

UNIVERSAL
LIBRARY

OU_152837

UNIVERSAL
LIBRARY



MACMILLAN AND CO., LIMITED
LONDON · BOMBAY · CALCUTTA · MADRAS
MELBOURNE

THE MACMILLAN COMPANY
NEW YORK · BOSTON · CHICAGO
DALLAS · ATLANTA · SAN FRANCISCO

THE MACMILLAN COMPANY
OF CANADA, LIMITED
TORONTO

A STUDY OF
THE CAPITAL MARKET
IN
POST-WAR BRITAIN

BY
A. T. K. GRANT

MACMILLAN AND CO., LIMITED
ST. MARTIN'S STREET, LONDON

1937

COPYRIGHT

**PRINTED IN GREAT BRITAIN
BY R. & R. CLARK, LIMITED, EDINBURGH**

PREFACE

THIS book is the outcome of work done during the tenure of a Leverhulme Research Fellowship, to which I was appointed in the summer of 1935.

The justification of the present book is simply that there does not exist, as far as I know, any adequate study of the British capital market later than that made by Lavington just after the War. Its scope perhaps requires more explanation. The limits of such a study are less easy to define than appears at first sight. Clearly the central part of it must be an account of the structure and working of the new issue market and of the other methods—none the less important because they are less obvious—by which enterprise obtains its finance. But the task does not end there. If we are to see the capital market in perspective, and to understand the significance of the changes that have come about, we must go a great deal further afield and show it in its context. It is always under the impact of change—changing expectations, changing conditions, changing monetary policy. Inevitably we are forced back on some examination of the forces governing economic policy, and of the way in which they have exerted their influence in the past and may continue to do so in the future. But one must go further still, for this involves not only economic history but also theory ; some attempt at least must be made to relate developments in the real world to the discussions of interest and the trade cycle in which economic literature has been so fruitful. For these reasons the present study covers more ground than might be thought necessary at first sight, and I am convinced that the attempt at least is worth the making.

I must express my indebtedness to the Leverhulme Trustees, for the Leverhulme Research Fellowship which provided the opportunity for undertaking this work. I have received constant encouragement and help from Professor N. F. Hall and Mr. Henry Clay, who not only urged me to the project but advised me during its progress and read large parts of the manuscript, though the responsibility for any opinions expressed and conclusions drawn is, of course, mine, and mine alone. Mr. A. W. Stonier read through the proofs, and helped me to throw light on several patches of darkness. Several friends have read portions of the draft, and I gained much from their comments. Others again have helped me with introductions, and in other ways. Last—and far from least—some of my material is derived from conversations and correspondence with business men directly or indirectly concerned with industrial financing ; to all those—many of them complete strangers—who answered my questions I owe sincere thanks, for without such collaboration one part at least of this study would hardly have been possible.

A. T. K. GRANT

UNIVERSITY OF LONDON,
UNIVERSITY COLLEGE.
April 1937.

CONTENTS

PART ONE—FINANCE AND ENTERPRISE

	PAGE
I: INTRODUCTION	3

1. *Scope of the Study*

A study of the post-War British investment system dealing in turn with (1) the general relationship between finance and enterprise; (2) the development of monetary policy; (3) the long-term capital market; and (4) present problems and future prospects.

2. *Character of the Relationship between Finance and Enterprise*

Several views are quoted on the reasons why a rise in money rates should affect enterprise adversely, and vice versa. Under a gold standard system, with a defined objective, a small rise may have a disproportionate effect because it is the inevitable precursor of a larger rise should the initial rise be ineffective. This cannot occur where the monetary objective is uncertain. Further examination of the problem is therefore called for.

3. *Factors to be Examined*

A satisfactory explanation of the effect of changes in money rates on economic activity must show where the originating impact takes place; how both borrowers and lenders are affected; how uncertainty influences anticipations; and how interest rates are to be defined in order to correspond with conditions in a real world.

II: ENTERPRISE, INTEREST AND BANKING POLICY	16

1. *The Structure of Indebtedness*

Present-day enterprise is characterized by a separation between management and financing, made possible by a complex and interdependent structure of assets and liabilities set off against each other with narrow margins. Investors seek to distribute their savings in such a way that they can realize assets without loss in the event of any future contingencies. Hence any change which appears to increase the magnitude of such possible contingencies will be reflected in a counterbalancing change in the way that new and existing savings are employed. An increase in uncertainty, or a stiffening of the terms on which emergency facilities can be obtained from the banking system, will favour invest-

ments of an easily realizable type. The converse also holds good when estimates of the future become more reassuring. Changes in investment preference of these kinds will tend to set up movements which spread throughout the economic system. Thus one person's increased liquidity is another's increased illiquidity, except in so far as counterbalancing factors take the strain.

2. *The Formulation of the Interest Problem*

To translate a realistic approach into terms of interest rates involves discarding the conception of a unitary rate of interest, since (a) there is no single rate of interest of such importance that it can be singled out to the neglect of others ; (b) interest rates do not move together in any uniform manner, flexibility varying and the changes in relative positions being of high significance. Further, any one rate is not the result of the supply and demand for one type of capital alone, but of the supply and demand for all types of capital.

3. *The Primary Effects of Bank Rate Changes*

The direct effects of a change in Bank rate are (1) a rise or fall in the banks' advance and deposit rates, and in certain others which by agreement follow Bank rate ; and (2) a hardening or weakening of bill rates. It remains to be explained how equilibrium is reached anew in the bill market at the changed level, so that the supply of bills and the funds available for carrying them are again related to each other. The theoretical possibilities are : (1) that the volume of transactions financed by bills is flexible, so that changes in rates are directly reflected in an increase or fall in the number of transactions being undertaken ; (2) that transactions financed by bills are financed otherwise after the change, and vice versa in the case of a fall in rates ; (3) that the volume of transactions is unaffected, but that the bill market is able to attract or repel funds from elsewhere.

4. *Bank Rate and Working Capital*

Other things being equal, a change in short-term rates is unlikely to affect the demand for working capital, which is in the main dependent on the rate at which consumers are taking up goods. The absolute volume of transactions is, therefore, unlikely to be affected by a change in short-term rates alone.

5. *The Replacement of Money Market Funds*

The conclusion is reached that, while to some extent transactions previously financed in the bill market may seek alternative finance on a rise in rates, the main strength of the bill market is its ability to attract funds from elsewhere to replace funds withdrawn. The converse also holds good. This strength is due to the safety and liquidity of the investments offered by the bill market.

6. *Relative Rates and Investors' Preferences*

Diversion of the flow of new savings from longer-term to shorter-term investments as a result of a rise in the short rate relative to the long will set in motion certain forces. The flow of capital for long-term purposes will thereby be reduced. While the established borrower will tend to maintain his share, the marginal borrower, on whose activity new economic development largely depends, will find his facilities reduced. Thus an induced change in the relationship between short and long interest rates strengthens or weakens the outward investment pressure on the economic system. While the banking system can control the short rate, it can do little directly to move the long since the price of long-term borrowing will tend to smooth itself out through time and to alter only with changed expectations. This tendency is reinforced by institutional factors, such as the anxiety of issuing houses to protect the price of new issues, which make for changes in the volume of capital placed rather than for changes in the terms on which it is offered.

III: ENTERPRISE, INTEREST AND ECONOMIC PROSPECTS . 37

1. *The Impact of Changing Prospects*

Changing economic anticipations tend to generalize themselves. Lenders faced with a belief in a coming slump will be less willing to take up speculative investments and more willing to take up safe investments. Liquidity and safety will be major considerations. Borrowers will be inclined to postpone new operations since they have greater difficulty in getting funds, even though they are convinced of the soundness of their projects. There will be an increased dispersion of interest rates: Short-term rates will fall to low levels; and gilt-edged rate will tend to fall; speculative borrowers will tend to be driven out of the market altogether. The converse happens at a time of improving expectations.

2. *The Concept of Risk Premium*

It is fallacious to separate up "Risk" and "Pure Interest". The mere existence of risk not only will increase the yield of risky investments but may simultaneously reduce the yield on riskless investments; hence any attempt to measure risk is meaningless. Further, the mere fact that increased risk rules out many borrowers who would receive accommodation in good times makes comparison of rates at different points of time misleading.

3. *The "Gibson Paradox"*

A. H. Gibson's observations on the close relationship between commodity prices and the yield on Consols are explained in terms of changing prospects and business fluctuations.

4. *Financial Policy and Economic Prospects*

The banking system is able, by forcing up short-term rates in relation to long, to attract savings away from long-term investments, and so to bring boom conditions to an end. It cannot, however, always prevent slump or restore economic activity quickly once it has fallen to a low level. This is due to the fact that while rates can be raised infinitely, they cannot for practical purposes be forced below zero, and savers may be satisfied with a zero yield if they are assured of capital protection.

5. *Finance and Enterprise: A Summary*

A summary of the salient features of the argument of Part One.

PART TWO—THE DEVELOPMENT OF MONETARY POLICY

IV: PHASES AND FACTORS IN MONETARY POLICY . 55

1. *The Course of Events since the War*

British economic history since 1919 must be treated as abnormal. During the period there are a number of outstanding landmarks: the boom of 1919 and 1920 and subsequent depression; the stabilization of 1925; the Stock Exchange boom of 1928 and 1929, together with its break; the fall of the pound in 1931 and the events which preceded it; the introduction of protection, the Ottawa Agreements and cheap money. While before 1932 the object of policy was to strengthen the position of the depressed export industries by bringing about improved world conditions, since that year the objective has been to stimulate industry directly within Great Britain, and to leave world conditions to take care of themselves.

2. *The Structure of Interest Rates, 1920–36*

Figures of various rates of interest are quoted. The outstanding feature of the steadiness of Consols from 1922–30 in spite of considerable changes in short-term rates. During the same period, the rate on new industrial debentures was tending to fall. Both major breaks—in 1920 and again in 1929—were preceded by periods when the three months' bill rate was above the yield on Consols, and lucrative short-term investment opportunities were exerting a powerful pull on new savings.

3. *Factors governing Monetary Policy*

Monetary policy since the War has been governed at various times by (1) the need for meeting the requirements of the national finances, largely dominated by impending debt maturities; (2) consideration of the external value of the pound; and (3) consideration of the state of economic activity at home.

V : THE INFLUENCE OF PUBLIC FINANCE ON MONETARY
POLICY 70

1. *Government Financing in Relation to General Monetary Policy*

The needs of the authorities could influence monetary policy on account of the desire (1) to borrow new money on easy terms to meet a deficit, as in 1919 ; (2) to keep down the cost of the national debt by maintaining bill rates as low as possible ; and (3) to promote conditions in which the Treasury could re-borrow on favourable terms in order to meet maturing obligations, or to convert outstanding obligations to lower rates.

2. *Ways and Means Advances from the Bank of England in 1919*

An examination of the way in which special steps were taken to dispose of an abnormal type of War borrowing. This was the starting point of post-War financial reconstruction, and explains certain aspects of policy in 1919.

3. *The Treasury Bill Position to April 1921*

An analysis of the Treasury Bill position after the War up to the point at which the sale of such bills by tender was restored in April 1921. This marked the second stage of post-War debt reconstruction.

4. *Debt Consolidation, 1920-26*

A summary of the way in which the Treasury dealt with the debt in the above years in such a way as to gain increased freedom of action.

5. *The Post-War Debt Consolidation and General Monetary Conditions*

The effect of the existence of a large floating debt five or six years after the close of the War had been to tend to drive out commercial bills. While the policy probably kept down debt charges, it gave the authorities an interest in keeping short-term money rates as low as possible. A substantial reduction in the floating debt—had it been possible—would not have exerted any deflationary influence.

6. *The Handling of the Debt, 1926-36*

The major changes in the debt position between 1926 and 1936 are : (1) the reduction in the short-term unfunded debt, and (2) the conversion of the 5 per cent War Loan in the summer of 1932. During 1929 the existence of a large floating debt may have been a factor in postponing a rise in Bank rate.

VI : THE INFLUENCE OF EXCHANGE CONSIDERATIONS ON
MONETARY POLICY 101

1. *The Stabilizing of the Pound*

An examination of the movements of the Sterling-Dollar exchange up to the middle of 1924 suggests that the exchange

value of the pound was not a primary determinant of policy. In 1924, however, steps were taken by which Bill rate in London was brought above the corresponding rate in New York. From that time onwards, early stabilization at the old parity appears to have been a primary objective. Stabilization was achieved in 1925 at the price of attracting a large volume of foreign short-term balances against which no adequate assets were held. This had serious results, as the post-War gold standard depended for its effective working on the existence of liquid international balances side by side with gold.

2. *The Post-War Gold Standard*

From 1925 to 1931, the Bank of England attempted to strengthen its position without at the same time putting an undue strain on economic conditions at home. The evidence suggests that there was no substantial deterioration in the position after 1927. The abandonment of the gold standard in 1931 was inevitable in the circumstances, as long as the authorities were not prepared to commandeer British holdings of foreign securities and sell or pledge them in support of the pound.

3. *Policy since September 1931*

The chief events since 1931 are the War Loan conversion and the setting up of an Exchange Equalization Account in order to control the exchanges, and to offset inward or outward movements of floating balances. At the moment Britain is in a strong position as compared with the previous period. Taking the post-War period as a whole, the capital market enjoyed a remarkable degree of freedom when the competing claims of Government finance and exchange considerations are taken into account.

PART THREE—THE LONG-TERM CAPITAL MARKET

VII: THE NATURE OF THE CAPITAL MARKET . . . 119

1. *Scope of the Market*

In its widest sense the capital market would cover short and medium term lending since such investment economizes the need for long-term borrowing. More usually the term is restricted to long-term investment alone. But long-term investment includes much more than Stock Exchanges and the new issue market.

2. *The Channels of Savings*

There are various channels through which savings reach

the business community—banks, savings banks, building societies, insurance companies, the direct purchase of securities, mortgages and other private direct investments, profits put back into business. These channels overlap considerably, and change in importance over periods of time.

3. *The Volume of New Investment*

Estimates of the national savings in any year vary considerably owing to the difficulty of estimating the provision necessary for keeping existing capital intact. The annual amount seeking new investment very much exceeds the net addition to the national wealth owing to the large volume of reinvestment which must be made.

4. *The Early Development of Enterprise*

The greater part of new enterprise is started up under the auspices of existing concerns. Entirely new enterprises starting on their own are dependent on the original capital being provided by private backers ready to take a chance. This is a highly speculative business, and it is essential that those providing finance should be in close touch with the working of the concern. For this reason the Stock Exchange is seldom the appropriate medium for providing capital for entirely new enterprise.

5. *Enterprise and the Stock Market*

The Stock Exchange is an institution for imparting marketability to securities. At the most, it should be providing money for expansion to enterprises with past records on which the public can judge. It is important that the enterprises whose securities are dealt in should have a sufficient record to enable buyers and sellers to make some valuation of the worth of the business without access to inside information.

6. *The Flow of New Marketable Securities*

The new issue market is a system by which going concerns are sold to the public or are developed with the aid of money from the public. An active new issue market implies a considerable volume of private investment at a much earlier stage. Marketability and access to the Stock Exchange are the rewards of successful growth.

VIII: THE NEW ISSUE MARKET SINCE THE WAR . 133

1. *New Issues: the General Course of Events*

Figures showing different types of new issues in each year, 1920–36. New issue activity coincides with rising or high prices for existing securities.

2. *The Post-War Boom and After*—1919–23

An account of the hectic activity of 1919 and 1920, and of the recession which followed.

3. *Post-War "Prosperity"*—1924–29

An account of the steady increase in the new issue market over the years in question, culminating in the new issue boom of 1928–29.

4. *Decline and Fall*—1929–31

An account of the market in the first two years of depression.

5. *Cheap Money*—1932–36

An account of developments following the low point touched in 1932, after which new issue activity revived rapidly, being mainly concerned with financing home industry.

IX: THE WORKING OF THE CAPITAL MARKET . . . 154

1. *Institutions of the New Issue Market*

Issuing agencies may be classified roughly under four heads: (1) old-established houses of the Baring and Rothschild type, originally responsible in the main for overseas issues, but now turning their attention towards home industry; (2) finance and investment houses which handle the bulk of the smaller home issues; (3) *ad hoc* syndicates of varying degrees of repute; and (4) stockbroking firms with powerful connections handling issues on their own.

2. *The Supply of Capital*

Money for the purchase of newly issued securities comes from three sources: individual members of the public, investment institutions, and ordinary business undertakings carrying part of their reserves in the form of security holdings. The bulk of Stock Exchange securities is held by members of the public, ownership being widely diffused among the well-to-do. The institutions are very important where new issues are concerned owing to the part they play in underwriting.

3. *The Demand for Capital*

An analysis of the purposes for which new money tends to be used.

4. *Methods of Flotation*

Some discussion of (1) prospectus issues taken up by public subscription; (2) issues through an Offer for Sale, and (3) private placing followed by Stock Exchange introduction. Dangers and advantages of the last method.

5. *Types of Security*

An analysis of the extent to which business obtains capital by the issue of debentures on the one hand, and of preference and of ordinary shares on the other. New issues of the latter type fluctuate very considerably according to the state of business ; the former remains relatively stable.

6. *The Price of New Capital*

An analysis (a) of the average price paid on new issues of industrial debentures and of preference shares from year to year ; and (b) the costs of floating new issues on the London capital market. Costs of flotation appear high in the case of the smaller issues.

X : THE IMPACT OF CHANGE ON INVESTMENT MACHINERY 170

1. *New Issues : Pre-War and Post-War*

Comparing post-War with pre-War conditions the major changes are : (1) a spectacular decline in lending overseas ; (2) the disappearance of overseas railway financing ; (3) the emergence of large-scale borrowings by home municipalities ; (4) the enormously increased importance of home enterprise ; and (5) the increased importance of financial intermediaries such as investment trusts.

2. *The Characteristics of Pre-War Investment*

Capital raised by new Stock Exchange issues before the War did not play a major part in developing home industry. A large part of home industrial development was financed locally and by private arrangement. Banks did practically nothing to provide long-term capital, in contrast to the position in some other countries.

3. *Characteristics of Post-War Investment*

Since the War the London capital market has been paying vastly increased attention to home industrial enterprises. The extravagances of 1928 were largely due to flotations of companies with inadequate profit records. There are reasons for believing that private investment in new industries may be on the decline, since more and more money is going through the Stock Exchanges. It is therefore important that consideration should be given to the provision of finance for untried ventures, and for ventures in the earlier stages of development.

XI : INVESTMENT INTERMEDIARIES 183

1. *The Significance of Investment Intermediaries*

Investment intermediaries, linking savers at one end of the chain and users of capital at the other, assist savers by enabling them to invest more wisely ; to go further afield ; to minimize idle balances ; and to spread risks over different types of enterprise. Users of capital benefit since they get

capital more easily and cheaply. Intermediaries include banks, insurance companies, investment trusts, building societies and similar institutions.

2. *The Banks and Home Industry*

Bankers insist that banks only lend for short periods, and that it is no part of a bank's function to provide long-term capital. In fact, the provision on short-term capital enables industry to economize in its use of long. Actually, advances made by banks could not be called in at short notice, and in any case there is much to be said for the banks adopting a more liberal attitude than they do at present since in the last few years they have been forced to buy Government Securities owing to the falling off in the demand for banking accommodation from home industry.

3. *Insurance Companies and Home Industry*

Insurance companies have invested funds totalling some £1500 million. Between one-quarter and one-third of their assets consist of investments in industry and commerce. Their holdings of industrial securities have been increasing since the War.

4. *Investment Trusts and Home Industry*

Investment trusts have security holdings of £350 million. Some 30 to 40 per cent of their assets are in ordinary shares. They bring together the conservative investor and the established business, but cannot do very much in the way of providing capital for new and untried enterprise. The same applies to the unit trusts which have proved so popular in recent years.

5. *The Security Holdings of Business Concerns*

Established business concerns have large holdings of Stock Exchange securities in which they invest funds which are not required in their own business.

6. *The Relative Importance of Investment Intermediaries*

The private holder of securities is far more important than the intermediaries as far as existing holdings go, but the intermediaries are growing in importance very rapidly. For the most part the intermediaries are of assistance only to established industry.

XII: THE FINANCING OF THE FRINGES OF ENTERPRISE . 201

1. *The Problem in its Setting*

Existing enterprises, however anxious they may be to expand, cannot alone satisfactorily fulfil the task of starting new developments. New enterprises are of great importance, and are dependent on securing finance privately. To some extent financial houses are paying greater attention to growing industries under the pressure of low returns in orthodox investment channels.

2. *The Demand for Industrial Banking*

The demand for some types of industrial banking has been often reiterated during the last thirty years.

3. *The Growth of New Enterprise in face of Risk and Uncertainty*

Some examples of the way that industries have started from small beginnings. Since the War industry would appear to be strongly affected by changes in public taste and choice. Profits would appear to be less evenly distributed. Strong financing is important, and risks should be widely spread.

4. *Recent Developments in Institutional Financing*

Recent developments show themselves in the activities of bodies such as the Bankers' Industrial Development Company, the Securities Management Trust, the United Dominions Trust, Credit for Industry, the Charterhouse Industrial Development Company and other finance houses paying attention to home industry, the extended activities of insurance companies, the growth of instalment financing, and certain developments being carried through under Government auspices for the benefit of the Depressed Areas. Nevertheless new businesses are still dependent for the most part on private backers.

5. *The Local Financing of Enterprise*

An examination of the contrasting prospects of new enterprises in different parts of the country.

XIII: INVESTMENT IN HOUSING AND AGRICULTURE . 232

1. *Urban Housing since the War*

Statistics of houses built since 1920. Since 1932 a boom in new housing has been the cause—or at least the accompaniment—of business revival.

2. *Housing Finance since 1928*

Figures estimating the amount spent on new houses built by private enterprise in Great Britain from 1928 onwards. Building societies are playing a much increased part, but other agencies—including the banks and private investors—are also important. The return on money to be obtained from lending to finance house purchase is higher relative to other investment opportunities than before the depression. The housing boom is in the main to be explained by the finance available as a result of investors being on the look-out for new investment opportunities. The "pool" system adopted by building societies is an illustration of the way in which new sources of demand for houses have been tapped.

3. *Building Societies: Some General Aspects*

Building societies are, paradoxically, lending money on self-liquidating but illiquid assets. While they are essentially solvent, there might be trouble if there were any considerable

demand for the repayment of funds borrowed from the general public. Special steps to provide supporting finance might be necessary should this occur.

4. *The Financing of Agriculture*

Agriculture in Great Britain is characterized by the fact that ownership of the land is largely separate from the working of the land. There would appear to be an unwillingness on the part of landlords to sink capital in improving the land, but facilities for securing long-term capital exist. Short-term finance presents difficulties because the farmer has no real assets which he can pledge. Attempts have been made to enable him to borrow more easily on the security of his crops and stock, but it cannot be said that the financing of agriculture is very satisfactory. The possibility of companies going in for organized farming is discussed.

PART FOUR—PRESENT PROBLEMS AND FUTURE PROSPECTS

XIV: ECONOMIC ACTIVITY AND THE CREDIT MACHINE . 259

1. *The Problem of Control*

The task of minimizing booms and slumps by monetary action is complicated by the fact that a cumulative process cannot be controlled accurately. While it is possible to bring an upward movement to an end by sufficiently drastic action, that very action may in turn precipitate a downward movement.

