case of West Germany." Weltwirtschaftliches Archiv, 1965, 317-331.
- Rudloff, Hartmut. " Stabilisierungsprobleme einer wachsenden Wirtschaft, dargestellt am Beispiel der Bundesrepublik Deutschland." Die Mitarbeit, Zeitschrift für Gesellschafts- und Kulturpolitik, 1966, 511-522.

- Rüstow, Alexander. "Wirtschaftsethische Probleme der Sozialen Marktwirtschaft." Der Christ und die Soziale Marktwirtschaft. edited by Patrick Boarman. Stuttgart: Kohlhammer, 1955.
- "Eigentum für Alle." Wachsende Wirtschaft, Gesunde Finanzen, Stabile Mark. Bonn: Publikationen der SPD, 1964.
- Scherf, Heinz. "Zur Frage der Beziehungen der Löhne und Preise in der Bundesrepublik Deutschland 1951-1961." Weltwirtschaftliches Archiv, 1964, 44-78.
- Schlecht, Otto. "Von Blitzstart keine Rede." Die Zeit, August 11, 1967, p.1.
- Seuffert, W. "Einkommenspolitik, Konjunkturpolitik und öffentlicher Haushalt." Finanzwissenschaft und Finanzpolitik. edited by F. Schäfer. Tübingen: Mohr, 1964.
- Siebert, G. "Schwierige Preisstabilität." Offene Welt, (February, 1966), 131-143.
- Sohmen, Egon. "Competition and Growth. The Lesson of West Germany." with a comment by R. Opie. American Economic Review, 1959, 986-993.
- Stolze, Dieter. "Abschied von der Marktwirtschaft." Die Zeit, September 20, 1966, p.1.
- Teichmann, Arndt. "Die Wettbewerbsordnung der Bundesrepublik Deutschland." Deutsche Studien, (April, 1963), 413-430.
- Tröger, Heinrich. "Preisstabilität in der wachsenden Wirtschaft." Stabilität und Aufstieg. Hannover: Dietz Nachf., 1963.
- "Die Finanzreform, Grundzüge und Leitgedanken." Offene Welt, (November, 1966), 270-279.
- Vocke, W. "Adenauer und die Wirtschaft." Adenauer und die Folgen. Munich: Hans Joachim Netzer, 1965.
- Wemelsfelder, J. "The Short-term Effects of the Lowering of Import Duties in Germany." Economic Journal, (March, 1960), 94-104.
- Wirtschaftsdienst. "Soll und kann der Staat den Export fördern?" Interviews. (October, 1966), 527-531.
- Zeitler, G. "Bestimmungsfaktoren der Preis- und Produktivitätsstruktur." Strukturwandlungen einer wachsenden Wirtschaft. edited by Heinz König. Berlin: Duncker und Humblot, 1964.

OTHER

Bundeswirtschaftsministerium. Gutachten des wissenschaftlichen Beirats.
Wirtschaftspolitische Problematik der deutschen Exportüberschüsse.

Deutsche Bundesbank. Monatsberichte, 1959-1966.

Statistisches Jahrbuch für die Bundesrepublik Deutschland, 1950-1966.

U.N. Yearbook of National Accounts and Statistics, 1966.

BIOGRAPHY

BORN: Harmen A. Heyn
December 7, 1944
Geringswalde, Sa.
Germany

EDUCATION: Primary and Secondary
Education in Hannover
Germany and Windsor
Canada

1962 University of Windsor
Scholarship

1966 B.A.(Honours Economics
and Political Science)
University of Windsor

PROFESSION: Woodrow Wilson Fellowship
1967 Joined Department of
Trade and Commerce TCS
1968 Posted to New Zealand
1969 University of Innsbruck