2. *The Problem in its Present Setting*

The present position is affected by the absence of an international standard; the semi-insulation of Britain in relation to the world at large; the banks' large holding of Government securities; the liquid condition of business; and Government expenditure on rearmament. In general the banks would appear to be less sensitive to action by the Bank, and industry to the banks. Any attempt to adopt a restrictive policy might result in the banks disposing of their security holdings.

3. *The Future of the Long-Term Rate of Interest*

During the last five years the Government securities taken up by banks, insurance companies and semi-official funds exceed £800 million. Not only is it impossible for this support for gilt-edged to increase at the same rate in the future, but the Government is likely to be a net borrower on account of rearmament. Some fall in gilt-edged is therefore highly probable, but it should not go very far as there are other potential purchasers who should be attracted to the market once a certain point is reached.

4. *Financial Policy and Fiscal Policy*

The danger of a boom is likely to be reduced through a careful spacing of public works and public housing demands. But further credit expansion would seem unwise ; it would be better to let the long-term rate move upward, and Government loans be placed without the aid of credit expansion. Steps may prove necessary to strengthen the control of the Bank over the banks.

XV : THE PRESENT POSITION OF NEW ENTERPRISE . 275

1. *The Need for Organized Financing*

The financing of home industry has been affected since the War by the fall in overseas investment ; the conservative character of new saving ; the broadening of the investment field to cover small existing businesses ; and the growth of capital economizing processes, illustrated by the instalment purchase of capital goods and the extension of trading estates. But new enterprise is still inadequately served.

2. *An Examination of some Criticisms*

Proposals for the setting up of institutions to finance new industries on a large-scale risk-spreading basis have been met with certain criticisms. These criticisms are examined, and it is suggested that most of them are either misconceived or apply even more strongly to the financing of new enterprise by private initiative.

3. *Methods of Approach*

An organization for financing new enterprise is needed. It is suggested that such an organization should work through the banks, although the bulk of its capital might be raised from the public. It would seek to spread its risks over a wide range of new enterprises and would provide expert technical and managerial assistance, as well as supplying capital.

XVI : ECONOMIC DEVELOPMENT AND SOCIAL PROGRESS . 291

1. *The Problems of Economic Development*

The capital market ultimately finds justification in the part it plays in facilitating economic progress. Economic progress implies (1) a rapid rate of material advance ; (2) an even rate of development ; (3) a more satisfactory distribution of income. The first of these objectives has been realized most satisfactorily, and therefore emphasis is thrown on the other two, and in particular on (2), which raises the question of the trade cycle.

2. *Some Recent Developments in Trade Cycle Theory*

An examination of views put forward by J. M. Keynes and R. F. Harrod. It is suggested that the phenomena discussed by them are not by themselves sufficient to explain the amplitude and characteristics of business fluctuations of the type with which we are familiar.

3. *The Amplitude of Business Fluctuation*

The reduction of the cyclical element in business fluctuations is less important than securing proper adjustment to long-term major changes. The former could be considerably reduced in dimension as a result of a thought-out Government expenditure and public works policy, coupled with a financial system which provided increased liquidity facilities in time of stress. British experience suggests that the major structural changes are the more important cause of hardship.

4. *The Effects of Coming Population Changes*

The present economic system in Great Britain is organized to meet the needs of a country with a rising population. But population has reached its maximum and is likely to begin to decrease. This must mean a large reduction in new investment, and this will call for a corresponding reduction in saving. But savings habits are unlikely to change, as a large fraction of saving is made for precautionary motives without reference to income possibilities. The State may have to intervene to provide a remedy.

5. *Economic Development and the State*

The State is being called in more and more to redress the balance in the social and economic system. This tendency is likely to gather force as investment opportunities diminish with the cessation of population growth. In a hypothetical future the capital market may become mainly a means of satisfying the demand for safe securities yielding little in the way of interest but easily realizable in case of need. Such a change would bring it more and more under the auspices of the State, which in its turn would have to take over the responsibility of financing new enterprise, in so far as private investors are inclined to forgo the responsibility of financing economic experiment and development at a time when its rewards are likely to be smaller and its risks at least as great as they are now.

PART ONE

FINANCE AND ENTERPRISE

I

INTRODUCTION

1. SCOPE OF THE STUDY

SINCE 1919 the British economy has undergone a variety of experiences calling for decisions of major importance. The problems change with bewildering rapidity : an economic structure devoted to the prosecution of war had to be replaced by one organized for the pursuit of material well-being ; an international monetary system had to be restored with earlier experience under very different conditions alone as a guide, and then maintained in face of disquieting symptoms of economic weakness ; finally an unprecedented depression had to be combated. Thus no sooner were the after-effects of the last war wearing themselves out, than nations suddenly found themselves faced with the task of maintaining standards of living amid the collapse of national and international economic systems, and an increasing fear of wars to come. In the background is a yet more incalculable problem, whose effects we have yet to experience, that of adjusting a system designed to minister to the needs of an expanding population to those of one which has ceased to expand and will soon be declining.

The object of the present study is to examine the financing of enterprise against this familiar, if variegated background. It is a study of the British investment system and of its working, using investment in a wide and neutral sense to cover the whole network of transactions by which savings are handed over at one end of the chain and used by productive undertakings at the other.

Inevitably it must be a study of a changing process, for the methods and conditions of 1920 are different from those of 1929, as those of 1929 are different from those of 1936.

The subject falls into three broad divisions. First, there is the task of defining the relationship between finance and enterprise in general terms. The sequence of events by which a policy of financial expansion or contraction affects the profitability of enterprise, and the numbers employed, must be filled in in sufficient detail to show at what point in the economic system a change first makes itself felt, and how it spreads with consequent effects on incomes and employment ; further, in view of the important part played by outside non-economic considerations, any realistic explanation must show the influence of changes in expectations on business operations. Only in terms such as these can the mechanics of the relationship be set out so as to throw light on the conditions of real life.

Such a discussion will pave the way for the second part of the study, which will be to give some account of the forces governing the development of financial policy in the years from 1919 to 1936. These forces are several ; monetary policy has been influenced at various times by a desire to facilitate government financing, to strengthen the country's position as a world financial force, or to encourage economic activity at home. These motives have acted and reacted in the most perplexing fashion, and some attempt will accordingly be made to disentangle the issues involved ; there will, however, be no attempt at exhaustive analysis as this study is primarily concerned with home enterprise, and only indirectly with the finances of Government or with Britain's position in the world economic system.

These discussions will lead to the third and dominating section of the study, which is an account of the institutions and methods of the capital market in the post-War period, and of the ways in which British industry obtains its finance. The term " capital market " must be interpreted

widely ; it comprises not only the market for negotiable securities, but also various ways in which business obtains long-term finance without recourse to a public issue. The field is large, diversified and ill-defined, and the position varies from industry to industry and area to area ; the problems of the untried enterprises are very different from those of the established concern ; the institutions which finance building are very different from those that finance agriculture. Yet a close and detailed examination of the actual machinery for the provision of capital is essential, as it is the vehicle through which forces affecting employment and real income make themselves felt.

Finally, in the concluding section the study will attempt to bring out the significance of the conclusions and possibilities which emerge, and to show their bearing on the position as it is now—" now " referring to the earlier months of 1937.

2. CHARACTER OF THE RELATIONSHIP BETWEEN FINANCE AND ENTERPRISE

It is an accepted axiom that a rise in money rates affects enterprise adversely, and that a fall in rates has a stimulating effect. But few attempts have been made to define the sequence of events exactly, and as a result it is not easy to assess the significance of this generalization in terms of the real word. An examination of the actions and reactions involved is a necessary preliminary to any study of the capital market.

Why should a rise in money rates affect enterprise ? This apparently simple question is in fact complex and deceptive. " A rise in money rates " cannot be considered by itself, without reference to the context. It is no isolated phenomenon, but something which will be carefully studied and interpreted by the business community in the light of the accompanying circumstances. A rise in money rates does not only mean an increased price for certain classes of accommodation, but will also be a pointer affect-

ing future expectations. For these reasons it may have very different effects, for example (i) under a rigid gold standard system ; (ii) under some alternative standard with known objectives ; (iii) in a system where the objectives and criteria of management are shrouded in uncertainty.

Most expositions of the working of Bank rate assume a rigid gold standard system.¹ It is, therefore, convenient to start with this assumption, subsequently analysing the results attained to see how far they will differ under the other two alternatives.

Under a rigid gold standard system changes in Bank rate were explained in terms of external conditions. A change in Bank rate was made necessary by changes in a country's balance of payments. If the country was paying out more than it was receiving, the exchanges fell until it was profitable to export gold ; gold exports were a signal to the Central Bank that action was needed ; the discount rate was raised and short-term rates stiffened in sympathy ; it became ultimately more profitable to keep money at home than to lend abroad, and more profitable for financial houses abroad to maintain balances in the centre with higher rates. In short, the first effect of a Bank rate increase was to bring about a shift in the flow of capital movements in favour of the country raising rates. Conversely, a favourable balance, gold influx, and lower rates led to a shift in the flow of capital movements away from the country lowering rates. In this way an equilibrium was preserved through changes induced in the flow of capital movements.

Such an explanation is satisfactory (under the conditions of stability implied by a rigid gold standard system) in so far as it goes, but it does not go very far. It deals only with the mechanics of indebtedness ; to use a simple analogy, it explains how a country manages its account,

¹ It should perhaps be pointed out that the pre-War gold standard was not the rigid and simple affair which it is often supposed to be. On this see R. S. Sayers, *Bank of England Operations, 1890-1914*, *passim*.

but not the manner in which income and expenditure are brought together again once they have got out of line. Therefore, in addition to changes in money rates acting as palliatives, more permanent results must follow if adjustment is to take place. It is held that such results do follow : on a rise in rates there will be a curtailment of purchasing power, and this, in due course, will affect activity and employment ; as wages and profits are reduced purchasing power falls off. In short, we have the implicit hypothesis of a relationship between interest and income : that a rise in rates will normally tend to reduce total incomes, and a fall to increase them.

We are not, of course, entitled to postulate any direct causal connection between interest and income. We must exhibit it, and cannot merely assume it. Therefore, one may turn to some explicit views of the relationship between interest and economic activity ; those of Montagu Norman, R. G. Hawtrey, and the Macmillan Committee.

The Governor of the Bank of England, in evidence before the Macmillan Committee :

Internally, how do you conceive it (a rise in Bank rate) operates ?—Well, I should think its internal effect was as a rule greatly exaggerated—that its actual ill effects were greatly exaggerated and that they are much more psychological than real.

Yes ?—Much more psychological than actual.

The same would apply to a reduction in the Bank rate—the benefit occurring from a reduction in the Bank rate ?—Yes. I do not mean to say that a large variation in the Bank rate, a difference of three points or whatever it may be, does not bring about a wider change than that, but I have always thought that in the process of change from one rate to another, the difference is much more largely psychological than it is actual.¹

R. G. Hawtrey, who sees the problem very clearly, gives a more specific answer throughout his writings. His argument, briefly summarized, is that a rise in short-term rates has a rapid direct effect on those who hold goods

¹ Evidence, Qs. 3328-3330.

with borrowed short-term money ; that on this account they will tend to increase or decrease their holdings of goods very rapidly ; and that in this way they will tend to start a cumulative process in the economic system. This argument is examined in some detail later ¹ and, therefore, will not be discussed further at this point. Its merit is that it does provide an adequate explanation if the facts on which it is based are correct, in that it does show a possible direct relationship between dearer money and economic activity ; it covers enterprise, and not only indebtedness.

Faced with the same problem, the Macmillan Committee is unwilling to put its faith in any one explanation.

We think it would be generally accepted, as a brief summary of the case, that a restriction of the volume of credit has to be associated with a higher market rate of interest than would rule if the volume of credit were greater, that an enhanced rate of interest operates in a variety of ways as a deterrent to new capital enterprise and the volume of current business, that the reduction of new enterprise has an all-round adverse effect on the level of profits, that the reduction of profits has an adverse repercussion on the volume of output, and so on.

This train of events is partly brought about in a direct and obvious way ; but partly also in a more obscure manner through its effect on the prices of long-term securities and on the ease and comfort of the new-issue market.²

Further on the Committee reverts to the same subject.

In normal conditions we see no reason to doubt the capacity of the banking system to influence the volume of active investment by increasing the volume and reducing the cost of bank credit. For in ordinary circumstances the new-issue market is responsive to the ease of bank credit, and the additional real investment which ensues on a brisker new-issue market serves to increase profits generally and hence to stimulate enterprise in various directions. The effect of cheap and abundant credit on the willingness and ability of dealers and others to carry increased stocks, and hence to increase their orders to the manufacturer, is also important. Indeed it

¹ See below, pp. 26-29.

² Paras. 226 and 227.

is more usual to emphasize the extreme ease of stimulating enterprise and investment in these ways, and hence the danger of inadvertent or excessive action, rather than the difficulty of providing by banking means a sufficient stimulus to produce a noticeable effect ; and this view is obviously the right one.¹

Later on still they revert to the effect of a fall in the long-term rate of interest, and point out that—

there are, as a rule, various types of fixed investment such as house building and the expansion of public utility undertakings which are fairly sensitive to changes in the long-term rate of interest. There are many schemes, for example, which are not worth while at 5 per cent, but become profitable, on the best estimates which can be made, if long-term funds are obtainable at 4 per cent. Or again, a fall from 6 per cent to $4\frac{1}{2}$ per cent in the rate of interest on loans against houses is nearly as good as a fall of 25 per cent in the cost of production, when it comes to calculating the minimum level of rent which will prove profitable ; and there is reason to think that the demand for house room is elastic.²

Thus the Macmillan Committee have pointed to a series of interesting and suggestive possibilities, though they have refrained from analysing them in detail.

We therefore have several apparently distinct strands of thought, or at least, strands of emphasis. Norman emphasizes “ psychological ” factors ; a rise in Bank rate is a danger signal to the business community which induces it to cut down its operations, but he does not explain what the basis of this fear is. Hawtrey maintains that changes in short-term rates directly affect the cost of carrying goods to such an extent that dealers will change their policy on that account. The Macmillan Committee lays weight on the long-term capital market, but without examining in detail the way in which it may be affected. In addition, it makes substantial concessions to Hawtrey’s point of view : the action of dealers in increasing or reducing stocks is “ also important ”.

What are we to make of such a mass of evidence which

¹ Para. 232.

² Para. 238.

—on the face of it—is inconsistent and even contradictory ? Yet the witnesses are of unimpeachable respectability ; the testimony itself has about it a stamp of reality—of truth, but not of the whole truth. We have a number of parts to the jig-saw puzzle, but no clue to show us how to fit them together.

The key to the difficulty, however, is to be found in Norman's evidence. The " ill effects " of a rise in Bank rate are " psychological ". What does this mean ? In one sense all business anticipations must be " psychological " since they are the result of personal decisions ; in another, " psychological " may be used for " irrational ". If the meaning is " irrational ", the explanation would imply that the effect of a rising Bank rate is to frighten people rather than to reduce their profits directly or indirectly. This is unsatisfactory as long as we can give no reason why people should be frightened ; on the other hand, if we can give a good reason why people should be frightened, the explanation ceases to be " psychological " in this sense.

Yet criticism on these lines does not destroy the position taken by Norman completely. His strength lies in the fact that he puts the responsibility on his critics of providing an alternative and better solution to the problem. If we are unable to produce such an alternative explanation, Norman's explanation still remains. He is by way of being a residuary legatee, unless we can produce a rational train of cause and effect to show why a rise in interest should bring about a diminution of income.

But in its context—that of a rigidly worked gold standard—" psychological " may be interpreted in a wider sense, and made the basis of a more convincing explanation. A rise of one per cent in Bank rate may be trifling from the point of view of increased cost of financing, but of supreme significance to the business community when they are certain that rates will go on rising till a given result is achieved. The rigid gold standard does provide certainty in this respect : that Bank rate will be put up

and maintained at a higher level until the balance of payments is in equilibrium and any fundamental price readjustments have taken place. For this reason there is a "psychological" effect; it is not the rise in Bank rate by itself, but the knowledge that the authorities are determined to achieve a given result come what may, that influences expectations to such a powerful degree. In short, under the gold standard, interest rate movements are intensified because of what they signify; they affect expectations in addition to any increase in the cost of financing, which taken by itself may be trifling.¹

Looked at from this angle, the suggestions made by Hawtrey and the Macmillan Committee gather a new significance. Business men are looking, not at the rise in rates, but at what may be beyond it, and with the gold standard they are assured that the policy will be carried through till a given result is achieved.

And the economic system is sensitive to any upward or downwards movement of activity.

When once an expansion or contraction of the consumers' income and outlay has begun at all, it tends to gather impetus with cumulative effect. Expanding demand encourages investment and contracting demand discourages it. The task of those who are responsible for regulating credit is that of *starting* the appropriate movement. They have to break a vicious circle. Once it is broken, they can leave the situation to develop without further interference. Therefore credit regulation depends not on the point in the credit system where the response is greatest, but on that where the response is promptest.²

Thus we are still left with the task of explaining where and how the impact of rising interest rates makes itself felt. But we do know that under the gold standard a small rise in interest rates may have a disproportionate effect on expectations, and to that extent the problem is simplified.

¹ The writer is indebted to Dr. P. N. Rosenstein-Rodan for illuminating discussions on this point.

² R. G. Hawtrey, *The Art of Central Banking*, pp. 383-384.

But what will be the position in the absence of the gold standard? Let us assume that there is some alternative standard in operation, and that the monetary authorities adhere rigidly to a policy which looks, for example, to the stabilization of employment or prices or some specifically defined index of economic activity. In this case the effect of a change in rates will depend on the clearness with which the objective is defined, and as the determination of the authorities to follow a given policy to the end. If the business community knows that the authorities are bound to follow a given policy, changes in Bank rate will again induce magnified changes in expectations. But if the policy is ambiguous or unfamiliar this may not be the case.

The last assumption to be taken is that of a monetary system working without any specifically defined objective. In this case the spontaneous reaction will be very different. Uncertainty is much increased—not only uncertainty covering policy, but also uncertainty covering future movements of prices and business activity. It is impossible to dogmatize about such a position: the one thing we can say is that a rise in Bank rate will not necessarily produce a *given* result. The result may be negligible; it may be overpowering in that the increase in uncertainty itself brings about a magnified effect.

But this—so far from being the end of the matter—is but the beginning. It has been shown that the intensity and the nature of the reaction to rising interest rates will vary with circumstances; it has not been shown how exactly that reaction comes about. We are back at the old question, how do changes in interest rates operate on internal economic conditions?

The economist tends to answer the question quite simply. Economic activity is largely dependent on the volume of real investment which is being undertaken at any period of time. If investment falls off, employment in the capital goods industries is reduced; if investment increases, employment expands. Therefore, the power of a change in the rate of interest is dependent on its ability

to increase or decrease the volume of investment being undertaken. A fall in the rate of interest means that investment opportunities which were previously unprofitable now become profitable. In the opposite case previously profitable opportunities are ruled out.

This explanation is perfectly satisfactory under certain simplifying assumptions. It assumes that a rise in Bank rate can be translated into a rise in "the rate of interest". It assumes also that investment opportunities can be measured accurately; that is, that even if there is no certainty, any uncertain risks can be assessed with certainty. For its limited purpose of illustrating underlying forces at work such an explanation is a useful one, but it must be completely re-translated and elaborated if it is to be adopted as an explanation of how monetary policy affects the real economic world in which uncertainty is the dominating feature, in which risks and opportunities cannot be measured with any approach to exactness, and in which—as will be suggested later—long-term rates of interest are largely independent of short.

3. FACTORS TO BE EXAMINED

The task of describing the influence of movements of interest rates on economic activity is thus a complex one. Any satisfactory answer must be both exact and comprehensive. We must know the circumstances in which effects are likely to be rapid or slow, and whether an upward movement of rates has more or less powerful effects than a downward movement. There is the question of the types of activity which first feel the force of change; whose employment and whose earnings will be the first to be affected? It must further be remembered that the economic system is as often as not in a state of flux; business is either improving or deteriorating, and seldom in a balanced condition; it is to situations such as these that any explanations must be related.

Further, any satisfactory explanation cannot stop short

at examining the behaviour of the man who is about to undertake new business operations. On the face of it such an approach may seem natural enough, but in fact it is inadequate. When we come to consider how business operations are undertaken, there are clearly a number of parties involved, and even if we take the simplest examples, it is difficult to reduce the number of parties to less than two : lender and borrower. The fact is that business is carried on with borrowed money. Any explanation which is to be satisfactory must take account not only of the behaviour of the borrower—that is he who actually carries out the enterprise—but also of the lender, or rather, of a series of borrowers and lenders. It is the lender who in the first instance has money to dispose of which he seeks to invest. He will have a number of alternative ways in which he can place his money among a number of borrowers offering to use it on varying terms and in projects of different degrees of attractiveness. Questions of risks involved, of the weight that has to be attached to the doubts surrounding all business operations whose outcome is hidden in the uncertainty of the future, of the prospects of success and of an adequate return, affect the lender quite as much as the borrower and may affect him differently. If we are to explain the influences exerted by changes in interest rates we must show the reaction of lenders to all these changes ; it is not enough to consider the behaviour of the borrowers alone.

And at the outset there is the approach to the whole question of interest rates to be cleared up. Are we entitled to speak of “ the rate of interest ” under the dynamic conditions of real life ? Or is the problem much more complicated, so that we must take account of a whole series of rates constantly changing their relationship to each other ? At an early stage in this discussion a definition of the structure of interest rates becomes essential. There are many rates of interest ; the fundamental problem is can we treat them as one ? And if so, is there one rate of interest which can be taken as a “ true ”

rate, or is there some method of averaging the various rates in order to give us a trustworthy picture of changes ?

Further, there is the question of the extent to which we are entitled to look on interest rates as flexible. It would be reasonable to expect that some rates would move much more freely than others, while other rates would be much less sensitive, but would see a greater diminution of business done at the fixed prices. Keynes has discussed the possibility of the existence of a "fringe of unsatisfied borrowers",¹ but he has failed to develop this theme since clearly different results may follow if the effect of change is to alter the price at which business is done or the volume of business done at a fixed price. Closely related is the question of the extent to which the various rates are interdependent. Preliminary matters of this sort must, at least, be set in the proper perspective before the phenomena of the real world can be explained satisfactorily.

¹ *Treatise on Money*, vol. ii, pp. 364-369.

II

ENTERPRISE, INTEREST AND BANKING POLICY

1. THE STRUCTURE OF INDEBTEDNESS

INCREASING separation between management and finance is characteristic of economic development. More and more business is being carried on with other people's money. This has been made possible only through the growth of a highly complex structure of indebtedness built up out of a mass of interdependent assets and liabilities by means of which risks are spread and balanced, and savings so transformed that loans of one type are—through a number of intermediate stages—ultimately making available capital on quite other terms.

Money changes hands on different terms for different periods and for different purposes. An individual is faced with a series of alternative ways in which he can employ that part of his income which he does not wish to consume. He may leave his savings to accumulate on deposit at his bank, or at some other financial institution. He may take up a life insurance, or buy Saving Certificates or Unit Trust Certificates, or choose from a wide selection of Stock Exchange securities of various kinds. These will range from long-term Government Bonds and first class debentures, through preference shares, down to ordinary shares of varying degrees of safety, bringing in varying returns. Nor is he bound to take a direct interest in industrial concerns himself; he can buy the securities of Investment Trusts and Finance Companies, and these will in effect be doing his investment for him.

Each of these many investment possibilities has ad-

vantages and disadvantages. Money on deposit with the bank, or used to purchase Savings Certificates, can always be withdrawn without loss at very short notice, but against this advantage must be set the fact that the rate of return is relatively low. Long-term Government securities or good industrial debentures bring in a rather larger income, but though it is reasonably certain that this income will continue, there is no guarantee that the securities can be realized without loss since their market value may have changed in the meantime. Finally, ordinary shares in general bring in the highest return, but they carry larger risks and the income will vary from period to period as such shares are the first to be affected by any change in the earning capacity of an undertaking. Thus here we have the advantage of a higher return and possibilities of capital appreciation, counterbalanced by greater risks¹ and a greater sensitiveness to any change in business conditions. Such bodies as Investment Trusts and Finance Companies provide another type of investment, making use of the technique of spreading risks over a wide range of enterprises in such a way that the investor finds profits and losses cancelling out and receives possibly a smaller but safer return.

The investor thus finds himself faced with a series of alternative possibilities, and his choice will be influenced by his judgment of the extent to which he is likely to have to realise the investment in the future, and of the extent to which he can see it locked up in return for a larger continuing income. In so far as he calculates rationally, his willingness to take risks will at any moment depend on his estimate of his own position ; he will weigh up in his mind how far he can *afford* to take these, and he will behave accordingly. He will apportion his savings

¹ The risks are twofold : on the one hand, the dividend may not be maintained ; on the other, even though the dividend is maintained, a rise in general rates of interest may make realization impossible without loss. Against this, however, must be set the chances of increased dividends, and of a fall in interest rates and increasing certainty making for a rise in capital value.

between the various possibilities so as to relate the returns he receives and the risks he runs to his estimates of his personal prospects.

Enterprises are in much the same position as individuals. An institution such as a bank finds itself very similarly placed. It must consider how far to hold cash, how far to make loans which can be called fairly quickly, how far to tie up money in ways which are safe in the long run, but which will not, in fact, permit of the loans being called in an emergency. The bank will make an estimate of what the maximum demands upon it are likely to be and, in the light of this, will distribute its funds between cash, call money, bills, advances and investments. This distribution will change with changed circumstances; if the bank expects the demand for cash on the part of the public to increase it will strengthen its cash and its loans at short notice, and will slow down the rate at which it adds to its less realizable assets. In the opposite case, when the demand for cash on the part of the public is likely to fall off, the bank will be more willing to add to advances and long-term investments. Like the individual, the bank will vary the direction in which it uses its assets with changes in its estimate of what the future demands upon it are likely to be.

And this applies generally throughout the economic system, and is not confined to private people and financial institutions. Every business undertaking is both borrower and lender. It borrows on one set of terms and lends on another. The ordinary business owes money to those from whom it buys its raw materials, and is owed money by those to whom it sells its output. The liabilities may be more or less pressing, the assets more or less realizable. Those in charge of the undertaking are concerned to see that they have a working margin between assets and liabilities, so that they can meet demands as they come due. Hence any change in expectations concerning the calls likely to be made upon the business will tend to be reflected in a corresponding adjustment of assets. Each

business will seek to preserve its liquidity.

Investment often involves a long chain of financing by which one man lends at a low rate of interest and with a high degree of safety to another who re-lends at a higher rate carrying added risk in return for this. The chain leads on towards the outer fringes of enterprise where concerns get capital, not because they can offer security but because they show tempting, if uncertain, prospects. This chain of financing thus runs through a series of links from people whose loans are heavily secured on the wealth of others to speculative investments secured merely on the chance of an enterprise proving a success. At each stage of the chain there is, as it were, a margin : the individual or institution who is at the same time borrowing and re-lending pledges a part of his own wealth in the operation.

All this lending and re-lending is closely bound together, and if at some of the earlier stages there is a marked slowing down in the rate at which new loans are being made, this contraction will tend to make itself felt throughout the whole network of obligations, and individuals in the more speculative parts of the system will be less willing to enter into new undertakings and may even try to reduce their old ones. One person's liquidity is another's illiquidity, and any attempt to call in assets will tend to increase the pressure on the debtors from whom the assets are called, since items which are assets to one undertaking may be liabilities to another. The attempt to secure liquidity may thus spread, and make for a process of financial contraction except in so far as other businesses are prepared to offset the tendency. Individuals and business undertakings of all kinds are alike subject to such forces.

In these circumstances, any cushion which enables an undertaking to strengthen its position suddenly should occasion arise, will enable it to work on a much narrower margin. The financial system provides a series of such cushions. The individual can buy securities with an easier conscience, and manage with a smaller (or even a negative)

balance at the bank, if he knows that at any time the bank will give him an overdraft. A business needs fewer liquid assets if it can always be sure of an advance from the bank. Banks in their turn are able to manage with a much smaller proportion of cash and easily realizable assets because they know that, should occasion arise, the Bank of England will be prepared to re-discount bills for the money market. In all these cases, the important factor is the ability to get cash, should given circumstances arise. Throughout the system, the volume of money in its narrowest sense and of idle cash balances is kept at a minimum, and this is possible because the system is so organized that extra balances and extra cash can be secured at short notice. As a result, the system is highly geared, and a small change in one part may make itself widely felt on account of the narrowness of the margins on which people work.

This, then, is the credit structure of the community. It consists of a mass of varying assets and liabilities, set off against each other with narrow margins. As new savings are made, new assets and liabilities spring into being. At the same time, liabilities are constantly maturing, and assets are being turned into cash. The whole is made workable by the ability of the system to obtain cash in emergency from financial institutions. And this credit structure is highly responsive to any change, whether it be induced by the banking system through alterations in the terms to which it is prepared to provide assistance, or whether it be the consequence of outside circumstances and general fears of increasing risks or enhanced hopes that things will go well.

2. THE FORMULATION OF THE INTEREST PROBLEM

The next step must be to relate the general description of the structure of indebtedness given to changes in the terms on which lending and borrowing take place. Quite

clearly, there is a very large number of rates of interest, from those at which a bill broker can borrow overnight from a bank to those on which the impecunious and improvident can get financed on the security of post-dated cheques or "on note of hand alone". But at the outset we come up against a question of method: are we entitled to speak of *the* rate of interest and to simplify the whole problem by adopting a unitary conception, or are we forced from the beginning to deal with a whole series of interest rates related to each other? Unitary conceptions of interest rates have played a large part in economic literature, and have proved useful in the examination of certain problems of theory under simplified conditions. But however helpful such conceptions may be under the simplified conditions of theory, they provide a treacherous approach to the problems of the real world.

A unitary conception of interest might be justified if either of two conditions were realized. In the first place, if one particular rate were much more important than the others, it might be possible to consider that rate alone, and ignore the rest. But it is impossible to plead this defence. As we have seen, the significant feature of the structure of indebtedness is the interrelationship of different forms of borrowing and lending; given this fact, one cannot single out one rate since it is meaningless out of its context. Nor is it theoretically justified. The rate on long-term gilt-edged securities, to take a specific example, is not determined by the demand for, and supply of, gilt-edged securities alone. It is the outcome of the demand for and supply of all securities generally, precisely in the same way as the price of any single good is not the result of demand and supply relating to that good alone, but of all demands and supplies. We are not even entitled to put much weight on a comparison between, for example, gilt-edged rates in 1926 and gilt-edged rates in 1936. The gilt-edged rate of 1926 is the result of demands and supplies for securities at one point of time; that of 1936

at another. There is no real basis on which we can compare the two.¹

The second justification of a unitary conception of interest might be that, though there were many rates, they all moved together and could, therefore, be treated as one. In fact, they do not move together : one of the characteristics of the interest rates structure is the way in which rates diverge under the influence of monetary policy or of changed business conditions. Some rates are flexible and respond quickly ; others are much less so. In the latter cases, the rate remains rigid, and the volume of business done at that rate is rationed either by borrowers or by lenders. Bank charges for advances, for example, though they vary to some extent, do not vary sufficiently to control demand for accommodation. If a bank thinks it has lent too much it does not raise rates to new borrowers till the volume of applications is reduced ; it simply refuses certain forms of business. In the same way, if the demand for advances is falling off, the bank may not reduce rates till demand increases once more, but may merely leave things unchanged and buy more investments or bills or whatever it may be. Similarly, issuing houses tend to stabilize the terms on which they offer new issues ; they space out their issues in order to protect the price of those they have made, and do not change the terms on which they do business in order to place the maximum number of issues at any given moment of time. In contrast, rates in the Bill Market are extremely sensitive.

One is inevitably forced to the conclusion that a unitary conception of interest does not provide a useful starting point to a study of interest rate changes in terms of the real world. In this respect, the conception of a

¹ Even the above statement, with its implication that the price of any one security is the outcome of present and anticipated demands for, and supplies of, all securities is an over-simplification. It is the outcome of demand and supply for goods and securities in general. On the relationship of monetary theory to the theory of general equilibrium see Rosenstein-Rodan, "The Co-ordination of the General Theories of Money and Price", in *Economica*, August 1936.

single rate of interest is very similar to that of a general level of prices. For a long time *the* price level was a fundamental on which most credit theories rested. But by now economists have gone a long way beyond such a conception, and, when they do use it, they do so with great care. Depression has taught us that what is interesting is not the average movement of a large number of prices, but the fact that various prices behave in an extremely different way. With an examination of relationship of particular prices to each other, the other conception of a general level of prices dissolves. For the same reason, an examination of the relationship of different interest rates to each other at once does away, for most purposes, with *the* rate of interest whether it be described as "real" or "natural" or "market" or anything else. Any satisfactory approach to the interest problem must start from the interdependence of various rates and from the significance of liquidity (that is, of the relationship of assets and liabilities in the light of future expectations) to individuals and to businesses alike.

3. THE PRIMARY EFFECTS OF BANK RATE CHANGES

The structure of interest rates, we have seen, is too complex to be treated as a whole in terms of a single rate of interest. The network of obligations and counter-obligations is such that any satisfactory explanation of the relationship between interest and the flow of income of the community has to be couched in terms which show the significance of liquidity, of the ability to meet without loss owing to forced contraction any financial calls which might possibly arise. The starting point of such an enquiry is clearly an examination of the effects of changes in Bank rate.

A rise or fall in the official rate of discount has certain direct effects on the terms on which money changes hands. Some rates of borrowing or lending are specifically tied to Bank rate : the most important are the rates at which

single rate of interest is very similar to that of a general level of prices. For a long time *the* price level was a fundamental on which most credit theories rested. But by now economists have gone a long way beyond such a conception, and, when they do use it, they do so with great care. Depression has taught us that what is interesting is not the average movement of a large number of prices, but the fact that various prices behave in an extremely different way. With an examination of relationship of particular prices to each other, the other conception of a general level of prices dissolves. For the same reason, an examination of the relationship of different interest rates to each other at once does away, for most purposes, with *the* rate of interest whether it be described as "real" or "natural" or "market" or anything else. Any satisfactory approach to the interest problem must start from the interdependence of various rates and from the significance of liquidity (that is, of the relationship of assets and liabilities in the light of future expectations) to individuals and to businesses alike.

3. THE PRIMARY EFFECTS OF BANK RATE CHANGES

The structure of interest rates, we have seen, is too complex to be treated as a whole in terms of a single rate of interest. The network of obligations and counter-obligations is such that any satisfactory explanation of the relationship between interest and the flow of income of the community has to be couched in terms which show the significance of liquidity, of the ability to meet without loss owing to forced contraction any financial calls which might possibly arise. The starting point of such an enquiry is clearly an examination of the effects of changes in Bank rate.

A rise or fall in the official rate of discount has certain direct effects on the terms on which money changes hands. Some rates of borrowing or lending are specifically tied to Bank rate : the most important are the rates at which

banks make advances to customers or received customers' balances on deposit, but there are others. Such rates will, for the most part, change automatically with Bank rate though existing loans may be subject to some exception, unlike new loans. One important qualification must be mentioned, however ; there is usually a minimum below which rates to borrowers will not fall, whatever may happen to Bank rate.

But in the second place, once movements of Bank rate are made effective, they have a direct effect on the money market and on the prices at which bills change hands. There is no prearranged basis for change in this case : the price arises out of market conditions—out of the supply of bills and of the finance available for carrying them—after the Central Bank has taken whatever steps it thinks fit to increase or decrease the volume of credit available.

These, then, are the immediate effects of Bank rate movements : certain rates change automatically, while others change in so far as the authorities see that their rate is made effective by buying or selling securities if necessary. There are no other direct effects beyond these, though these in their turn do give rise to a number of indirect effects which, it will be suggested, may be of the greatest importance. The significant fact is that any satisfactory attack on the wider problem of " How Bank rate works "—meaning by that how changes in credit conditions affect the working of the economic system—must take as a starting point the only direct effects which can indisputably be assigned to movements of Bank rate, and in particular with the more important of these, their effect on rates in the short-term money market.

The case to be considered first is that of the Central Bank on its own initiative ¹ deciding to raise Bank rate and to secure a higher rate of interest in the bill market. With the raising of the rate, the Central Bank sells

¹ *I.e.* it is assumed that the bank is raising rates as a matter of policy, and it is not finding it necessary to raise rates owing to market rates threatening to overtake the official rate of discount.

securities in the open market. Balances are transferred from the accounts of the purchasers of securities to the Central Bank, the cash reserves of the commercial banks are therefore depleted, and they have to set to work to increase their reserves at the Central Bank by disposing of their assets. They do this in the first instance by allowing bills to run off and not renewing them, and by reducing sums lent on call or short notice to the bill market. If this contraction is a vigorous one, the holders of bills may be so embarrassed as to have to resort to the Central Bank for an extra supply of cash, a process which involves them in loss. In time, however, the market will have paid off its indebtedness to the Bank, and a new equilibrium will have established itself by which the supply of bills is taken up—with rates ruling higher and without the market having to call on the assistance of the Bank.

How has this adjustment between the volume of bills and the money available for carrying them come about ? The possibilities are three.

First, it may be that the volume of transactions which could otherwise have been financed in the bill market is reduced absolutely : the rise in rates has rendered certain transactions unprofitable, or, though profitable, impossible owing to the sheer refusal of facilities. The assumption here is that the rise of short-term rates has a direct effect on the volume of economic activity.

Second, it may be that transactions previously financed through bills are now financed elsewhere and in other ways.

Third, it may be that the volume of transactions is unaffected, but new money is soon attracted from elsewhere to the bill market, thus enabling the market to dispense with assistance from the Bank.

Clearly these possible factors may be operating either singly or together, in varying degrees, and all require examination.

This examination will take as a basis the assumption of the closed system based—as in the argument so far—on a financial system of the British type. The importance

of the London discount market is (or was), it is true, largely international. This meant that a rise in rates in London would be followed by the increased use of financial facilities in centres abroad where rates had not risen, and by the growth in London of foreign-owned balances to be employed in the now more profitable discount market. But these complications are—at bottom—the same as those discussed above and their admission does not solve the problem, but only postpones it while formulating it with all the complications of an international system. The movement of funds in London, or of bills from it, does not touch the fundamental question of how adjustment takes place between the supply of bills and the finance available for carrying them, a question which can only be answered in terms of a closed system, whether it be the world as a whole or a hypothetical national system.

4. BANK RATE AND WORKING CAPITAL

First, then, is there evidence to suggest that the reduction of funds in the bill market, and the rise in rates, acts directly on economic activity by making people refrain from carrying on productive or commercial activities which they would have entered into had conditions in the short-term money markets been less stringent? At first glance, perhaps, there may be something to be said for this view. It might be argued that bills represent transactions which are self-contained and self-liquidating; as some transactions come to an end fewer take their place owing to a rise in rates, with the result that the volume of transactions is reduced. This argument depends on the assumption that the price of accommodation is a vital consideration which will make transactions of the type covered by bills profitable or unprofitable to a large degree.

R. G. Hawtrey would appear to be a strong adherent of this view:

A very great part of bank advances and especially of bills,

represents *commercial* borrowing, that is to say, its purpose is to enable traders to carry stocks of commodities in the interval between purchase and sale or between purchase and use. There are, of course, bank advances to finance goods actually in course of manufacture or in transit, and these advances cannot easily be contracted or expanded except as a *result* of decreased or increased activity. But the commodities reposing in stock in marketable form invariably account for a very large part of the credit facilities required in any highly developed community, and any trader's holding of these commodities can be varied within wide limits with very little inconvenience to him. This applies not only to the finished goods in the hands of retailers and wholesale dealers, but also to the materials and intermediate products awaiting use in the hands of manufacturers. All alike are in a position to delay their purchases whenever the charges for borrowing money are raised, or their bankers show in other ways a reluctance to lend. And, when the economic system is working normally, a reduction of charges and a relaxation of credit would meet with an immediate response in a hastening of purchases, and a consequent stimulus to productive activity.¹

And again:

In my opinion, the traders who hold stocks of finished goods with borrowed money are likely to be especially sensitive to the rate of interest, and their response is likely to play a decisive part in the *initiation* of an expansion or contraction of credit.²

But the argument remains unconvincing. Even though individual transactions are, in a technical sense, "self-liquidating", we are not entitled to assume that stocks of goods are likely—in a more Russian sense—to be liquidated quite irrespective of changes in demand only as a result of changes in the price of financial accommodation. And the change in the cost of financing is likely to be small.

Machlup has put the point very clearly :

The relatively small effect of the change in the costs of credit, invested in working capital, on the total cost of pro-

¹ *Trade Depression and the Way Out* (1933 edition), p. 131.

² *The Art of Central Banking*, p. 366.

duction is easily comprehended if you understand that we have there a fraction of a fraction of a fraction. The volume of working capital is only a ratio of the total annual prime costs, a ratio which depends on the rate of turnover ; naturally the *interest* on the working capital is only a percentage of that ; and finally a decrease in the rate of interest is only a fraction of the latter.¹

Even if we postulate a class of dealers² especially sensitive to the cost of carrying goods and working on a narrow margin, we are in a quandary : if their margin is so small that they are sensitive to relatively small changes in interest rates, they must be much more sensitive to any changes in demand whether they wish it or not ; consequently they are performing a speculative function, and, once this is admitted, prospects become a more important consideration than finance. It thus becomes impossible to argue that a small rise in the cost of short-term credit will *in itself* directly reduce the volume of transactions to any considerable extent, irrespective of demand and of anticipation. (Of course, a small rise may influence anticipations to a disproportionate extent—but that is another matter.)

¹ Fritz Machlup, "The Liquidity of Short-term Capital", in *Economica* (August 1932), pp. 279-280.

² Hawtrey gives examples in support of his thesis : Wholesale Grocery, Wholesale Drugs, Wholesale Dry Goods, Wholesale Automotive Equipment, but his figures (quoted from Professor M. T. Copeland's *Principles of Merchandising*) on pp. 368 and 369 of *The Art of Central Banking* do not carry much conviction. On page 368 he argues : "It seems obvious that dealers who are making a net profit of from $\frac{1}{4}$ to $1\frac{1}{4}$ per cent on their turnover, and whose interest charges amount to from $1\frac{1}{4}$ to $2\frac{1}{4}$ per cent of turnover, would be sensitive to any considerable movement in the rate of interest". But the effect will depend on the rate of turnover : with a stock turn of 4, a 2 per cent rise in interest rates means only a rise of $\frac{1}{2}$ per cent in interest charges on turnover ; with a stock turn of 8, a similar rise means only a rise of $\frac{1}{4}$ per cent in interest charges on turnover. The table on p. 369 similarly proves little beyond suggesting the inferences that wholesale grocery businesses pay between 8 and 10 per cent per annum for accommodation, and that businesses with a large turnover make larger profits than ones with a small turnover. In any case, compared with nineteenth-century conditions, stocks of goods and commodities are likely to play a proportionately smaller part owing to improved communications and business integration.

The fact is that much of the confusion arises out of the use of the word "liquidity" in several senses. How is a bill based on a definite sale of goods liquid? In the first place, it is liquid because under normal circumstances it can be disposed of readily and without capital loss. That is to say, first, there is security (the goods involved), second, there is marketability, and third, there is no danger of heavy capital depreciation through changes in interest rates since the transaction is a short-term one. But this would apply to any short-term collateral promissory note, provided there was a market in such notes. In what further sense is a commercial bill a liquid asset? The answer is that it is "self-liquidating"; if there is a falling off in commercial activity (for example, with business recession), cash will automatically tend to be released. And this applies to all working capital, and working capital alone.

The scope of commercial assets, in the "self-liquidating" sense, has been drawn sometimes more narrowly, sometimes more broadly. There seems, however, to be no valid reason why all credit extended to working capital purposes should not be included in this category, provided, of course, that no more "commercial" credit is used than can be liquidated in the course of a normal production period.¹

Now it is impossible to reverse cause and effect and to argue, because cash will be released when the demand for working capital falls off, that if cash is withdrawn the demand for working capital will fall off. In fact, there is no ground for expecting anything of the sort to happen. The one thing which is inflexible in the short run is the amount of working capital required by the community; this depends directly on the rate at which goods are being taken up by the final consumer in the case of consumption goods, and by the final owner in the case of new capital goods. Money can only be withdrawn from the bill market² on condition that somehow or other it is replaced

¹ Br. Suviranta, "The Shiftability Theory of Bank Liquidity," in *Economic Essays in Honour of Gustav Cassel*, p. 632.

² And sometimes even from the security markets. In 1929 rises in

or alternative facilities are available elsewhere. In the first instance, it may be replaced through the emergency facilities offered by the Central Bank, but in the longer run it must be replaced in other ways, since the market is never permanently in debt to the Bank.

5. THE REPLACEMENT OF MONEY MARKET FUNDS

Once one rejects the possibility that a rise in short-term rates may automatically reduce the demand for short-term capital, one is forced back to considering the remaining alternatives: that transactions previously financed through bills are now financed elsewhere and in other ways; and that money is attracted from elsewhere to compensate for the withdrawals of balances available for the holding of bills. The most obvious alternative method of securing finance would be by borrowing from the commercial banks, but there are reasons against believing that in the short run this alternative is likely to be a very important one, though, no doubt, it has some effect.¹ The cost of borrowing from the banks will have gone up automatically with the increase in Bank rate. For their part the banks are unlikely to be prepared to extend facilities in the way of advances at a time when they are reducing their holdings of bills.

On the other hand, firms doing business may use funds of their own to finance transactions instead of drawing bills—funds which they would otherwise have employed in other directions. In an extreme instance they may even reduce their holdings of securities; at any rate, they can refrain from buying new securities which they would

rates took a long time to be effective in withdrawing money from Wall Street because the volume of security transactions proved to be inflexible in face of a powerful demand for securities. How much more must this be the case when the demand is not a speculative one, but a genuine commercial one based ultimately on the consumer's demand for commodities.

¹ See, for example, the tendency of bank advances to increase in the months immediately after the down-turn of the business cycle, and to fall only subsequently.

otherwise have bought. Every firm has funds constantly coming in and reserves accumulating, and with the rise in rates it may be profitable to use them for financing the firm's own short-term transactions.

But this is only one particular case of a far more general situation. The problem, it may be recalled, is this : the volume of working capital cannot be varied easily ; the funds devoted to the provision of working capital are reduced through the action of the Central Bank itself ; nevertheless the supply of bills and the money for carrying them soon comes into equilibrium without assistance from the Central Bank being called for ; how does this come about ? The general answer must be surely that since the volume of working capital will not vary to any great extent, fresh funds must be attracted from alternative uses. And, in fact, it is only reasonable to expect this to be the case.

After all, the purchase of bills is a most satisfactory form of investment, and the only drawback is the low return which it usually offers in comparison to other available alternatives. A sudden increase in the rate of return, therefore, is likely immediately to arouse interest on the part of new prospective purchasers. At every moment institutions and individuals alike are in receipt of incomes, part of which must be saved and invested in one form or another. The way in which these savings will be employed will vary with the alternative openings available. If there is a demand for cash for the holding of bills, it will be profitable to invest—directly or indirectly—more money in bills. The stream of new savings will be deflected just sufficiently towards the bill market and away from long-term investments, for example. The bill market has the first call on investable funds in that by offering a higher return on bills it can attract newly accruing funds away from alternative employments. These alternative employments may be anything, from the purchase of new issues, the putting out of money on the mortgage market, the direct financing of industrial enterprise.

The case considered is that of a change in the quantity of available money induced by the Central Bank, but an explanation on similar lines will cover the case in which the Bank does nothing, while the demand for accommodation changes. For example, owing to rising prices the demands on the bill market increase. As a result, rates rise ; the rise in rates attracts new money to provide the necessary finance. In the converse case of a falling demand, falling rates will tend to drive money out of the bill market in search of more profitable employments.

6. RELATIVE RATES AND INVESTORS' PREFERENCES

The primary effect of a rise in Bank rate is, then, to raise the price of short-term lending ; its secondary effect is to make short-term lending more attractive relatively to other longer-term lending. Taking this as a basis, one can see the way towards building up an explanation of the effect of changes in interest rates on the economic structure.

With a rise in short-term rates, new money seeking investment will be diverted from longer-term to shorter-term forms of investment. A chain of restrictive influences will be set in motion. Speculative long-term investments will be relatively less attractive than before, and the flow of savings in that direction will be reduced. The established borrower will tend to maintain his share of the flow, but speculative propositions, which otherwise might have found finance, will be turned down. The volume of new issues will be reduced. Business may postpone expansion, and employ funds available for that purpose in short-term investment. The original development will be postponed or abandoned, now that the outward investment pressure which all the time is driving the economic system to devise new income-producing employments is relaxed. New capital is diverted in such a way that the liquidity of the system is increased at the expense of new enterprises which offer only speculative rewards.

And this affects employment. New jobs which would otherwise have come into being remain non-existent. This slowing down of the rate at which new employments are being created leads to a reduction of the community's income, and the fall in demand and the downward movement of prices postulated by economic theory are explained.

In the opposite case we have the downward movement of short-term rates, and an increase in outward investment pressure. The price of bills rises and the yield falls away; alternative openings will be sought in order to secure a more satisfactory return on the money invested; in time the excess liquidity is absorbed as people in search of a higher return tie their money up in less liquid ways. Ultimately this should result in a freer provision of funds for the use of new speculative enterprises, and so the volume of new income-producing employments coming into being is increased. As the pressure makes itself felt throughout the system and reaches the extremities (the territory of large risks and large returns), the volume of activity increases and so leads to a rise in the income and the expenditure of the community.

Nor do these developments necessarily involve any change in the volume of credit outstanding. The rate at which new income-producing employments are being created will affect the average velocity of circulation of the existing volume of credit; credit turns over more or less quickly. A man may leave his deposits in a bank account, or he may lend them to someone else who spends them on a factory, in which case they will reappear in someone else's bank account. The size of these deposits remains the same, but in the one case nothing has happened and in the other a set of new transactions has been financed by means of them.

The argument put forward, based on relative rates of interest, involves an assumption that, other things being equal, a rise or fall in short-term rates will not affect long-term rates. Why is this so? Why does a rise in one rate not immediately induce a parallel rise in other

rates ? For example, if a rise in bill rates ultimately involves a diversion of funds from long-term industrial uses, why does not the long-term rate immediately rise to neutralize the effect of the change in short-term rates ? With expectations unchanged, the long-term rate always tends to stabilize itself. It tends to smooth itself out through time because any anticipated permanent change would immediately make borrowers or lenders adjust their terms accordingly. If the long-term rate at the moment is 4 per cent and it is expected that in a year's time it will be 5 per cent, it would pay people to borrow permanently now in order to re-lend the proceeds in a year's time. Conversely, if the present rate is 4 per cent and in a year's time it is anticipated that it will be 3 per cent, it would pay borrowers either to postpone operations or else to borrow on short-term even at a comparatively high rate in order to fund their obligations at the low rate which is expected to come about in the future. Consequently, the long-term rate always tends to stabilize itself in contrast to the short-term rate which may go up and down at short intervals. (Buyers and sellers of bills are only concerned with what is going to happen, say, in the next three months, and do not have to think in terms of permanent investments.)

Institutional tendencies reinforce this stability of long-term rates. As we have seen, the new issue market will regulate the volume of business done in preference to changing the terms in which business is done. It will be unwilling to float new issues if past issues are undigested, and any attempt to hasten the pace involves capital loss to their clients. It must be remembered that those engaged in the underwriting business are themselves often large holders of securities, and they would be unwilling to see a fall in the capital value of their holdings even if they were compensated by increased underwriting profits.

Short-term rates are thus in the main under the control of monetary authorities, while long-term rates tend to stabilize themselves, and to move only under the influence

of changed business prospects.¹ The question of prospects has so far been ignored, up to the present the underlying assumption being that prospects remain unchanged. The effect of uncertainty and of changing prospects upon the interest rate structure and on economic activity will, therefore, be discussed in the next chapter, at the conclusion of which an attempt will be made to show banking policy and changing prospects in relation to each other.

So far we only have an explanation of the way in which changes in interest rates induced by the banking system will—other things being equal—tend to have an effect on the future volume of economic activity. This explanation, with its emphasis on the relative movements of interest rates, has the merit of dispensing with any argument—and such arguments are either clumsy, or fallacious, or both—that absolute movements in the long-term rate of interest are all-important because they directly expand or contract the field of profitable enterprise. Instead we have an alternative-use relative-price explanation of why the banking system may be able to exert some influence on the rate at which new income-producing employments are being developed. “Income-producing employments” is used deliberately in order to avoid any suggestion that the volume of economic activity is necessarily bound up with the demand for fixed capital, for bricks and mortar and machines. The savings of the future may well be invested in the working capital necessary for the development of service industries requiring little fixed capital of the familiar type.

Perhaps it is worth stressing that all we are concerned with for the moment is the initial response which may give birth to a cumulative process ; once there is a check and

¹ But movements of the short-term rate may themselves affect prospects and so influence the long-term rate indirectly to some extent. The banking system may also purchase long-term securities on a large scale, and thus move long-term rates, as it has done since 1932. But, nevertheless, it remains true that long-term rates are far less sensitive than short-term, and as long as this is the case banking action will have its main effects by changing the relative attractiveness of different types of investment, and so influencing the flow of new savings.

expansion has been turned into contraction, this contraction will tend to grow in force—and the converse holds good in the opposite circumstances. But it is the initial reaction which is admittedly so important, and which would appear capable of explanation in terms of the movements of relative interest rates, and consequently of the volume of capital available for employment at the fringes of enterprise in the creation of new income-producing employments.

III

ENTERPRISE, INTEREST AND ECONOMIC PROSPECTS

1. THE IMPACT OF CHANGING PROSPECTS

IN the real world economic activities take place under conditions of uncertainty. Those in charge of an enterprise have no means of telling what the future has in store ; the most they can do is to assess the possibilities in the light of past experience and present conditions, and use this as a basis for any judgments that may be called for. Some activities are more subject to uncertainty than others, but no activity is absolutely certain. There is no possibility of exact measurement, and no way of knowing within narrow limits what an enterprise is likely to earn. Under such conditions changes in the general outlook for business inevitably exert a powerful influence.

Economic prospects may be summed up in terms of the expected future earning power of an enterprise and of the degree of risk involved. Such estimates are always being revised, since they are affected both by new business experiences and by changing outside events. Further, as a result of the interrelated character of economic activity, prospects tend to generalize themselves. The position of any one particular industry does not, of course, depend entirely on what is happening elsewhere in the economic system ; at any moment of time some industries are declining while others are expanding. But to a considerable extent a pronounced decline in one industry carries other industries with it, and so tends to spread ; the impression is further heightened by the difficulty of distinguishing

accurately what is happening, so that, in the judgment of investors especially, anticipated changes for the better or the worse tend to colour the whole of the economic landscape instead of only a part of it. While to some extent the expert can distinguish more clearly, and think in terms of particular forms of activity, the bulk of the public tends to think broadly of an increase or decrease of risk, of more or less favourable prospects. And the attitude adopted has far-reaching effects on activity generally.

These may be shown most clearly by means of specific cases. What will be the effect of an increasing belief that economic depression is imminent ?

First, from the point of view of the lenders. Investors looking broadly at investment opportunities will be inclined to attach greater importance to any particular risks that they can see than they would have done before. They will be less willing to tie up money in speculative enterprises, and if they are to be persuaded to do so, they will expect a higher reward : at the same time they will be prepared to take a lower return than before if they can be assured of safety.

These tendencies may be reinforced as they pay regard to their own position. If they expect a period of depression, their incomes may fall and possibly demands upon them increase. It will therefore be important, as far as possible, to hold investments to a greater extent in an easily realizable form. The return on the investment is less important than the ability to turn it into ready money without loss. Thus from the point of view of investors, when economic prospects take a turn for the worse, liquidity and safety will be major considerations and the earning power of the investment of lesser significance.

Second, from the point of view of the borrowers. With the expected onset of depression, some borrowers may postpone new operations as they revise their estimates of the possible earning power of enterprises they hope to set in motion. Others do the same because they need money for their existing business, and want to keep assets in a

more liquid form ; they postpone developments for the time being, even though they may still be convinced that those developments will be worth while. Other borrowers, confident that their own projects will be profitable in spite of the change in the general situation, may be anxious to continue with them. Yet they may find that they can only get money at an excessive price, or that they cannot get it on any terms at all. With an increased demand for liquidity and safety on the part of lenders, many borrowers find it impossible to get the capital they want.

What will the effect of this be on interest rates ? First, increased sums will be put on deposit with the banks, even though the banks pay little for such deposits. The proportion of deposit accounts, as against current accounts, increases. This is a general tendency in depression ; and an illustration of the way in which people are seeking to maintain a high degree of liquidity. Second, there is an increased demand for short-term securities which are safe and easily realizable. As the rate is sensitive and the supply of such securities limited, the rate falls spectacularly. This applies not only to bills, but to other safe securities with a fairly close date of maturity. Third, long-term Government securities give a lower yield because of the increased demand for them now that safety is a prime consideration. But the yield does not fall as much as that on short-term securities because there is no guarantee that they can be realized without loss ; they may depreciate if interest rates rise. The same applies to other gilt-edged securities and to good industrial debentures. Fourth, the yield on existing ordinary shares goes up as their price falls. These will be the first to feel the effects of depression, and purchasers will, therefore, be the less willing to pay a good price for them. Lastly, new ordinary shares will be almost unsaleable. Risks appear so great to the investor that the market is unable to place such issues on terms which make it worth while for those interested to go forward with their enterprise.

In general, there is an increased dispersion of interest

rates. The prices of the different classes of securities have been adjusted to meet the changed demand, with its greater emphasis on safety and liquidity. The securities that are both safe and liquid are highest in price ; those that are safe but not liquid have also risen, but not so much. Those that can offer neither safety nor liquidity have fallen away in value, and many potential borrowers are unable to find accommodation on any terms at all.

The converse of this case is that of improving prospects. With improving prospects the bundle of interest rates draws together, as the gaps between the particular rates lessen. Short-term rates tend to rise, as the emphasis shifts from liquidity to income. The yield on ordinary shares gets lower, as ordinary shares go up in price. There is a demand for new ordinary shares, and activity in the new issue market increases by leaps and bounds. The case of improving prospects is the exact opposite of deteriorating prospects : in the one interest rates are coming closer together, in the other, moving farther apart.

Changing prospects affect directly the rate on gilt-edged securities. Purchasers of such securities are prepared to accept a lower income yield when the outlook is bleak because they are attracted by the certainty of the income, while with improving conditions they will expect a higher yield. " Cheap money " in depression is largely a consequence of depression itself, and " dear money " in a boom the result of expanding activity. But money is not necessarily " cheap " or " dear " to everyone. The business which cannot borrow during depression is not finding money cheap ; if it can borrow in a boom it is not necessarily finding it dear. A concern with middling prospects may even find that it can borrow on the most satisfactory terms midway between boom and slump. During the slump it may not be able to borrow at all ; during the boom it may find that the price of capital has been forced up owing to the growth in demand. The possibilities of borrowing change for different types of borrowers at different moments in the trade cycle.

2. THE CONCEPT OF RISK PREMIUM

The dispersion of interest rates in depression and their drawing together again with improving prospects is often discussed in terms of risk premia. "Interest rates have fallen, but the risk premium has risen" is a type of argument often used by financial writers in explaining the phenomena discussed above. While such a statement no doubt can sometimes serve a useful purpose, its looseness may give rise to dangerous inferences. It may, therefore, be wise to digress in order to examine some of the implications of the concept, risk premium.

The idea involved is that of separating up two elements, risk and interest. This idea is misleading because the two elements are not independent of each other; risk is of the essence of the problem. Increasing risk is not only enabling the investor to get a higher return on preference shares, for example, but, at the same time, is forcing him to accept a lower return on Consols. Remove risk, and not only will the yield on preference shares be less, but also the yield on Consols greater. It is this latter fact which the "risk premium" argument ignores; it assumes the yield on Consols as a yard-stick against which other yields can be measured, and overlooks the fact that a change in prospects will change the yard-stick itself. If we suddenly had complete certainty, there is no telling whatever where the rate of interest would be. Therefore, while it is reasonable enough to think in terms of relative risk as between two types of securities, it is quite misleading to think in terms of a measurable risk premium of an objective kind to be arrived at by taking the gilt-edged rate as a starting point.

Nor is this the only objection. With increasing risk, the risk premium becomes cumulative. One cannot compensate a substantially increased chance of loss by a higher charge once a certain point is reached, and this limiting point is reached very soon. The greater the charge, the

more the risk of default increases, and the lower the charge the less the risk of default, since the debtor will find it easier to pay the reduced amount. Hence there is little opportunity for counteracting unfavourable circumstances by charging more for new loans of a speculative character. Quite simply, such loans become not worth making at any price ; all that happens is that the marginal borrower finds that he can no longer borrow.

Since this is the position, it is impossible to draw confident conclusions from comparing any kind of average risk premium at two different points of time. The average may be lower at the latter point as compared with the former, but this does not necessarily mean that anticipated risks are lower. On the contrary, it may be the result of risks appearing so great that all but the best borrowers have been ruled out.

It may be added that this is only one particular case showing the impossibility of comparing effectively interest rates at two different points of time in terms of a unitary concept of interest.

3. THE "GIBSON PARADOX"

A. H. Gibson is responsible for drawing attention to the extraordinarily close connection between movements in the yield of Consols and in the level of wholesale prices. "One of the most completely established empirical facts within the whole field of quantitative economics . . . it is very unlikely indeed that it can be fortuitous, and it ought, therefore, to be susceptible of some explanation of a general character." ¹

Keynes summarizes Gibson's evidence as follows :

Prices and Interest fell together from 1820 to 1850, rose together from 1851 to 1856, fell together in 1857-58, rose together from 1858 to 1864, fell together from 1866 to 1869, fell together from 1873 to 1896, rose together from 1896 to 1900, fell together from 1901 to 1903, rose together from 1905

¹ J. M. Keynes, *Treatise on Money*, vol. ii. p. 198.

to 1907, fell together in 1907-8, rose together from 1908 to 1914 and 1914 to 1920, and fell together from 1920 to 1923. And over and above these general trends, a number of the minor oscillations of the two are in the same direction.¹

Gibson is responsible for what is probably the most remarkable economic prophecy of the post-War period. In 1921 he argued that within a comparatively short period of time wholesale prices would be back to the pre-War level, and the yield on Consols would be down to £3 : 5s., this figure being reached "within a period of ten to fifteen years". Those who are interested in the arguments will find them set down at some length in *British Finance During and After the War*.²

Gibson starts with assumption that if he can discover the future course of commodity prices he will be able to tell what the yield on Consols will be.

Summing up, the reasons for thinking that commodity prices in the course of a few years will not be materially higher than the pre-war level (in the absence of any further great war, grave and prolonged social disturbances, or a series of bad harvests) are as follows :

(1) The almost complete reversal or liquidation of the operating causes for the rise during August 1914-April 1920, except the increased wages and increased taxation. Both wages and taxation will, however, fall in the course of time, though not to pre-war levels ; but the increase remaining will probably be compensated for by improved methods of production, and greater output per man, per hour.

(2) The fructification of the large amount of capital that was attracted to food and raw material producing countries during the seven years 1907-13, the influence of which was largely suspended or nullified during the recent war by the indirect effects of hostilities.

(3) The lesson of economic history. The rapid fall in prices to a normal level soon after the termination of the Napoleonic Wars.

¹ *Ibid.*, p. 201.

² *British Finance During and After the War, 1914-21, being the result of Investigations and Material collected by a Committee of Section F of the British Association.* Co-ordinated and brought up to date for the Committee by A. H. Gibson, edited by A. W. Kirkaldy (Pitman, 1921).

(4) The gradual deflation of credit and currency, part of which will be effected automatically as prices fall, and part later by the action of the Government and the banks.

It is an interesting question whether the average level of prices may not, in the course of time, say, at the end of ten years, even fall below the immediate pre-war level. Any such probability is obviously closely connected with the future production of gold, the restoration of gold currency (or gold backing of paper issues), and the attitude of banks in the matter of again making this metal the main constituent of their cash reserves.¹

Though the reasons which Gibson gave are of very varying impressiveness, there is no disputing that he has proved right. With the fall in wholesale prices, the prophecy of a £3 : 5s. yield on Consols in ten or fifteen years' time has also come true.

Gibson's own explanation of the relation between prices and interest is that the cost of living determines interest. (He does not use the Ministry of Labour Index as a basis for any of his calculations because he thinks it too crude.) In fact, this explanation would seem to be too simple to be acceptable. The phenomenon can be explained in terms of the trade cycle. Wholesale prices have proved a sensitive index of boom or slump. During boom, gilt-edged rates are up because the investing public is prepared to take risks and to sacrifice safety to income. During depression, when commodity prices are low, the investing public demands safety and is willing to relinquish income, so that the demand for gilt-edged securities increases and their yield is low. The prices of Government bonds, like those of commodities, reflect business fluctuations. Gibson's observations are an illustration of the effect of changing prospects on interest rates discussed above.

4. FINANCIAL POLICY AND ECONOMIC PROSPECTS

Investors, it will be remembered, are faced with alternatives: they can either seek to maximize income,

¹ *British Finance During and After the War*, pp. 297-298.

or they can aim at preserving liquidity in order to be able to realize their investments as easily as possible without sustaining capital loss. Those who wish to maximize income have to carry the larger chance of loss since they are faced not only with danger of default but also of the security depreciating. Conversely, those who aim at having their capital in an easily available form have to sacrifice possibilities of income. In short, the investor prepared to take risks and to see his income vary more from year to year tends to receive a larger and more uncertain return than his fellow who aims at liquidity and safety.

The choice offered to investors will be affected by two sets of forces : on the one hand, changes in economic prospects, and on the other, changes in interest rates induced by the banking system. It is now necessary to show how these two are related to each other, and affect investment possibilities.

As we have seen, the banking system has a high degree of control over short-term rates of interest. A rise in these rates induced by the banking system will increase the possibility of income in combination with a high degree of liquidity, and will attract capital to short-term as against more speculative long-term uses. It will thus tend to hold back the process of change by which new business undertakings are brought into being, to follow up as yet undeveloped economic possibilities. In the opposite case, an induced fall of short-term rates will drive capital in search of income into longer term uses, and so increase the supply of finance available for new undertakings.

But the banking system as such has no real control over long-term rates. It is impossible to trace a direct causal connection between Bank rate and Stock Exchange values ; any effects are indirect (though this is not to deny that the purchase on a large scale of long-term Government securities by the banking system may have considerable effects in lowering the rate of interest). Prospects are beyond the direct control of any Central

Bank, however wise or powerful it may be ; they are influenced mostly by events external to the banking system. The response of stock markets to a political assassination may be quicker than the response to a policy of easy short-term money.

Changes in prospects, it will be remembered, affect the investor in two directions. On the one hand, he revises his estimates of the relative risks involved in the various opportunities which are before him ; on the other, he revises his estimates of the calls which may be made upon him and of his own need for liquidity. Thus any substantial change in prospects will tend to have a double effect on the investor's choice as between liquidity and income.

The resulting choices will translate themselves into changes in relative interest rates. Changing prospects tend to drive further apart or bring together the various alternative openings which offer themselves for the reception of new funds. With prospects becoming less attractive, short-term rates are driven down and the gap between short-term and long-term rates widens, while the different long-term rates move apart according to the standing of the borrower. With improving conditions, and a greater willingness to sacrifice liquidity to income, the gaps become less and the different rates draw together.

As we have seen, with prospects remaining fairly steady and not in process of change for better or for worse, a movement of the short-term rate relative to the long will tend to increase or decrease the outward pressure on the investment system, and the volume of new income-producing employments which it is prepared to finance. This will affect employment, and the flow of money being spent on goods and services, and, in due course, there will be a change in the general profitability of enterprise. Thus banking policy can in time affect general business prospects by indirect means, other things being equal.

Under international conditions, it may be pointed out, the outward pressure on the investment system may take

the form of an increase or decrease in the rate at which capital is being exported. If this is the case, the effects on the domestic economy may be long delayed, and perhaps even neutralized before they make themselves felt. The break up of the international financial system has, however, reduced this possibility.

But the fact that the banking system can influence economic activity as long as prospects are not already changing of their own accord, does not necessarily support the conclusion that financial policy can control the position once prospects are changing. The two cases of improving economic prospects and deteriorating prospects need separate consideration.

The first case to be considered is that of improving prospects. Trade and employment are increasing, and business concerns are earning larger dividends. The investing public is taking up a large number of propositions involving a high degree of uncertainty. Boom conditions are threatening to develop. How far can the banking system control the position ?

The answer would appear to be that the possibilities of control are considerable, though there are difficulties involved. The banks have it in their power to force short-term rates up to a level at which a large part of new savings is attracted into short-term uses, while in addition some holders of long-term securities may begin to sell out in order to put out their money on short-term. But the action required may have to be drastic if the boom is in full swing, and the public is convinced that there is big money to be made out of subscribing to new issues. The short-term rate may have to be forced above long-term rates and kept there for some period of time. Nevertheless, it is true that, except in periods of full inflation, fed by Government deficit, the banking system can slow down the rate at which new enterprises are being brought into being. The banks can always—by offering, to take an extreme example, to pay 10 per cent on deposits—attract so much money away from the stock markets that prices

of securities will be forced down. The real difficulty is to control the situation so exactly as to prevent a boom developing, without, at the same time, bringing on a slump.

In the opposite case the banks have much less power. Business is falling away, and the banks want to reverse this tendency. In these conditions, changing prospects by themselves will be driving interest rates apart and the short-term rate will be falling quite apart from anything that the banks do. The banks can reinforce this tendency by driving the short-term rate down still more, and so driving investors who want some income in search of new investment opportunities. But the banks cannot drive the rate of interest down beyond a certain point; they can offer nothing on their deposits, but many people may still keep their deposits, in preference to buying securities, because of their desire for liquidity. For this reason an open market policy by itself may have little effect, and that long delayed, in bringing a reversal of the down swing in the trade cycle. The fundamental consideration is that while short-term rates can be forced as high as is necessary (unless, indeed, there is a runaway inflation) they cannot for practical purposes be forced below zero.¹ In short, determined action by the banks can always strike at a boom but not necessarily stave off a slump. Such are the limits to the powers of the financial system.

So far no attention has been paid to the influence of public expenditure on economic prospects. It is impossible to discuss here its significance, and the possibilities of accelerated or retarded public works programmes. Public authorities, as purchasers of goods and services, can affect economic prospects, though to what

¹ The banks could, of course, impose a negative rate of interest by making a charge for keeping deposit accounts. But this is as likely to lead to a hoarding of notes as to an increased willingness to invest. If the idea is to be carried to its logical—but impracticable—conclusion, some arrangement by which notes lost value if they were hoarded would be necessary. Proposals on these lines have been made by Silvio Gesell; for an account see H. T. N. Gaitskell, "Four Monetary Heretics" in *What Everybody Wants to Know about Money* (ed: G. D. H. Cole).

extent they should deliberately seek to do so involves questions of administration far beyond the present discussion.

Governments are not only buyers of goods and services ; they are also large borrowers, and as such they may be able to influence the long-term rate of interest in a way which is impossible for the financial system proper. The British conversion operation of 1932 provides a case in point, and will be discussed later in its proper context. But here again the power of the Government to increase or decrease the outward investment pressure of the economic system will depend on the specific circumstances.

5. FINANCE AND ENTERPRISE : A SUMMARY

In the interests of clarity—though at the risk of repetition—it may be well to summarize some of the salient features of the argument outlined in this and the preceding chapters.

(i) The banking system as such has direct control over short-term rates of interest since it can always dictate the terms on which it will take deposits from the public, lend money for the holding of bills, buy bills, and make advances.

(ii) Long-term rates of interest are independent of short since they are determined by long-period expectations and consequently smooth themselves out through time ; to some extent movements in short-term rates may indirectly influence long-term by affecting expectations, and in certain circumstances banks may move long-term rates if they are large-scale buyers or sellers of long-term securities, but this does not invalidate the generalization that long-term rates of interest are much less sensitive to bank action than short.

(iii) The banking system can exert its influence on general economic conditions by making short-term investment opportunities more or less attractive relatively to long ; with short-term rates relatively high, new savings

will tend to be deflected into short-term uses and away from long, and *vice versa*.

(iv) The industrial borrower who finds that he is forced to obtain fresh finance on short term instead of long will have to watch the more carefully the relationship between his assets and his liabilities in order to ensure that he can meet any calls upon him ; this means that he will have to be more cautious in entering into new commitments and more pressing in his relationship with his debtors.

(v) Owing to the closely interlocking engagements of the financial structure, an initial restrictive pressure will tend to gather force ; there will be a tendency for a general restriction of commitments and calling in of loans ; this will tend to work through the system and to affect most strongly marginal projected developments at the fringe since they would be most sensitive to lack of finance and most easy to postpone.

(vi) Thus a raising of the short-term rate relative to the long will tend to set in motion a chain of forces ultimately making for a reduction in the flow of new investment ; this in its turn will lead to a reduction in employment, incomes and profits, and so to a reduction in the apparent attractiveness of new enterprise generally ; this will tend to gather cumulative force.

(vii) In the converse case, a reduction in the short-term rate of interest relative to the long will deflect the flow of savings into long-term investment channels ; business men, owing to the greater ease of getting permanent capital, will be more willing to commit themselves ; investors will be on the look out for new opportunities ; the effect of this pressure will be felt throughout the system till the volume of capital available at the fringes of enterprise is increased and activity thereby stimulated, with consequent increases in employment, incomes and profits for the economy as a whole.

(viii) It should be noted that the above analysis is concerned less with the *price* of new long-term capital than with its *volume* ; at the fringes of enterprise where new

developments take place prices are incalculable even within wide limits, and the funds available for new uncertain ventures will rather be influenced (a) by the attractiveness of alternative investment openings, and (b) by the estimates of potential investors of any demands likely to be made upon them in the future ; only when alternative openings are unattractive and future demands likely to be easily met will substantial funds be available for the development of new uncertain enterprises.

(ix) These effects will tend to be magnified under a financial system governed by defined criteria ; thus under a gold-standard system a small rise or fall in rates will be the equivalent of an otherwise much larger rise because it will be taken as a certain indicator of future tendencies ; the knowledge that the authorities are determined to bring about a given result will of itself tend to bring about the desired state of affairs more rapidly ; this may not be the case where the principles on which the authorities are acting are less clearly defined.

(x) The analysis up to this point starts with the assumption of action induced by the banking system, other things remaining equal ; it must therefore be shown against the more realistic background of a world in which prospects and the volume of economic activity are already in a state of flux quite apart from anything which the financial system may do.

(xi) The behaviour of the various rates of interest under the impact of changing prospects is clearly defined : with deteriorating prospects the bundle of interest rates is dispersed ; the short-term rate falls very sharply owing to the desire of holders to keep funds in easily available form ; the rate on safe long-term securities tends to fall because demand for them is strengthened owing to the desire for safety ; the yield on existing speculative securities rises in proportion to the apparent risks involved ; new speculative borrowers are almost entirely ruled out.

(xii) When prospects are improving, interest rates

tend to draw together, with a movement of short-term balances into long-term investments, and with increasing demand for speculative securities ; new issues of speculative securities rapidly increase in number.

(xiii) The banking system can delay the advent of boom conditions by accelerating the rise in the short-term rate and so restraining the demand for long-term investments and speculative securities by making short-term investments more attractive ; if there are no Government deficits it can always break a boom for forcing up short-term rates to prohibitive levels, since there is no limit to the height to which it can raise them ; but this weapon of control is not necessarily satisfactory, as we are not entitled to assume that banking action can always control a boom without at the same time precipitating a slump.

(xiv) In the case of depression the power of the banking system is much more limited since it can never force short-term rates below zero ; it can only content itself with trying to force down short-term rates (and possibly also the rate on gilt-edged) by the purchase of securities ; the reduced yields obtainable may force investors further afield, but there is no guarantee that they will do so except perhaps after a considerable interval.

(xv) These considerations suggest that the powers of the banking system to control economic activity, though important, are strictly limited ; this leads to the inference that the emphasis laid by many economists on the significance of Government expenditure policy, used in conjunction with banking policy, in the attempt to diminish business fluctuations is fully justified.

IV

PHASES AND FACTORS IN MONETARY POLICY

1. THE COURSE OF EVENTS SINCE THE WAR

THE history of economic and financial development in post-War Britain is throughout a story of "reconstruction"; the size of the unemployment figures and the persistence of depressed areas saw to it that we were unable to approach our problems in terms of continuous development. There is no phase which we can justly call either "prosperous" or "normal", even in retrospect. Throughout, the dominating feature was not what had been achieved but what had yet to be done, and all the conspicuous accomplishments—and they were both many and conspicuous—seemed as nothing before the tasks that remained.

Up to 1931 the task of reconstruction was envisaged in terms of refashioning an international economic system. Our energies were directed towards the restoring of economic order in those parts of the world where economic organization had disintegrated as a result of war. The approach was natural enough; Britain's supremacy, both in world trade and world finance, depended on the health of the world economy; therefore, Britain's prosperity depended on the prosperity of the rest of the world; from this a short step seemed to lead to the conclusion that the key to the British unemployment problem lay abroad and not at home, and that in the long run it was worth while for Britain herself to make sacrifices in order to promote a greater stability of economic conditions in other parts of the globe.

The onset of depression undermined these assumptions ; after 1931 opinion swung over to the other extreme, and began to hold that prosperity—like charity—begins at home. The attempt to build up a world economy had failed. Political difficulties were supervening. The school of thought which had looked to restoring economic prosperity in Britain by restoring it elsewhere was discredited : instead, prosperity was to be restored by a direct offensive on Britain's economic problems. The offensive—like so many offensives—was not as successful as its authors would have us believe ; the problem of the distressed areas remained, in spite of tariffs and quotas and restrictions and financial aids designed to bolster up industries which were feeling most strongly the impact of depression or of changing currents of demand. In the meantime, the complete reversal of economic policy was reacting on countries abroad and making the international situation more difficult. Neither of the two post-War policies had succeeded in providing Britain with a balanced economy.

There are a number of outstanding landmarks in the period : first, the feverish boom of 1919 and 1920, and the depression which followed it ; then the stabilization of the pound in 1925 and of other currencies either at the same time or in the two or three years following ; the climax of 1929, when Stock Exchange prices soared to mountainous heights in Wall Street, only to fall and usher in the world depression ; the gradual deterioration of economic and political conditions the world over, leading to the fall of the pound in September 1931 ; finally, the period of British protection and of the Ottawa Agreements and of cheap money.

The immediate post-War boom is a direct consequence of the break in economic continuity. For four years the nation's energies had been directed to carrying on a war with the utmost possible vigour, and the working of the economic system had been subordinated to this end. Suddenly the whole position changed ; the War was at an

end and its demands had ceased. The economic system had to adjust itself to completely changed conditions, and to do this without the aid of any accurate data on which to base judgments for the future. Business men could only guess what prices would emerge for their products, and the profits to be obtained in different lines of activity. Past experience was no guide because of the gulf between war conditions and peace-time demands. Above all, it was impossible to see which profits and prices would be temporary, and which permanent. Demand was bound to be spasmodic in character, since temporary needs, arising out of artificial shortage, were superimposed upon the more normal currents of demand which might be expected to remain. The margin of error in determining the future of business ventures was enormously increased, and mere guesswork had to take the place of the tolerably accurate estimation possible under continuous peace conditions. The complete break in economic continuity destabilized enterprise.

The problem which faced the business world was a double one. In the first place, there was the relatively simple task of making good losses due to war. Certain industries had to be converted from war to peace uses. Replacements which had been neglected had to be made at last ; non-essential industries which had been working at low pressure had to be brought into a condition to fulfil peace-time requirements.

But this was only half the problem. The other task was to bring into being the new productive activities which would be called for in years to come. Work-people had to face a double transfer ; once labour had been demobilized and set to work to meet temporary demands of the post-Armistice period, it had to be retransferred away from this salvage employment to the posts where it would permanently be needed in a more normal future. First, there was a temporary repairing job ; then the task of finding a permanent productive occupation. After organizing the beating of swords into ploughshares, someone

would have to organize the using of the ploughs.

The temporary demands were quickly met.

At the end of the boom period of 1919-20 the productive capacity of the world in nearly every respect was at least as great as might have been anticipated eight years before even if there had been no war.¹

But the productive structure of the world had been distorted.

Had this distortion in the organized productive structure of the world occurred only in the output of war materials, the problem of reorganizing production as soon as the demand for war materials stopped, would have been relatively easy and fairly speedy in accomplishment. But still greater difficulties were created, because the war also required temporary changes in the organization of production of goods not directly required for war purposes.²

The shifts required were much larger than appear at first sight, and all the harder to make.

The abnormal post-War boom had led to a sharp rise in wholesale prices and in the cost of living. The decontrolled capital market absorbed an unprecedented volume of new issues in 1920. But the turn came within the year. Wholesale prices reached their peak in the first half of the year, and the cost of living towards its close. By that time a Government deficit had made way for a very substantial Government surplus, while Bank rate was at 7 per cent, and the banks were being persuaded to ration credit. Measures to reduce the note issue added to the deflationary effect.

With such strong forces at work, depression developed rapidly. 1921 is a year of falling prices, falling wages and rising unemployment. From the end of April, money rates in Great Britain began to fall and were falling even faster than those in New York. By then any conscious policy of further deliberate deflation had been abandoned ;

¹ A. L. Bowley, *Some Economic Consequences of the Great War*, p. 93.

² N. F. Hall, "The World Depression" in King-Hall and Hall, *The Economist in the Witness Box*, p. 34.

the unemployment problem held the field, and industrial unrest was acute, with stoppages in the coal and cotton industries. In 1922, there were stoppages in the engineering and shipbuilding industries (the latter much overdeveloped as a consequence of the shipping losses of the War), and in both years wages had been heavily cut.

The turning-point came in 1922 ; thereafter improvement set in. Money rates were low, and employment was increasing, while positive measures were being taken to improve the economic situation on the Continent. In the background was the Reparation problem ; but the collapse of the German currency was followed by the Dawes Plan in 1924. In general, conditions were steadily growing better.

In 1924 the first steps were taken which were to lead to the stabilization of the pound in the following year. From the middle of 1924 money rates in London were higher than those in New York, and the very expectation of a further rise helped to bring that rise about. The stabilization of the pound at a high level served to increase the difficulty of Britain's main export industries, and led directly to the Coal Lock-out and the General Strike in the following year. The steady improvement in the unemployment situation was checked in 1925 and 1926 ; in 1927, however, employment increased again. In the meantime, Stock Exchange prices were rising, and 1928 saw a record quantity of new issues floated on the London Stock Exchange—many of them with disastrous consequences to their purchasers. Although a number of the speculative shares had already begun to fall in the earlier part of 1929, Stock Exchange prices remained high till the autumn.

But 1929 saw the end of the gradual improvement which had lasted with only slight interruption from 1922 onwards. The most spectacular feature of the year was the break in Wall Street in October. But speculation in New York had had considerable effects on financial conditions in England. Short-term funds had tended to

gravitate to New York, not only because of speculative aspirations on the part of British investors, but because high yields could be obtained for Call Money on Wall Street. The resulting pressure on the exchanges coincided with the repatriation of balances by French banks, the franc having been stabilized in June of the previous year. With such pressure on the pound, the Government had difficulty in placing their Bills with the market. In spite of efforts to keep rates down, Bank rate was raised at the end of September—perhaps rather unfortunately from the point of view of the market, because the Hatry crisis several days before had undermined confidence. The fall in Stock Exchange values towards the close of 1929 was the precursor of the general decline in economic activity which began to make itself felt in the following year.

This was the beginning of the Great Depression. Things went from bad to worse during 1930 and 1931. Money rates were low and gilt-edged were rising except during moments of crisis. About the middle of 1931, depression took an acute turn and financial crises began to arise, first of all in Germany and Austria. The Hoover Moratorium failed to bring about any improvement in the situation. At the end of July the May Report was published, and alarm at Governmental “extravagance” was added to a fear that Britain had insufficient liquid assets to meet the demands that might be made upon her. The Labour Government resigned towards the end of August, and the National Government took its place. The run on sterling reached abnormal dimensions. Efforts to save the pound failed, however, and on September 21st, Britain left the gold standard. A number of other countries followed Britain’s lead.

The suspension of the gold standard is the starting point of a marked change in British policy. From that time, attempts to solve Britain’s economic problems through international collaboration were abandoned. The flow of capital to foreign countries was restrained by an unofficial embargo, and a strict if informal control became

a permanent feature of policy. Accompanying this was a change in commercial policy. In addition to getting the advantages—real though temporary—of a currency depreciated in terms of the dollar, the franc and the mark, a general tariff was put upon foreign imports. As time went on this protection crystallized into a new economic policy, of which the Ottawa Agreements are the most notable feature, and which also shows itself in bilateral arrangements with other countries which have special trading relations with Great Britain.

This is the great reversal of British economic policy. Up to 1930 and 1931 we attempted, as far as possible, to build up a world economic system resembling in broad outline that which obtained at the close of the nineteenth century and in the years before the War. Economic conditions in England, it was held, were dependent on economic conditions elsewhere ; England's interests therefore coincided with those of the world, and the task of reconstruction should aim at improving conditions in the world at large. From 1932 onwards an opposite view took its place. It was assumed that much could be done at home irrespective of what happened elsewhere. Tariffs and special arrangements were put into force in order to increase employment, and little attention was paid to the effects on third parties. The multilateral trading structure of the world was further undermined, and Britain emerged in the unfamiliar rôle of a full-fledged protectionist country.

It is not proposed to examine in detail the implications of these two contrasting policies. Broadly speaking, both are open to criticism ; there was a swing from one extreme to another. More cautious progress in the attempt to re-establish an international economic system would have done more to make success secure. The good-will which prompted our efforts in making large loans to impoverished countries and in re-establishing an international monetary standard deserves high praise ; but in the light of subsequent events some of the steps we took were disastrous.

Much of the foreign lending only covered up fundamental difficulties involved in the Reparation and War Debt problems. The stabilization of the pound overstrained Britain's financial strength, and aggravated the difficulties of her main export industries. Had we been less internationally minded, the cracks might not have been papered over, and steps might have been taken to put in hand the necessary structural reinforcements before the house came tumbling down about our ears.

But the policy pursued since 1932 seems equally unhappy. It is true that Britain cannot be singled out as the only sinner ; the multilateral trading system of the world was being undermined long before the protectionists gained the upper hand in the National Government. But a protective policy could have been introduced which did less damage to countries whose difficulties were even greater than our own. Some, at any rate, of the unfortunate political developments of the last few years can be laid at the door of the isolationist economics which have gained ground so effectively. It is dangerous to reduce unemployment by exporting unemployment abroad.

Nor has the effect on the unemployment problem in Great Britain been very satisfactory. While the position in the South and Midlands has improved enormously, the disparity with the depressed areas has probably grown. The contrast between, say, Coventry and Slough on the one hand, and Rhondda and Jarrow on the other, is more striking now than it was ten years ago. Even such improvements as have taken place are due far more to the needs of rearmament than to the general change in commercial policy from 1932 onwards. The depressed areas have been hit several times over. Over-developed during the War, they felt the force not only of the disappearance of War demand but also of the major economic changes which dominated the post-War period. The demand for coal was falling off, with increases in competitive sources of supply, while the loss of the Indian market to Indian mills operating behind a tariff, and competition from

Japan, was undermining the position of Lancashire. These effects were accentuated by the increase in the value of the pound when stabilization took place. Finally, the nationalistic trend in economic policy reduced both the willingness and the ability of our chief customers to absorb our exports, and the export trades were hit once more. Even special arrangements could not compensate for this ; the advantages which the coal mines in the North-East gained through the Scandinavian agreements were offset by the increased competition which was encountered by South Wales elsewhere from foreign coal excluded from the Scandinavian market. In recent years economic policy has had about it an uncomfortable flavour of " to him that hath shall be given, from him that hath not shall be taken away even that which he hath ". The North is not sharing as it should in the rapid rise in the standard of living in the South and Midlands ; what the ultimate political and economic effects may be has yet to be seen.

For the rest, Britain is now, for the first time, in a position of financial semi-insulation. Since the conversion of 1932 interest rates here are ruling at an exceptionally low level, and restriction and a heavy risk premium are making this possible without a large-scale exodus of capital, though substantial sums have gone for investment to New York. It would be in keeping with the change in commercial policy if Britain were prepared to resign a large part of her financial influence in the world at large. Interest rates can be kept down to artificial levels permanently only as long as Britain is prepared to insulate herself from world financial movements. As yet she is so insulated—in company with the United States, Sweden and Holland—because instability and unrest maintain a risk premium which acts as a barrier between the creditor and debtor countries. But in the long run continued insulation would mean that London ceased to be a world financial centre of the type with which we have been familiar in the past.

2. THE STRUCTURE OF INTEREST RATES, 1920 TO 1936

An examination of the relationship of interest rates may prepare the way for the more detailed examination of the influences at work forming monetary policy and governing the capital market since the War.

INTEREST RATES, NEW SHARE CAPITAL, AND UNEMPLOYMENT, 1920-1936

Year	Average Bank Rate	Average 3-month Bill Rate	Yield on 2½% Consols	Average Rate on New Industrial Debentures	Average Rate on New Preference Shares	New Issues of Share Capital (£ m.) (Midland Bank figures)	Percentage of Un-employed (Great Britain)
	(%)	(%)	(%)	(%)	(%)		
1913	4.77	4.37	3.40	5.50	5.74	..	(2.1)*
1920	6.82	6.40	5.32	7.92	8.09	261.0	(2.4)*
1921	6.12	5.21	5.21	8.09	8.39	47.9	16.6
1922	3.79	2.65	4.43	6.72	7.17	49.8	14.1
1923	3.49	2.70	4.32	6.40	6.59	45.8	11.6
1924	4.00	3.54	4.38	6.61	6.27	62.0	10.2
1925	4.55	4.10	4.44	6.43	6.10	87.1	11.0
1926	5.00	4.51	4.54	6.48	6.70	91.0	12.3
1927	4.65	4.24	4.55	6.21	6.67	129.0	9.6
1928	4.50	4.15	4.47	6.10	7.37	186.1	10.7
1929	5.50	5.27	4.61	6.10	6.58	153.9	10.3
1930	3.41	2.61	4.49	5.96	6.00	43.9	15.8
1931	3.97	3.55	4.40	6.33	6.50	18.2	21.1
1932	3.01	1.84	3.75	5.44	6.32	21.7	21.9
1933	2.00	0.69	3.40	4.58	5.28	30.6	19.8
1934	2.00	0.83	3.10	4.48	5.00	65.0	16.6
1935	2.00	0.56	2.89	3.83	5.03	75.4	15.3
1936	2.00	0.59	2.94	4.17	4.99	90.3	13.0

* In brackets, Trade Union unemployment percentage.

(Sources: *Economist*, League of Nations *Statistical Bulletin*, *Midland Bank Review*, *Ministry of Labour Gazette*.)

The above series—being annual averages—conceal short-term fluctuations, but they do serve to bring out the broad changes in the relationships between different rates as well as illustrating movements in the volume of industrial and commercial share capital (as opposed to debentures) issued each year. The percentage of unemployed is a rough index of economic activity.

The actual rates themselves need little explanation. The short-term rate chosen is an average of the rates on various kinds of three months' bills, and is naturally below Bank rate. Long-term rates are represented by the yield on Consols, and by the rates paid on new issues of industrial debentures. The former indicates the position of long-term Government stock, the latter the cost of raising new money by established concerns offering the fullest security. The average rate on new preference shares is also given, but too much weight must not be put on this series as the quality of preference shares and the conditions under which they are issued alter considerably with changes in the taste of investors. The Midland Bank figures of share capital showed to what an extent the volume of new issues of this type varies from year to year, and how closely it is related to changes in general economic conditions.

Other important rates at which money changes hands have been omitted from the table. Many of them follow Bank rate.

While these normal rates are subject to many exceptions in practice, the general position (with occasional deviations) is that :

(a) The rate of interest allowed by the clearing banks on London deposits repayable at short notice is 2 per cent below Bank rate.

(b) The rate of interest charged on loans and overdrafts is $\frac{1}{2}$ per cent to 1 per cent above Bank rate, with an agreed minimum of commonly 4 to 5 per cent.

(c) The rate of interest charged by the clearing banks on call money to the discount market is somewhat above the rate paid on London deposits.¹

Certain other rates change at irregular intervals. Rates offered by Building Societies to depositors, or charged by them to customers, tend to move but slowly. Other rates—such as that offered on Post Office Savings Bank deposits, for example—perhaps never move at all.

¹ Cmd. 3897 of 1931, para. 70.

The outstanding feature of the table is the steadiness in the yield of Consols from 1922 to 1931, in spite of substantial variations in short-term rates. In general, gilt-edged remained surprisingly stable. There were two big downward steps, the first from 1921 to 1922 and the second from 1931-32 onwards. Both these movements coincided with powerful influences from outside the financial system. The first readjustment of values followed the depression which came after the hectic post-War boom. The second was the result of another revaluation of investment opportunities, again caused by depression. In the latter case, certain abnormal influences also made themselves felt. Overseas lending dwindled to a trickle, the result not only of enhanced risks but also of official discouragement of the export of capital. Other measures were also taken to force down long-term rates in order to make easy War Loan conversion in 1932. The Bank of England bought securities, and so forced the commercial banks—faced with dwindling advances, and unable to acquire other profitable assets—into the market for long-term Government stocks. The figures are instructive :

1932, Quarters	Government Securities in Banking Department of Bank of England	Investments of London Clearing Banks
	£ million	£ million
I	44.1	281.6
II	66.2	309.1
III	70.1	365.1
IV	75.7	436.3

But it must be remembered that the purchase of securities before the conversion by the bankers was as nothing compared to purchases afterwards, when insurance companies were also taking up large amounts, and the authorities themselves were building up substantial balances through the operation of public and semi-public funds.¹ The outcome of these tendencies is that Govern-

¹ See below, pp. 268, 269.

ment control of the market has been an outstanding characteristic since 1932.

Turning again to the table, a significant feature is the way that the rate on new industrial debentures is not only independent of short-term rates but also has a pronounced movement which is not reflected in the yield on Consols. The margin between Consol and debenture rates tends to narrow, especially before the depression ; in 1920 and 1921 this margin is over $2\frac{1}{2}$ per cent ; by 1925 it is 2 per cent ; by 1928 it is under $1\frac{1}{2}$ per cent ; in 1935 it is under 1 per cent.¹ The public is enlarging the investment field in the search for new opportunities, and as things appear more settled investors are prepared to take up debentures on terms more favourable to the borrowing concerns. Only at exceptional times, like 1931, does the rate on new debentures jump upwards.

The figures in general show clearly the effects of changing prospects. In depression the demand for liquidity is such that the rate on short-term securities is right down, while the gilt-edged yield is also falling owing to the absence of safe alternative forms of investment. In contrast, new share capital is almost unobtainable. The effect of depression has been to make liquidity and safety seem especially desirable, and to drive interest rates apart. In the converse case of improving prospects, investors are prepared to go farther afield ; liquidity becomes a secondary consideration ; short-term rates tend to rise and a much greater volume of share capital is put upon the market.

It is interesting to note that both major breaks were preceded by serious monetary stringency ; in 1920 and again in 1929 the three-month bill rate was above the yield on Consols. The lucrative short-term investment opportunities must have exerted a strong pull on individuals, and institutions collecting new savings, to the

¹ This remains true when allowance is made for the change in scale. In 1921 an investor would have got 55 per cent more by choosing new debentures instead of Consols ; in 1925, 45 per cent ; in 1928, 38 per cent ; in 1929, 32 per cent ; in 1935, 33 per cent.

detriment of the new issue market. In due course new ventures, finding difficulty in raising capital from the public, were forced to modify plans for development. High short-term rates had a powerful influence in this direction, but even then circumstances must have greatly reinforced their effect. Even if short-term rates had been kept lower in 1920 and in 1929, it is certain that the boom would have broken when the exaggerated prospects on which investors based their estimates failed to be realized.

3. FACTORS GOVERNING MONETARY POLICY

What were the factors which governed monetary policy since the War? They will be analysed in the chapters which follow, but it may be well to bring them together here as a prelude to more detailed examination.

First, there is the need for meeting the requirements of the national finances. The priority of this factor is one of time, and not necessarily of importance. Just after the War it dominated financial policy: a Budget deficit had to be financed, and then in a few months a large deficit was being replaced by a large surplus. Here is a direct effect, originating from the public finances, substantially modifying economic prospects and the working of the financial system. Further, it must be remembered that most of the Debt was unfunded. At regular intervals money had to be repaid and reborrowed, and the competition of other borrowers at times made this task a difficult one. In any case, the Treasury had a natural interest in keeping down the cost of the Debt. All these forces have made for an increased governmental influence on monetary conditions in the country, an influence which was much less important before the War.

The second factor helping to shape monetary policy was consideration of the external value of the pound. The old theory of Bank rate, inherited from before the War, looked to a drain or an influx of gold as necessitating a lowering or a raising of Bank rate. After the War this

guide had disappeared, with the pound no longer effectively convertible. Nevertheless there was the objective of a return to gold always present as a motive for policy. Exchange considerations, therefore, had an indirect influence up to 1925, and a direct effect after 1925 once the gold standard was restored. Finally, after 1931, policy aimed at the building up of a technique for handling a fluctuating currency, a technique being worked out by means of the Exchange Equalization Account.

The third factor governing monetary policy is the state of economic activity at home, whether reflected in Stock Exchange prices or in figures of unemployment. The authorities were forced to pay some attention to the effect of monetary changes on home industry, even though for a long time it was assumed that internal prosperity was in the main bound up with conditions elsewhere, and that therefore the stabilization of the pound was on the direct road to prosperity. But the unemployment situation was such that at no time was this assumption carried to its rigorous and logical extreme.

These three factors—the requirements of the national finances, the exchange value of the pound, and the desire to maintain economic activity at home—must therefore be disentangled if we are to follow the financial development of the post-War period.

V

THE INFLUENCE OF PUBLIC FINANCE ON MONETARY POLICY

1. GOVERNMENT FINANCING IN RELATION TO GENERAL MONETARY POLICY

SINCE the War, Treasury policy in the handling of the National Debt has had a far-reaching influence on general financial conditions. As might be expected, the influence has varied from one moment to another, but at certain critical times it has perhaps proved of predominant importance. An examination of some of the effects of financing by the authorities provides a convenient approach for a wider discussion of financial policy, and is further justified in that the period begins with the Government liquidating the commitments of a war, and ends with "cheap money" introduced by the conversion of a large part of the National Debt.

The motives which may force the authorities to take an active part in influencing conditions in the money and capital markets are several. In the first place, there is the need of borrowing to meet a deficit. This factor was of supreme importance during the War, but affects the period under discussion only in 1919, since after the end of that year income and expenditure were never out of touch with each other to any very serious extent, even allowing for Unemployment Insurance borrowings in 1930 and 1931.

Secondly, the authorities are naturally anxious to keep the cost of the National Debt as low as possible, and this desire may well come in conflict with any need to restrain

credit, whether in the interests of stabilizing the exchanges or controlling general economic activity. It might almost be said that the Treasury has a vested interest in low money rates, and consequently there exists a possibility—of course, not an inevitability—that an objective monetary policy may be made difficult on that account. The attempt to keep down the cost of borrowing may take the form of maintaining a large proportion of the debt in the shape of short-term borrowing, on the assumption that such borrowing is, on the average, considerably cheaper than long. Further, special measures may be used to influence credit conditions at any moment when the Government is coming into the market with funding or conversion operations. The activities of the Bank of England and the National Debt Commissioners will be directed to strengthening the position of the Treasury and weakening that of the lenders, and rival borrowers will be kept out of the market as far as possible.

Third, the problem of maturing Government debt had a profound influence on Treasury policy during the period. The War left a legacy of debt of every type, short and long, and most of it was due to call for attention at one time or another between 1919 and 1936. The long-term unfunded loans could not be converted, for the most part, till 1929 or after, and in fact the big conversion took place in 1932. But there were medium term borrowings which were maturing at intervals throughout the period, as well as Treasury Bills regularly falling due for renewal every week. In addition, just after the War advances to the Government from the Bank of England were at an exceptionally high level, being swollen by certain abnormal forms of borrowing which came under this head. Thus in 1919 and 1920 the Treasury was faced with the task of replacing debt of every type at a time when Government borrowings had to compete with the demands of industry and commerce, demands which were increasing at a bewildering pace once the Government released the hold over economic activity which it had maintained throughout

the War. The possibilities of action were further restricted by the limits on the note issue which were operative from the beginning of 1920. Thus just after the War the problems connected with the handling of the National Debt were especially acute, and the methods adopted require examination in some detail.

2. WAYS AND MEANS ADVANCES FROM THE BANK OF ENGLAND IN 1919

In 1919 the Treasury began the task of consolidating the borrowings of the War period. Though hostilities had ceased, throughout the year expenditure was still heavily outrunning income, and any consolidation had to be made in face of a heavy deficit and of a growing competing demand from home industry.

The starting point for any consolidation was clearly a reduction in Ways and Means Advances from the Bank of England. Like the money market, the Treasury is driven in the last resort to borrow from the Bank. In the normal way what happens is this : the Treasury borrows from the Bank, handing over its securities ; as the borrowed money is disbursed by the authorities, the commercial banks' reserve with the Bank are increased ; if this increase is a permanent one, the banks will have an inducement to increase advances and add to their other assets, and so general economic expansion will be stimulated. Thus continuous borrowing from the Central Bank by the Government will be strongly inflationary in character, and consequently every effort is made to see that such Ways and Means Advances are temporary.

In the normal way any increase in Bank Ways and Means will be reflected in a corresponding increase in the Government securities held by the Bank. But this was not the case in the greater part of 1919, when the bulk of the Ways and Means Advances represented a special form of war borrowing then in vogue.¹ Figures of Bank of

¹ For some interesting information bearing on this subject see S. E. Harris, *Monetary Problems of the British Empire*, pp. 46-59.

England advances to the Government are available only from April 1919 onwards, but till the end of October such advances are considerably larger than Government securities.

The average figures, month by month, are as follows :

1919	Government Securities in Banking Department	Ways and Means Advances from Bank	Excess of Advances
	£ million	£ million	£ million
April . . .	57·3	231·9	174·6
May . . .	48·7	226·3	177·6
June . . .	60·0	433·6	373·6
July . . .	74·7	513·8	439·1
August . . .	27·8	191·2	163·4
September . .	26·2	174·4	148·2
October . . .	58·9	121·3	62·4
November . .	40·5	32·0	— 8·5
December . .	78·1	45·8	— 32·3

The explanation is that during the greater part of 1919 the item " Ways and Means Advances from the Bank of England " consisted for the most part of Ways and Means Advances borrowed *through*, instead of *from*, the Bank of England. The Bank paid interest on certain deposits, which it re-lent to the Government. Neither assets nor liabilities thus created appear in the Bank Return ; presumably the Bank considered itself to be acting merely as the agent of the Government.

This type of war financing goes back to 1916, interest being paid on " spare " clearing bankers' balances, and on external balances. These two kinds of balances were re-lent by the Bank of England to the Government, and together constitute the bulk of this item of " Ways and Means Advances " from April to October ; Advances of the ordinary sort could not have exceeded the value of Government Securities in the Banking Department. There was a differential rate on the two kinds of balances ; at the beginning of 1919 bankers' spare balances (three-day deposits) earned 3 per cent, while external balances earned $4\frac{1}{2}$ per cent. (For comparison, it may be added

that deposit accounts with the banks earned 3 per cent at the time, and three-month Treasury Bills were on tap at $3\frac{1}{2}$ per cent.)¹

During April and May the volume of Advances is fairly constant from week to week. On May 31st the sale of Treasury Bills was suspended in anticipation of the Victory Loan, and the volume of Advances rose from week to week. On July 12th it reached its maximum of £703·5 million; the Bank Return three days previously showed Government Securities—also a maximum—at £136·9 million. The Government was borrowing on Ways and Means in place of Treasury Bills, proposing to pay off Advances as the subscriptions to the Victory Loan came in. The lists for the latter were open from June 13th to July 12th. Subscriptions to this loan reduced the balances available on Ways and Means Account, and the total fell rapidly from its peak. The rate on surplus bankers' balances was dropped after July 22nd as far as new balances were concerned, and from the end of the month as regards existing balances. The rate on external balances still remained. It must be added that a week earlier the sale of Treasury Bills had been resumed at the $3\frac{1}{2}$ per cent rate, so that spare bankers' balances which were not to be invested in Victory Loan could be used to purchase these.

Thus the spare bankers' balances had been dealt with; the external balances continued. The difficulty here was that these were earning $4\frac{1}{2}$ per cent, while Treasury Bills, the obvious alternative form into which such balances should be forced, were on sale to yield only $3\frac{1}{2}$ per cent. The obvious step was to increase the yield on Treasuries, and this was done on October 6th, when the Treasury Bill rate was raised from $3\frac{1}{2}$ to $4\frac{1}{2}$ per cent without any change in Bank rate. A fortnight later the special rate on foreign money was dropped, and "Ways and Means Advances from the Bank of England" became what they

¹ Treasury Bills only "on tap"; sales by tender began in April 1921.

said and are always taken to be, borrowings *from*, and not *through*, the Bank. On October 25th Advances were £62·0 million, while the Bank Return three days previously showed Government Securities of £78·6 million. With the aid of the Victory Loan an abnormal form of War borrowing had been made to disappear.

The sequence of events may be summarized as follows :

- May 31st : Sale of Treasury Bills suspended ; thereafter Advances began to increase.
- June 13th–July 12th : Victory Loan open to subscription.
- July 12th : Advances reach peak of £703·5 million, thereafter declining.
- „ 14th : Sales of Treasury Bills on tap at $3\frac{1}{2}$ per cent resumed.
- „ 22nd : 3 per cent rate on spare bankers' balances dropped.
- Oct. 6th : Treasury Bill rate raised to $4\frac{1}{2}$ per cent ; no change in Bank rate (5 per cent).
- „ 19th : $4\frac{1}{2}$ per cent rate on external balances dropped.

What is the volume of these “intermediary” Advances, as opposed to “direct” Advances from the Bank of the familiar sort ? ¹ A maximum estimate would take the total Ways and Means Advances as “intermediary” ; a minimum estimate, their excess over Government Securities ; other estimates come between the two, according to assumptions made about the proportion of Government Securities purchased on the initiative of the Bank, and the proportion representing “direct” Advances.

Superficially, the most striking feature is the rise of Advances to fantastic heights with the suspension of the sale of Treasury Bills in preparation for the Victory Loan. But this is not in itself very difficult to understand ; money invested in maturing Treasury Bills was allowed to remain on deposit pending the funding operation, and

¹ “Direct” Advances is used to describe Ways and Means Advances from the Bank of the ordinary type ; “intermediary” for the Advances made in the abnormal way here discussed.

the resumption of the sale of Treasuries. More significant would be the information about the position before the Victory Loan came to overshadow everything else and before the sale of Treasury Bills was suspended. For this we must turn to the figures for April and May, given in the table above.

There is one important advantage here ; the weekly figures are fairly constant, and do not deviate much from the average.¹ Taking averages, we are therefore faced with something in the neighbourhood of £200 million (*i.e.* something between £175 and £230 million). We must assume that some of the Bank's securities were acquired on its own initiative, and have nothing to do with Ways and Means of any kind.

What proportion of this sum of £200 million represents spare clearing bank balances, and what proportion external deposits ? It seems clear that much the larger part consisted of external deposits. An examination of the figures goes to suggest—in round numbers—that some £170 million consisted of foreign balances, though of this some £30 million came through the clearing banks, and that in addition the clearing banks provided a further £30 million of spare deposits on their own which had no relation to external balances. The smallness of the last figure is not surprising when we remember that special deposits with the Bank which were not for foreign account only got 3 per cent, while Treasury Bills were on tap at $3\frac{1}{2}$ per cent ; if the balances were really “ spare ” there was adequate inducement to favour the latter.

The above conclusion is arrived at as follows. From the figures already quoted it is clear that in August the volume of special Advances could not have been less than £163·4 million or more than £191·2 million. But by then the rate on the home balances had been withdrawn, so that all these must have been external balances. For

¹ During those two months Advances varied between £221 million (May 31st) and £234·5 million (May 3rd) and Government Securities between £67·1 million (April 2nd) and £46·3 million (May 21st).

rough purposes we may, therefore, assume that foreign balances must have been between £170 and £180 million ; there is no reason to suspect that there was any sudden increase in these in August as against May. This leads us to anticipate a fall of, say, £30 million in spare balances when the rate on home balances was withdrawn. Thus the £200 million would appear to have been divided between domestic and external balances roughly in the proportion of 30 : 170.

That external balances were large is confirmed when we look at the weekly figures at the point at which the external balances disappeared. The $4\frac{1}{2}$ per cent rate was dropped on October 19th ; the following figures refer to the two preceding weeks and the week following. (The dates given are those of the Bank Return ; the total Ways and Means Advances refers to three days later in each case, and comes from the Government Return.)

1919	Government Securities	Advances	Excess of Advances
		£ million	
October 8th .	57.2	176.5	119.3
„ 15th .	34.3	125.5	91.2
„ 22nd .	78.6	62.0	- 16.6

Thus external balances were still large at the beginning of October in spite of a falling exchange, and in spite of the fact that before the rate was withdrawn foreign money had begun " seeking employment in unofficial channels ".¹

There is an alternative source of information which provides a check. The Macmillan Committee has published a month by month analysis of the assets of the London clearing banks. Below are the items " Balance at Bank of England " and " Money at Short Notice to the Money Market ".

¹ *Economist*, October 18th, 1919.

LONDON CLEARING BANKS

1919	Balance at Bank of England (Monthly averages)	Money at Short Notice to Money Market (Monthly averages)
	£ million	£ million
January	90.3	105.9
February	81.2	102.9
March	92.2	103.7
April	85.1	112.2
May	88.9	112.1
June	246.0	132.7
July	117.3	90.4
August	81.6	85.7
September	81.7	83.7
October	76.1	54.7
November	74.7	53.3
December	131.0	53.0

It is clear that, except possibly in June and July during the period of the Victory Loan, the special deposits of the banks were almost entirely classified under the heading of "Money at Short Notice".¹ Here there are two significant drops: one, between April and May on the one hand and August on the other; and the other, between September and October, each of about £30 million. The first drop agrees with the estimate of spare clearing bank balances already arrived at. The second drop—also of some £30 million—coincides with the removal of the 4½ per cent rate on foreign balances, and suggests the further inference that the clearing banks were themselves concerned in the handling of foreign balances to the extent of £30 million. This provides confirmation of the estimate that the £200 million of special deposits with the Bank of England represent external balances and home balances in the rough proportion of 170:30. It must be stressed, however, that this only applies to April and May 1919, when

¹ Contemporary opinion also took the view that they were classified under this head.

the figures were relatively stable. Nevertheless, we are entitled to conclude that external balances must have been large and important at the end of the War and in the first years of peace.

The significance of these special Ways and Means borrowings through the Bank of England is twofold. In the first place external balances were retained in this country at the time when adequate foreign exchange was essential to the prosecution of war. Secondly, the inflationary effects of Government borrowings were reduced by the expedient adopted. Ordinary Ways and Means borrowings from the Bank would have swollen the cash reserves of the clearing banks; the special method adopted might almost be described as Ways and Means Advances deliberately offset by open market operations. Government expenditure was, of course, having an inflationary effect all the time, but this was minimized by the expedients adopted.

Why, then, was this type of financing dropped at the earliest opportunity? The objection to a differential rate on foreign balances was put very clearly by the Cunliffe Committee: "so soon as the present obstacles in the way of international intercourse are removed, any attempt to maintain this differentiation must break down, because it would be impracticable to prevent people from borrowing at the low home rate and contriving in one way or another to re-lend at the high foreign rate".¹

The objection to borrowing the commercial banks' spare balances in order to prevent them using these balances as a basis for expansion is a different matter. The method was effective when industry was controlled, and when the banks had no very strong inducement to expand. But it would have been dangerous to rely upon it in a boom period when the demands of industry were great. The banks might well have ceased to regard such balances as "spare"; the Government would then have been forced to borrow on Ways and Means account in

¹ *First Interim Report*, para. 19.

the ordinary way, while the Bank might have been unable to re-borrow in its turn unless it were prepared to offer a rate of interest very much higher than the 3 per cent which it was paying. In the changed circumstances the Treasury was probably well advised to dispense with this particular method of securing funds.

3. THE TREASURY BILL POSITION TO APRIL 1921

In October 1919 special borrowings on Ways and Means account through the Bank of England had disappeared. The floating debt consisted first, of ordinary Ways and Means Advances from the Bank; second, Ways and Means borrowings from Public Departments (considerable, though not of very great importance as more than half of them probably represented Government Securities held as a backing against currency notes); and third, Treasury Bills.

Treasury Bills were the central feature of the money market. In spite of a temporary reduction following on the Victory Loan, Bills outstanding soon reached the old high levels. Throughout 1920 and 1921, the monthly average never fell below £1000 million. These Bills were not only the central feature but also the driving force; through them the Treasury had an absolute control over the price of short-term borrowing, and the Bank rate and other short-term money rates were completely subservient to the rates at which Treasury Bills were "on tap".

The rates for three-month Bills—Bills for longer periods were on sale at related rates at the same time—were as follows:

			Per cent
August 14th, 1919	.	.	3½
October 6th, 1919	.	.	4½
November 7th, 1919	.	.	5½
April 14th, 1920	.	.	6½
March 11th, 1921	.	.	6

On April 21st, 1921, Treasury Bills were sold by tender

again, the opening average rate being £5 : 19 : 3.95. After this the tender system was maintained.

There is no adequate information to show how these Treasury Bills were distributed between different classes of holders. There is a total of over £1000 million to be assigned, and the only item about which we can speak with certainty is that of the banks. On the basis of figures published by the Macmillan Committee, the Treasury Bills held by the London Clearing Banks and the six Scottish Banks average as follows :

1919	.	.	.	£178.8 million
1920	.	.	.	136.4 „
1921	.	.	.	266.1 „

It will be noticed that the banks' holdings of Bills falls off very substantially in the boom year 1920, and rises with depression in 1921.

This is the only known item,¹ and the rest must be largely conjectural. A considerable number of Bills must have been held on external account by foreign and Empire banks and in other ways. We know that external balances on Ways and Means account alone totalled some £170 million early in 1919. A large part of this may have gone into Treasury Bills, and possibly £100–£150 million represents the size of such holdings.² The money market and various financial houses in the City would possibly account for another £100 million and maybe considerably more. Macrosty conjectures that insurance companies may have held £50 million. If we call all these agencies "financial" we can probably assume that more than half the Bills outstanding were held by "financial" bodies. This leaves the other half which must have been held, partly by commercial and industrial firms, and even more by various Government Departments and

¹ Except that we know that on March 31st, 1920, Bills to the extent of £48.6 million were outstanding as collateral for loans payable abroad. (*Report of the Committee on National Debt and Taxation*, para. 68.)

² What we do not know is the extent to which overseas balances were in Bills as opposed to deposits.

Funds. The Currency Notes Account held Government Securities which partly took the form of Department Ways and Means Advances, and partly of Bills. In addition to this the Post Office Savings Bank and other Government Funds must have been holders of Bills. But we are quite in the dark as to the type of security which predominated in these various funds—and the type could have been changed at any moment. Probably, £200 to £300 million of the total outstanding was held under Government auspices.¹ The conclusions seem to be that commerce and industry between them held £100 to £200 million. Macrosty² gives some examples of business concerns holding Bills; he mentions that balances being built up to pay Excess Profits Duty were often invested in this way. But all this is really only conjecture; the main difficulty is that we cannot tell what the Government itself was doing. Commerce and industry probably reduced their holdings of Bills in 1921 and 1922 when rates fell with depression, and they had every inducement to pay off bank advances.

The existence of such a large outstanding volume of Treasuries in face of a strong competing demand for funds from industry put the Government in an embarrassing position. As soon as there was a demand for cash, Bills were allowed to run off and the Government was forced to borrow on Ways and Means from the Bank, and so to make expansion easier. The Government's fear of being in the Bank had led to the increase in the rate of $6\frac{1}{2}$ per cent in April 1920. In addition, pressure was brought in various ways to persuade the market to take up bills and to discourage competing demands for funds. Already as early as May banks had been restricting advances at the request of the Treasury. The currency was approaching the limits which had been set by the self-denying ordinance

¹ Niemeyer put the total at £150 million for November 1925, before the Colwyn Committee. (Para. 97.)

² For some discussion of Bill holdings see H. W. Macrosty, "Some Current Financial Problems," *J.S.S.*, vol. 85, 1922. Harris, *op. cit.*, also has some information bearing on the subject.

of the Treasury towards the close of 1919; prices had risen very substantially and fear of a further rise made the authorities hostile to any expansion even though it would have eased their position.

The position was uncomfortable for the market, as well as being disquieting to the Treasury.

From Lombard Street's point of view the worst nuisance involved by the Treasury bill problem arises because in April last, when holders found it inconvenient to renew them, a rise in the rate which they were offered, accompanied by a rise in Bank rate, was the remedy applied by the authorities. Hence, whenever there is a balance of maturities over sales of Treasury bills there is a fear of a rise in Bank rate, and whenever there is a fear of a rise in Bank rate, holders of Treasuries prefer not to renew, and another vicious circle is set up, and the market is thus subject to constantly recurring tremors which arise owing to the embarrassments of the Treasury, a borrower whom no rise in the rate made for loans will check, and the guesses that have to be made at the consequent action of the authorities.¹

In the autumn of 1920 the pressure remained heavy. "On Thursday (*i.e.* 9th September)", according to the *Economist*, "October bills were offered to the Bank for discount, and were only taken subject to the condition that the proceeds should be invested in December Treasury bills".² On October 2nd the Bank was discounting below the official rate for those who wanted to apply for Treasury Bills. These special measures illustrate the anxieties of the authorities.

What is the significance of this? It would be a mistake to conclude that in 1920 the Treasury was in danger of losing its grip on the situation. By then the revenue from the sale of War stores was such that incomings far exceeded outgoings, and there was no Budget deficit to add to the difficulties. The Treasury could always control the position by raising its rate until other borrowers were squeezed out. As a technical device the method by which the level

¹ *Economist*, August 14th, 1920, p. 256.

² *Ibid.*, September 11th, 1920, p. 385.

of money rates was dictated by the Treasury Bill rate is in many ways fascinating. The rate was arbitrarily fixed, and the market at once adjusted itself by forcing the Treasury to borrow more or less from the Bank of England. The real difficulty arose from the fact that the Treasury wanted both to keep the rate low and to avoid borrowing on Ways and Means ; and these two conflicting aims could only be reconciled in so far as competing borrowers could be kept out of the market.

The control of the market through Treasury Bill rate could then be effective, but it had two disadvantages. The first was its arbitrary character. Money rates were merely dictated ; external influences could not make themselves felt as the price of money, and the withdrawal of gold-stiffened rates only if the Treasury changed the buying price of Bills. It may be that, under different circumstances, methods of this kind might lighten the task of effective monetary management, but without a science of such management—and there is no evidence of such a science in the years just after the War—the arbitrary character of the mechanism must be counted as a liability rather than an asset.

The second disadvantage has already been foreshadowed in the quotation from the *Economist* above. It is a technical defect. Ultimately, what the *Economist's* complaint appears to boil down to, is the element of discontinuity which upsets the market. Any change in rates is a jump of 1 per cent, or at least $\frac{1}{2}$ per cent. There is no gradual preparation and stiffening of rates when Treasury Bills are on tap at a fixed price. The restoration of the sale of a fixed quantity of Bills by tender each week from April 1921 onwards definitely marked an advance in that it made the movements of money rates both less arbitrary and less rigid.

One major line of criticism is definitely suggested by an examination of the Treasury Bill position. The authorities were clearly anxious both to keep rates low and to place their Bills without being forced to get assist-

ance from the Bank. The strange devices adopted are clear proof of this; they tried, as occasion arose, to persuade the banks to restrict accommodation, and to force the market to take up Bills through bringing indirect pressure to bear, in preference to raising rates still further. This objective can easily be defended. The case for avoiding a rise in rates was a strong one; quite apart from the cost of the floating debt to the Government, there were many desirable commercial and industrial borrowers who would have been hampered by a rise in rates which squeezed them out of the market. At the same time the authorities' instinct in wanting to avoid further inflation was equally sound; many borrowers needed curbing, and prices were rising phenomenally in the second half of 1919 and the first months of 1920.

But while objectives were reasonable, the methods adopted were half-hearted. Clearly what was wanted was a process of rationing, applied through the banks and the money and capital markets, which could discriminate between different types of borrowers; such methods should have been used firmly and effectively from the very beginning. It would in no sense have been an unwarranted interference with the free play of the economic system; in fact, there had been a complete break in economic continuity with the passage from war to peace. During the War, enterprise had been closely controlled; to suggest that normal working is most easily restored by a sudden removal of restrictions in circumstances such as those is a complete travesty of any rational economic doctrine. Prospects were incalculable, profits meaningless, and demand completely abnormal. What was wanted was an effective economic demobilization. In fact, what occurred was a financial demobilization carried out in face of economic anarchy.

Beside this major criticism other criticisms pale almost into insignificance. It is probably true that rates should have been raised earlier in 1919, and lowered again before March 1921. But this is almost incidental. The chaos of

the post-War boom could have been prevented had less dependence been placed on interest rates, and a conscious policy of decontrol adopted.

4. DEBT CONSOLIDATION, 1920-26

With the depression in 1921, the difficulties of the Treasury were eased. Between 1920 and 1926 the debt position was improved to a considerable degree.

Thus the improvement in the six years had been a substantial one. The floating debt was reduced by £500 million, and the short-term unfunded debt by a similar amount. Funding had been limited in extent, however, and the 3½ per cent Conversion Loan exaggerates even the extent of this funding as the nominal value of the debt was written up by this operation.

There remained, moreover, substantial amounts of debt which would have to be dealt with in the next three or four years. Apart from the floating debt and Savings Certificates, but including the 3½ per cent War Loan, 1925-28, the amounts which had to be dealt with were :

1926-27	.	.	.	£109.6 million
1927-28	.	.	.	300.8 „
1928-29	.	.	.	467.6 „
1929-30	.	.	.	46.2 „

Though there was much still to be done—especially with the possibility of a War Loan conversion from 1929 onwards—the magnitude of the problems bore little resemblance to those which had faced the authorities in 1919, 1920 and 1921.

The debt figures quoted above do not show any Ways and Means Advances from the Bank of England at either date, as such Advances are always temporarily paid off by the end of the financial year. Nevertheless, this type of borrowing had been considerable both in 1920 and 1921, but was reduced to modest dimensions from the beginning of 1922 onwards. This reduction, however, had not been accomplished simply by the Treasury

STRUCTURE OF THE NATIONAL DEBT, 1920 AND 1926 *

	April 1st, 1920	Per cent of Total Internal Debt	March 31st, 1926	Per cent of Total Internal Debt
<i>Floating Debt :</i>	£ million	Per cent	£ million	Per cent
Ways and Means Advances (Depts.)	204·9		139·4	
Treasury Bills . . .	1058·7		564·9	
	1263·6	19	704·3	11
<i>Short-term Unfunded Debt :</i>				
Exchequer Bonds . . .	318·6		15·6	
5% National War Bonds	1294·6		562·9	
4% (Tax-comp.) War Bonds	181·2		142·8	
Treasury Bonds . . .	..		481·4	
Savings Certificates . .	273·5		375·6	
Miscellaneous . . .	21·6		14·4	
	2089·5	32	1592·7	25
<i>Long-Term Unfunded Debt :</i>				
3½% War Loan, 1925-28	62·7		62·7	
4½% War Loan, 1925-45	12·8		12·8	
5% War Loan, 1929-47	1976·8		2044·1	
4% (Tax-comp.) War Loan, 1929-42	64·1		64·9	
4% Funding Loan, 1960-90	408·9		391·9	
4% Victory Bonds . . .	359·5		347·6	
4½% Conversion Loan, 1940-44	..		210·6	
	2884·8	44	3134·6	48
<i>Funded Debt :</i>				
Pre-War Funded Debt	315·0		313·5	
3½% Conversion Loan	..		760·0	
	315·0	5	1073·5	16
Total Internal Debt	6553·0	100	6505·1	100
External Debt . . .	1278·7		1110·8	

* Based on Colwyn Committee figures.

raising money from the public to pay off the Bank ; quite as important was the fact that the Bank had begun buying securities to a greater extent than before on its own initiative.

	Average Government Securities in Banking Department	Average Ways and Means Advances from Bank	Average Securities purchased on Bank's Initiative (1-2)
	£ million	£ million	£ million
1920	59·8	39·8	20·0
1921	53·3	24·7	28·6
1922	52·0	5·1	46·9
1923	47·8	2·4	45·4
1924	46·3	2·7	43·6
1925	41·1	1·8	39·3
1926	39·1	1·3	37·8

If we compare 1922 with 1920, it will be seen that Advances have been reduced by £34·7 million, this reduction being accomplished by increased purchases on the initiative of the Bank to the extent of £26·9 million, and for the rest by the Treasury paying off Advances. But fundamentally the position in 1921 is very much the same as that in 1922. The only real difference is a book-keeping one, some £20 million of Government Securities which come under the head of Ways and Means Advances in 1921 being replaced by less temporary Government Securities in 1922. When analysed, the paying off of Ways and Means Advances is much less spectacular than might be assumed at first sight. What happened was that the Treasury was funding its obligations, and that in the process the Bank had agreed to take up a larger proportion of more permanent Government debt—possibly Treasury Bills. In the years following 1922 this amount was slowly reduced ; securities purchased on the Bank's own initiative in 1926 are £9 million less than in 1922.

Department Ways and Means Advances were also down substantially between 1920 and 1926 in the figures quoted in the tables, but this reduction gives a much exaggerated impression. Taking the year as a whole

(and not only the end of the financial year), Advances of this type were not much lower in 1926 than they had been six years previously ; probably the bulk of them was composed of Government Securities held as backing for the Currency Note Issue. The Reparation Account may also have provided something. But it is almost impossible to get any clear picture of interdepartmental borrowing, which in any case was "in the nature of a bookkeeping transaction only".¹

Treasury Bills had been reduced in spectacular fashion during 1921 and 1922. If we take the December total for each year and subtract from them the known totals held by the London Clearing banks and the six Scottish banks, the remainder to be accounted for moves as follows :

December 1919	.	.	.	£998·9 million
" 1920	.	.	.	940·6 "
" 1921	.	.	.	758·2 "
" 1922	.	.	.	541·9 "
" 1923	.	.	.	503·9 "
" 1924	.	.	.	530·4 "
" 1925	.	.	.	548·4 "
" 1926	.	.	.	542·5 "

Of these Bills a large proportion was held by Government Departments or on account of Government Funds. Niemeyer—before the Colwyn Committee—gave £150 million as his estimate of the amount so held in November 1925. We seem safe in concluding that the amount of Treasury Bills outside the London Clearing and Scottish banks and Government Departments fluctuated between £325 and £425 million (and for the most part near the higher figure) from the end of 1922 onwards.² These would include the holdings of the money market and of foreign and Empire banks, which together would presumably account for the bulk of them.

¹ *Report of the Committee on National Debt and Taxation*, para. 96.

² This also appears to have been true in 1927–30, when it would appear that Department holdings were round about £100 million before the Note Issue was absorbed by the Bank, and round £250 million thereafter, including Bills held in the Issue Department. Para. 349 of the Macmillan Report provides the basis for this rough estimate.

It is, however, quite impossible to assess the real significance of the reduction of £400 or £500 million in Bills since 1920. While many must have purchased Treasury Bonds in place of Treasury Bills, we cannot tell to what extent this has been the case without making assumptions as to the Bill holdings of Government Funds and Departments in 1920. It is quite conceivable that a substantial part of the reduction was nothing more than a bookkeeping change by which Departments held longer term securities in place of Treasury Bills. But there is no evidence either way on this point, and we cannot tell how far a reduction in Bills outstanding did involve a reduction of Bills in the hands of the public.

The short-term unfunded debt was dealt with largely by the issue of Treasury Bonds. These were made available to the extent of over £720 million between 1920 and 1924, though the total outstanding did not exceed £500 million. The terms on which they were issued varied to a considerable degree; broadly speaking, few of them fell due for repayment for at least five or ten years from the original date of issue. They thus provided a medium term form of borrowing which protected the Government adequately from any early necessity for repayment. The $4\frac{1}{2}$ per cent Conversion Loan, 1940-44, of which no issue was made for cash, was offered in exchange to holders of 5 per cent War Loan and of Exchequer Bonds and was taken up to the extent of some £210 million. The $3\frac{1}{2}$ per cent Conversion Loan was the only form of funded debt issued between the end of the War and 1926, and was criticized because it increased the nominal value of the Debt.

5. THE POST-WAR DEBT CONSOLIDATION AND GENERAL MONETARY CONDITIONS

By 1926 Great Britain was back on the gold standard, and the process of debt consolidation, if not complete, had gone sufficiently far to show the form which the

National Debt was to take for several years to come. It is interesting to compare the structure of the Debt in 1914 and in 1926.

	March 31st, 1914		March 31st, 1926	
	£ million	Per cent	£ million	Per cent
Floating Debt .	13·0	2	704·3	11
Unfunded Debt .	50·1	8	4727·3	73
Funded Debt .	586·7	90	1073·5	16
	649·8	..	6505·1	..

In addition, External Debt totalled £1110·8 million in 1926 ; against this could be set as assets claims on Reparation and Inter-Allied Debt accounts. There was no External Debt in March 1914.

Thus the effect of Debt policy had been to provide the money and capital markets with enormous quantities of liquid investments of the highest character. Quite apart from Treasury Bills, the Unfunded Debt was of such a nature that it was unlikely to involve holders in any risk of appreciable capital loss. From the point of view of the conservative investor who sought both safety and a reasonable return, it was an ideal arrangement. In fact, it concealed dangers which will be mentioned in passing here, and discussed more fully in connection with the international position of the pound. The danger was that Britain could—and did—attract foreign money on a large scale which it could only hold satisfactorily as long as trade conditions were good and money rates at a high level, or the refuge offered to foreign funds safer than elsewhere.

The market had so large a supply of liquid investments that the demand for commercial bills of the pre-War type was much reduced. The complaint was that the number of bills had fallen off in volume ; this was true, but the real explanation is that the need for bills had disappeared owing to the supply of Government securities which served exactly the same purpose, which were easier to handle, and which required no special knowledge. Traders

in search of accommodation began to look to banks or financial houses to finance them, and these relationships did not give rise to short-term commercial securities which were marketable, or at least marketed. Whether the traders were much inconvenienced may be doubted ; they may have had to pay a little more, but there were certain other advantages to compensate this. When money rates are ruling fairly high the difference between borrowing from a bank and borrowing on bills is small ; it is only when money rates are low that borrowing on bills is appreciably cheaper. In any case, the existence of such a large volume of liquid Government investments destroyed the premium on self-liquidating bills which the trader might have hoped to exact.

The reduction in the demand for commercial bills had certain important technical effects on the working of the international financial system. Its flexibility was reduced. Before the War, not only could liquid funds be employed in different centres in accordance with the relative levels of money rates, but borrowers could choose from which centre to secure funds. If it was expensive raising money on bills in London, they could get funds—possibly in some other way—at home or elsewhere. Both the supply of funds and the demand for them could shift from centre to centre. The reduction in the supply of international bills meant, however, that the demand for accommodation moved with much greater difficulty. The funds could move as before ; the demand could not. Before the War, a withdrawal of funds from one centre and a resulting higher rate meant a decreased demand for accommodation. But where trade is financed through special arrangements with banks, the demand for accommodation is less likely to change and the price of it may be quite unaffected. While international trade can draw finance from different sources, British Treasury Bills can only be floated in London.

The working of the international financial system lost in sensitiveness as a result of Treasury Bills tending to

displace international commercial bills. N. F. Hall has brought out the significance of the change in a comparison between international acceptance business and international deposit banking :

The former tends to be self-liquidating in character and to establish a rough identity between the external credits and debits of the market on any particular occasion, provided that the basic economic factors influencing the total balance of payments are in approximate equilibrium. A British house accepts and floats into the London money market a foreign bill with a maturity of, say, three months ; the drawer of the bill sells the sterling placed at his disposal by the market and this tends initially to weaken sterling. At the same time, however, and to a slightly greater extent as a result of the discount and commission charges, sterling is strengthened, because before the date of maturity of the bill the drawee has to acquire funds to meet his London obligation. There is, therefore, a continuous buying and selling of sterling by foreigners, and except when there is a change in the volume of business being done, these payments offset each other with a slight cumulative tendency in favour of the pound. The timing of the various transactions is the important factor in the situation : sterling is first weakened and then strengthened. Disturbances that rise due to changes in the volume of business can normally be controlled by the ordinary mechanism of the Bank rate before they reach dangerous proportions. If the volume of business is tending to increase too rapidly, a rise in Bank rate will reduce the demand for discount facilities in London and will relieve the immediate pressure upon sterling arising from the sale of the proceeds of bills discounted. . . .

The position is entirely different when the market is practising international deposit banking as its characteristic activity, and the difference is accentuated when a large part of the international deposits in London are liable to move as the result of political and psychological, rather than strictly economic causes. In the first place, the timing of the transactions is different. There is first a demand for sterling when a deposit in London is acquired by the foreigner, and this demand strengthens sterling ; but there is a corresponding liability as the foreign deposit may be withdrawn at any time at the will of its holder. It is, therefore, much more difficult

to pair off the purchases and sales of sterling which occur in connection with the movements of these deposits.¹

This, of course, is only a technical point. It is quite possible to meet the difficulty by means of arrangements between Central Banks and in other ways. But the difficulty was there, and made the working of the post-War gold standard less easy, even though it is untrue to suggest that in itself it was a major cause of international breakdown.

Nor is it true to suggest that the existence of a large volume of Treasury Bills necessarily hampered the Bank of England in its ability to control the money market. As long as there is no running budgetary deficit, the Government always has the power to squeeze other borrowers out of the market. If the Debt is not increasing, the existence of a large Floating Debt does not directly hamper the power of the Central Bank to bring deflationary pressure to bear, provided—and this is an essential proviso—that the Government is prepared to pay the substantially increased cost on this Floating Debt which may be necessary to make monetary restriction effective. There is, of course, always the danger that the bias of the authorities may be in favour of cheap money in order to keep down Debt charges. But it is such a bias, and not the existence of the large Floating Debt, which is the obstacle which hampers the freedom of action of the Central Bank.

In the immediate post-War period the danger of the Government being forced to borrow from the Bank of England was a result of the Treasury's desire to prevent rates from rising, a desire which might have been defended on grounds other than those of trying to keep down Debt charges. This danger was reduced once normal credit was restored. According to Treasury evidence before the Colwyn Committee, the Government had been in no danger of being forced into the Bank

¹ *The Exchange Equalization Account*, pp. 85-87.

against its will since the end of 1923.¹ On the other hand, it was admitted that the danger might recur in the event of a "future national emergency"²; further, a variable rate of interest "might impose heavy burdens on the Exchequer at inconvenient moments, and there was a danger that this inconvenience might deflect the judgment of the Treasury in times of crisis".³ Against this, Keynes stressed the economy to the national finances which would come from a large Floating Debt, and on the whole it must be admitted that if on the average the rate of interest paid is substantially less, the fact that it varies is hardly an insuperable objection. The Committee finally came down in favour "of a steady, gradual reduction" of the Floating Debt.

The arguments so far considered are not conclusive either way. Against a large Floating Debt was the fact that it tended to drive out commercial bills; on the other hand, it is difficult to maintain that the trader was seriously inconvenienced thereby. In favour of maintaining Treasury Bills in the market on a large scale was the reduction in the cost of the Debt. It cannot be argued that a large Floating Debt reduced the power of the authorities in the last resort to control the money market, but it was true that officials might have bias in favour of cheap money, and that difficulties would arise in abnormal situations. To this could fairly be answered that abnormal situations call for abnormal measures, and that the Government is in a poor way indeed if it must permanently pay several millions a year more than it need as a safeguard against the bias of its own officers.

But there are other considerations to be taken into account. Did the maintenance of Treasury Bills at a high level keep up or keep down long-term interest rates?

¹ *Report*, para. 100. But in fact such an occasion came while the Committee was sitting, in November 1925, when the Bank was forced to take up Bills. See Sir Ernest Harvey's evidence before the Macmillan Committee, Q. 7596.

² Para. 101.

³ Lord Bradbury, summarized in para. 99.

If a large part of outstanding Treasury Bills had been converted into long-term debt, the first effect would have been to drive down short rates, and to force up long, in order to provide an inducement to investors to make the necessary change in their investment holdings. But it would have been easier to force short-term rates down than long-term rates up. The yield on Consols was around $4\frac{1}{2}$ per cent throughout most of the post-War period ; but public opinion would probably have thought a 4 per cent rate more likely in the long run than one of 5 per cent, so that the yield would probably have fallen more easily than risen. We are therefore faced with a probable position in which in the short run short-term rates fall drastically and long-term rates barely rise as a result of the funding of Floating Debt. In the longer period it seems more than likely that the long-term rate would have begun falling too. On the whole it would appear that the maintenance of a large Floating Debt tended to keep up long-term rates.

This argument is not a very conclusive one, but there are two pieces of evidence which go to support it. The first is the steady and substantial fall which was occurring between 1922 and 1929 in the rate at which new industrial debentures could be issued. This movement was not reflected in a falling yield on Consols ; towards the end of the period the tendency was slightly the other way. This does suggest that the existence of a large Floating and early maturing Unfunded Debt on which high rates of interest could be secured indirectly maintained the yield on long-term Government debt. The second piece of evidence is the experience of conversion in 1932. The drop was so large that it is difficult to believe that a more enterprising debt policy in 1923 or 1924 could not have reduced the yield on long-term Government Securities still further.

Had it been possible to do so, home industry might have benefited in a curious way. A fall in the long-term rate on safe borrowing might have tempted established

businesses into the market on a greater scale from 1926 onwards. The characteristic of the 1928 new issue boom is the part played by the speculative appeal. It seems paradoxical to suggest that a fall in long-term interest rates would have attracted a better class borrower and reduced the appeal of the more speculative element. But it might have had a considerable effect on investors' judgments by making them more modest in their expectations. Money might have gone into housebuilding and other relatively safe employments rather than into the purchase of the more extravagant kind of security which was appearing so frequently between 1926 and 1929.

But undoubtedly real benefits would have followed from a large funding operation before Britain's return to the gold standard. It would have exposed the extent to which the pound was being supported by foreign balances. It would also have tested the character of those balances. Balances held for investment purposes would have been placed in long-term securities ; more speculative balances would have been frightened away.

There is one final question which has yet to be examined : whether a reduction in the Floating Debt is deflationary. It has often been argued, especially by bankers, that a reduction in Treasury Bills would be deflationary because it depleted the short-term assets of the banks. This is an argument which needs scrutinizing very carefully. During depression, when profitable assets are hard to come by, a reduction of this kind, so far from being deflationary, will only strengthen the inducement to the banks to make new advances and to find credit-worthy borrowers. It is difficult to see how anyone can seriously suggest that at a time when the banks have great difficulty in lending their money they will be prevented from making further loans because one more borrower reduces the scale on which he takes assistance. It is quite irrelevant that in the process the volume of deposits outstanding may be reduced and the cash ratio raised : the inducement to lend is stronger than ever.

During a boom, on the other hand, the position may be different. In this case the banks may have extended their operations to the maximum by dovetailing assets of different degrees of maturity, and the reduction in the supply of a certain type of asset might cause the scale of operations to be reduced.¹ But this cannot possibly happen when business is slack, and it would not have happened in 1923 or 1924.

6. THE HANDLING OF THE DEBT, 1926-36

The monetary history of the last ten years has had its dramatic moments : first, the Stock Exchange boom here and more especially in the United States ; then the slump with its acute crises ; the departure from gold in September 1931 ; the conversion operation in the summer of 1932 ; the subsequent period of cheap money.

From 1926 onwards the structure of the internal Debt changed as follows :

	March 31st, 1926	March 31st, 1932	March 31st, 1936
	Per cent	Per cent	Per cent
Floating Debt	11	10	7
Short-term Unfunded Debt	25	14	9
Long-term Unfunded Debt	48	53	32
Funded Debt	16	23	52

Bills issued to the Exchange Equalization Account are excluded.

Up to 1932 the most striking change was a reduction in the proportion which the short-term Unfunded Debt bore to the rest, though this was to some extent offset by the fact that the long-term Unfunded Debt was obviously going to call for early attention. The 1936 figures show the position with all possible conversions out of the way.

There were certain changes in the actual items of which the Debt was composed during the period. Towards the

¹ But even this is doubtful in the case of a reduction in Treasury Bills ; banks would have all the greater incentive to develop Trade Bills by differentiating the character of their Advances.

end of 1928, with incorporation of the Currency Note Account in the Bank of England, Department Ways and Means decreased by between £100 to £120 million and Treasury Bills increased accordingly ; but this change is merely one of form. In 1927 there was an issue of 4 per cent Consols which increased the Funded Debt, and in 1929 some 5 per cent Conversion Loan was made available, partly for cash and partly in exchange for Treasury Bonds. These last two operations account for the fall in the proportion of short-term Unfunded Debt before 1932.

At one point in the period, however, the clash of interest made possible by the existence of a large Floating Debt became acute. During July, August and September 1929 there was a drain of gold to France, at the same time as high Call Loan rates were attracting fund to New York. The tendency in London was for rates to rise, and the authorities were faced with a dilemma either of putting up Bank rate or of allowing the Government to ease the financial position by borrowing on Ways and Means. In July, Snowden, then Chancellor of the Exchequer, was publicly expressing the hope that a rise in Bank rate would be unnecessary. It is quite arguable that Bank rate should have been put up early in August, and the increased cost of the Floating Debt was probably a substantial factor in preventing such a rise taking place. At the end of August the quotas of Treasury Bills were being placed with increasing difficulty. At the end of September, Bank rate was raised to $6\frac{1}{2}$ per cent and almost immediately the exchange recovered. This is not necessarily a case of cause and effect, because funds were released by the Stock Exchange collapse in New York, and it cannot be assumed that a rise in early August would have been followed by liquidation in New York. But it is impossible to escape the conclusion that if the Bank rate was to have been put up as high as $6\frac{1}{2}$ per cent at all, it should have been done long before the end of September. Here we have a possible example of Debt policy and monetary policy coming into conflict.

Since 1932 the structure of the Debt has been improved substantially. The Conversion operation in 1932, which reduced the interest on War Loan from 5 per cent to $3\frac{1}{2}$ per cent, was strikingly successful. The setting up of the Exchange Equalization Account has brought a technique by which assets of an appropriate character are held against uncertain foreign deposits. The quantity of Treasury Bills held by the banks and the market has been reduced to a comparatively low level, if we exclude the holding of the Account. At present the structure of the Debt is sound. The problems which emerge at the present time are connected rather with what the Debt may become than with what it is. In particular, there is rearmament, which may add financial problems of its own in the near future.

VI

THE INFLUENCE OF EXCHANGE CONSIDERATIONS ON MONETARY POLICY

1. THE STABILIZING OF THE POUND

A MAJOR force shaping monetary policy in the post-War years—and thus exerting an indirect influence on the financing of enterprise—was consideration of the exchange value of the pound. Already in August 1918 the Cunliffe Committee had expressed the view that “the conditions necessary to the maintenance of an effective gold standard in this country no longer exist, and it is important that they should be restored without delay”. Throughout the years after the War there was implicit in people’s minds the assumption that steps would be taken to restore the gold standard as soon as opportunity arose, and the fact that any private citizens enjoyed the right to take a five-pound note to the Bank of England and demand five golden sovereigns in exchange—though he could not melt them down or take them out of the country—stimulated this belief. It is against this background that the actual movements of the sterling-dollar exchange should be considered.

For the greater part of the War, the dollar exchange had been pegged by arrangement with the banking house of J. P. Morgan in New York at the rate of \$4·76 to the pound. In March 1919 this arrangement came to an end, and the pound fell. The fall became more rapid towards the close of the year, and by February 1920 the pound was down to \$3·40. It recovered somewhat after that, but fluctuated below \$4 till the autumn of 1921. During

most of 1922 it was between \$4.40 and \$4.50. In the spring of 1923 it reached as high as \$4.70, but was down again to \$4.20¹ in January 1924. Throughout 1924 it was tending to rise, and in the opening months of 1925 it rose towards the old gold parity till it was established at \$4.86.

That, in short, is the history of the pound and its post-War fluctuations. These movements were due to a number of factors, both normal and abnormal. Leaving aside movements of relative prices in different countries, it must be remembered that in the beginning the international trade position was unbalanced, with a Europe stripped of resources on one side, and overseas countries having difficulties in disposing of their goods, on the other. Superimposed upon this was a series of international payments for War debts or for Reparation which was constantly affecting the exchanges. The freedom of the exchanges itself facilitated speculation; in consequence news of political or industrial disturbance unsettled the exchanges unduly. It is often quite impossible to disentangle the various causes which led to exchange fluctuations during the period.

It will be noticed, however, that the history of the pound has two distinct phases. Till the autumn of 1921, the pound is for the most part below \$4; from the beginning of 1922 it is above \$4.40. It would appear that the fall in prices in Great Britain had been having its effects, and that the international trading position was beginning to stabilize itself. At one moment the pound even touched \$4.70, only to fall back under the pressure of political events.

There is no evidence of a conscious policy of deflation in order to prepare the way for a return to the gold standard in 1925. A period of high Bank rate in 1920 and the beginning of 1921 was, of course, highly deflationary in character, but the authorities' action can more easily be explained as an attempt to prevent an

¹ First Labour Government came into office in January.

internal boom and to facilitate government financing,¹ than by any specific desire to raise the exchange value of the pound in terms of the dollar. Subsequently there came a period of cheap money, accompanied by grave unemployment. Hopes of a rise in the pound seemed to be based on the assumption of an upward movement of prices in the United States rather than on a further fall of prices in Great Britain. From the beginning of 1922 to the middle of 1924 unemployment was falling, though the position was still unhappy, and money rates in London were below those of New York. Even then for most of the time the pound was within 10 per cent of the pre-War parity with the dollar.

In the middle of 1923 Bank rate was put up from 3 to 4 per cent, but again there is no convincing evidence that this was inspired by a desire to strengthen the pound.

This movement was dictated less by considerations of international trade, formerly the main factor in Bank rate, than by the suspicion that easy money here was being used to build up an unhealthy stock exchange speculative position both on domestic and foreign account, and the fall in securities which followed the movement rather suggested confirmation of the suspicion and justification of the movement. Our level of money rates was, of course, below that of the United States, where the New York Federal Reserve rate had been raised to $4\frac{1}{2}$ per cent in February; but, apart from this incident, the money position has remained remarkably oblivious to fluctuations of foreign Bank rates.²

But a significant change in policy took place in 1924, when a deliberate effort appears to have been made to strengthen the pound. Rates were reduced in New York; in London, on the other hand, while Bank rate remained at 4 per cent throughout the year, a special arrangement was reached in July between the Bank of England and the joint-stock banks by which the latter raised their rates to the Discount Market. By measures

¹ But their hands had been tied by the limitation on the note issue.

² *Economist*, February 16th, 1924, p. 305.

such as these, London money rates were kept above those in New York, Bank rate in London remaining the same.

	London 3-Months Bank Bills	New York Prime Bankers' Acceptances, 90 Days
1922	2·64	3·50
1923	2·72	4·09
1924		
January . . .	3·33	4·07
February . . .	3·56	4·07
March . . .	3·19	4·04
April . . .	3·06	3·94
May . . .	3·05	3·15
June . . .	3·04	2·47
July . . .	3·61	2·02
August . . .	3·79	2·10
September . . .	3·76	2·19
October . . .	3·73	2·23
November . . .	3·72	2·39
December . . .	3·74	2·90
Year . . .	3·47	2·96
1925		
January . . .	3·81	3·00
February . . .	3·81	3·08
March . . .	4·50	3·25
April . . .	4·31	3·18
May . . .	4·56	3·15
June . . .	4·44	3·25

The change had thus been brought about without anything which could be construed as deflationary.

The pound began to appreciate rapidly. Two factors were responsible for this. The first was the higher return which could now be earned in London as compared with New York. But short-term funds in search of income will hardly move to take a slightly higher return unless they are assured that there will be no capital loss owing to a weakening of the pound. This brings in the second factor : owners of short-term balances felt certain that,

far from depreciating, the pound was likely to appreciate still further. There were, no doubt, general grounds for this belief, but these were reinforced—as several writers have pointed out—by a concrete piece of evidence. The Gold and Silver (Export Control, Etc.) Act of 1920 was due to expire automatically at the end of 1925. Special Parliamentary action would therefore be required to prevent Great Britain going back to the gold standard automatically at the end of the year. Shrewd observers took the view that the Government would prefer to return to gold before this happened, and so to avoid having to ask for Parliamentary sanction for the continuance of the embargo on gold exports by the general public.

The two factors strengthened each other. Floating balances in London not only earned a higher return, but had a good chance of a capital gain balanced by only a slight chance of a capital loss. As a result there was a rapidly increasing demand for sterling, and the pound rose. In due course the decision was taken to return to the gold standard, and this was ratified by the Gold Standard Act of 1925, by which the Bank of England was obliged to sell gold bullion in quantities of not less than 400 ounces of fine gold at a rate of 77s. 10½d. per ounce of standard gold.

Why was the particular time chosen for stabilizing the pound? Partly, no doubt, because the Dawes Plan was putting Germany on her feet again, and the opportunity of international currency restoration seemed too good to be missed; partly because the Gold and Silver (Export Control, Etc.) Act was due to expire in 1925; and partly because the Kemmerer-Vissering Report had in 1924 recommended that South Africa should go back to the gold standard forthwith.¹

The consequences were unhappy enough. The burden

¹ In fact, South Africa did not follow the advice given in that Report, but it must have suggested strongly to the authorities in London that if Britain did not return to the gold standard fairly soon, South Africa would precede her.

of debt was increased as prices fell. The old established export industries were hit, though the charge must not be exaggerated since a lower level for the pound would only have served as a palliative and would not have enabled them to avoid certain fundamental readjustments. Opportunity was given for the franc and other currencies to be stabilized at a level artificially low in comparison ; we had tied our banks in advance, without preparing in any way for such an eventuality.

But there is a far more important criticism which must be made, when the conditions under which restoration took place are taken into account. The gold exchange standard of the post-War period involved one very significant departure from the gold standard of the years before the War. It envisaged a much larger volume of short-term claims upon the main financial centres. The economy in the use of gold resulting from counting claims on gold as equivalent to gold for monetary reserve purposes was a rational improvement in monetary technique. But for its success it depended on the main international reserve centres being in a sufficiently liquid position to meet any claims that might arise. This liquidity could have been secured by large gold reserves, or by a large volume of liquid counterclaims. Britain did not have a large gold reserve while her liquid claims on foreign centres were low.¹

It therefore followed that if the post-War gold standard was to work, Britain could become the repository for foreign balances only to the extent to which she was able to acquire gold or short-term claims on foreign countries. The gold exchange standard made it necessary that someone should practise " international deposit banking ", but it was essential that the someone in question should be in

¹ This had even been the case before the War, when a scarcity of liquid assets had led to frequent movements of Bank rate. Palgrave and Lord Swaythling had both suggested that English banks should hold a stock of foreign bills. (See E. G. Peake, *An Academic Study of Some Money Market and Other Statistics*, 2nd edition, p. 85.) But the position was much worse after 1925 and 1926.

of debt was increased as prices fell. The old established export industries were hit, though the charge must not be exaggerated since a lower level for the pound would only have served as a palliative and would not have enabled them to avoid certain fundamental readjustments. Opportunity was given for the franc and other currencies to be stabilized at a level artificially low in comparison ; we had tied our banks in advance, without preparing in any way for such an eventuality.

But there is a far more important criticism which must be made, when the conditions under which restoration took place are taken into account. The gold exchange standard of the post-War period involved one very significant departure from the gold standard of the years before the War. It envisaged a much larger volume of short-term claims upon the main financial centres. The economy in the use of gold resulting from counting claims on gold as equivalent to gold for monetary reserve purposes was a rational improvement in monetary technique. But for its success it depended on the main international reserve centres being in a sufficiently liquid position to meet any claims that might arise. This liquidity could have been secured by large gold reserves, or by a large volume of liquid counterclaims. Britain did not have a large gold reserve while her liquid claims on foreign centres were low.¹

It therefore followed that if the post-War gold standard was to work, Britain could become the repository for foreign balances only to the extent to which she was able to acquire gold or short-term claims on foreign countries. The gold exchange standard made it necessary that someone should practise " international deposit banking ", but it was essential that the someone in question should be in

¹ This had even been the case before the War, when a scarcity of liquid assets had led to frequent movements of Bank rate. Palgrave and Lord Swaythling had both suggested that English banks should hold a stock of foreign bills. (See E. G. Peake, *An Academic Study of Some Money Market and Other Statistics*, 2nd edition, p. 85.) But the position was much worse after 1925 and 1926.

a position to lose gold freely and to call in claims on the rest of the world.

The steps taken to keep short-term rates in London above those in New York attracted liquid funds to London. No gold reserve was built up against this; it was a purely artificial measure raising the value of the pound. The method by which the gold standard was restored in Great Britain thus made her a great international deposit banker, without the liquid assets to carry out the task, and she was never able to strengthen her position subsequently. This is the explanation of the dangers in which this country found itself, which in the end led to the collapse of 1931.

Had stabilization taken place when short-term rates in London were below short-term rates in New York, many of the subsequent difficulties might not have occurred. If the gold standard had been restored under such conditions, a movement of balances from New York to London would have been accompanied by a corresponding movement of gold—and American gold reserves were better fitted to take the strain.

It was known that the restoration of the gold standard was accompanied by an increasing demand for sterling by those who had short-term balances. Professor Gregory, writing in 1926, came to the conclusion "that on the face of it, in the last two years (*i.e.* 1924 and 1925) we have borrowed, in the shape of increasing foreign balances in London and in other ways, a sum considerably over £100 millions. We have lent long £220 millions and borrowed short £130 millions."¹ On top of this came further short-term borrowings—made possible by a flight from the franc—during 1926 when the Coal Lock-out and the General Strike completely disorganized Britain's balance of payments. The stabilization of the pound was achieved by attracting short-term balances against which we had failed to hold the necessary liquid assets.

But however great the effects of stabilization in other

¹ T. E. Gregory, *The First Year of the Gold Standard*, p. 77.

a position to lose gold freely and to call in claims on the rest of the world.

The steps taken to keep short-term rates in London above those in New York attracted liquid funds to London. No gold reserve was built up against this; it was a purely artificial measure raising the value of the pound. The method by which the gold standard was restored in Great Britain thus made her a great international deposit banker, without the liquid assets to carry out the task, and she was never able to strengthen her position subsequently. This is the explanation of the dangers in which this country found itself, which in the end led to the collapse of 1931.

Had stabilization taken place when short-term rates in London were below short-term rates in New York, many of the subsequent difficulties might not have occurred. If the gold standard had been restored under such conditions, a movement of balances from New York to London would have been accompanied by a corresponding movement of gold—and American gold reserves were better fitted to take the strain.

It was known that the restoration of the gold standard was accompanied by an increasing demand for sterling by those who had short-term balances. Professor Gregory, writing in 1926, came to the conclusion "that on the face of it, in the last two years (*i.e.* 1924 and 1925) we have borrowed, in the shape of increasing foreign balances in London and in other ways, a sum considerably over £100 millions. We have lent long £220 millions and borrowed short £130 millions."¹ On top of this came further short-term borrowings—made possible by a flight from the franc—during 1926 when the Coal Lock-out and the General Strike completely disorganized Britain's balance of payments. The stabilization of the pound was achieved by attracting short-term balances against which we had failed to hold the necessary liquid assets.

But however great the effects of stabilization in other

¹ T. E. Gregory, *The First Year of the Gold Standard*, p. 77.

directions, its direct effect on the capital market was small. During part of 1925 there had been an informal ban on foreign issues, in order to strengthen sterling, but this had meant that more money was available for home industry. After stabilization the trend in new issues was upwards, culminating in the boom of 1928-29 ; stabilization—by making prospects appear more favourable—probably stimulated activity far more than hindering it through rates being kept somewhat higher on account of the restored international standard. If the export industries were hit, there was no hindrance on new developments finding finance in the stock market. Stabilization strengthened the capital market, rather than the other way about.

2. THE POST-WAR GOLD STANDARD

From 1925 to 1931 London was faced with large short-term liabilities. But any serious attempt to build up a larger gold reserve would have meant a powerful deflationary policy at home, and for the most part the Bank of England had to be content with preventing inward movements of gold from having their full effect on the monetary system.

The policy pursued by the Bank can perhaps best be illustrated in tabular form. The following table enables us to gauge, quarter by quarter, the Bank of England's policy in regard to gold movements. It should be kept in mind (i) that when changes in the "cash basis" are of the same size and in the same direction as gold movements, the Bank has been allowing gold movements to make themselves felt automatically ; (ii) that when changes in the cash basis are greater than gold movements, but in the same direction, the Bank has been allowing gold movements to have a disproportionate effect ; (iii) that when changes in the cash basis are less than gold movements, but in the same direction, the Bank has been partially offsetting ; (iv) that when the cash basis is

unchanged while gold movements have taken place, the Bank is exactly offsetting ; (v) that when changes in the cash basis are in the opposite direction to gold movements, the Bank is counteracting. ("Gold movements" is used for the more cumbersome "Changes in Coin and Bullion in Issue Department".)

GOLD MOVEMENTS AND THE CASH BASIS, 1925-31

(£ million)

		Liabilities of Banking Depart- ment	Notes in Circulation	Total "Cash Basis" (Liabilities + Notes)	Change from Previous Quarter	Coin and Bullion in Issue Department	Change from Previous Quarter
1925	III	145.6	386.0	531.6	..	160.5	..
	IV	144.3	380.2	524.5	- 7.1	146.9	- 13.6
1926	I	143.5	373.6	517.1	- 7.4	143.6	- 3.3
	II	141.7	382.2	523.9	+ 6.8	147.0	+ 3.4
	III	139.7	376.6	516.3	- 7.6	152.4	+ 5.4
	IV	141.8	373.0	514.8	- 1.5	151.4	- 1.0
1927	I	141.8	365.7	507.5	- 7.3	149.5	- 1.9
	II	135.9	378.2	514.1	+ 6.6	151.4	+ 1.9
	III	134.7	378.0	512.7	- 1.4	149.9	- 1.5
	IV	137.4	376.7	514.1	+ 1.4	149.7	- 0.2
1928	I	135.5	369.0	504.5	- 9.6	155.8	+ 6.1
	II	135.2	374.1	509.3	+ 4.8	161.3	+ 5.5
	III	137.9	376.2	514.1	+ 4.8	172.4	+ 11.1
	IV	132.9	372.7	505.6	- 8.5	161.0	- 11.4
1929	I	135.0	358.4	493.4	- 12.2	152.1	- 8.9
	II	131.6	361.4	493.0	- 0.4	159.4	+ 7.3
	III	134.0	367.3	501.3	+ 8.3	142.1	- 17.3
	IV	128.8	362.1	490.9	- 10.4	134.0	- 8.1
1930	I	135.4	351.7	487.1	- 3.8	151.4	+ 17.4
	II	135.2	359.4	494.6	+ 7.5	159.1	+ 7.7
	III	130.5	363.2	493.7	- 0.9	154.7	- 4.4
	IV	134.2	360.6	494.8	+ 1.1	155.4	+ 0.7
1931	I	127.6	350.0	477.6	- 17.2	142.0	- 13.4
	II	128.9	353.9	482.8	+ 5.2	152.0	+ 10.0
	III	139.6	356.4	496.0	+ 13.2	139.7	- 12.3
	IV	149.1	359.0	508.1	+ 12.1	125.3	- 14.4

(Source.—Statistical Abstract of the United Kingdom. The liabilities of the Banking Department consist of Public and Other Deposits, together with an item of some £18 million for Capital and Rest. Notes in Circulation includes both Bank and Currency Notes.)

It is significant that the total liabilities of the Banking Department and the total of notes in circulation taken together remain fairly constant with a downward trend

to the middle of 1931. There was no sudden change in the cash basis of the British monetary system, and there is no evidence of deflation. In fact throughout the period the total deposits of the London Clearing banks were steadily going up owing to a slight reduction in the banks' cash ratios.

LONDON CLEARING BANKS' DEPOSITS
(Yearly Averages)

			£ million
1925	.	.	1602·7
1926	.	.	1608·9
1927	.	.	1658·6
1928	.	.	1708·9
1929	.	.	1738·0
1930	.	.	1740·8

(Source.—Macmillan Report)

Up to 1929 the policy of the Bank seems to be clearly defined. It would appear to have been to prevent inflows of gold from making themselves felt, but to allow outflows to have their effect. Thus there was an inflow of gold in the second and third quarters of 1926. The average gold reserve in the first quarter of the year was £144 million; in the third quarter it was £152 million. But this increase of £8 million was not reflected in the total cash basis, which fell by £1 million over the same period. Again, there was a large gold inflow in the first three quarters of 1928. In the last quarter of 1927 the gold holding was £150 million. In the third quarter of 1928 it was £172 million, but total cash remained at £514 million at both those points of time. After that, the Bank lost gold and the gold reserve was down to £152 million in the first quarter of 1929; during the same period the cash basis fell by £21 million to £493 million. The Bank was offsetting gold inflows but allowing gold outflows to make themselves felt.

In the third quarter of 1929 there was a complete change of policy, and we have the startling situation of a drain of gold of over £17 million accompanied by an

increase in the cash basis of over £8 million, this involving a large increase in the Bank's holdings of Government Securities. What is the explanation? It will be remembered that this was the time when the Wall Street boom, when soaring Call Money rates were acting as a magnet and attracting floating balances from London to New York, coincided with a heavy drain of gold to France. These factors explain the loss of gold, and it would, perhaps, have been understandable if the Bank had offset a large part of the loss owing to the abnormal circumstances. But the Bank not only offset the whole of the gold loss, but bought securities to the tune of £8 million over and above that. The only explanation would appear to be that the financial requirements of the Government were such that the Bank was giving assistance to the Treasury by taking up vastly increased quantities of Government Securities on its own account. As we have already seen,¹ at the end of August Snowden had been appealing to the money market to take up Treasury Bills in order to avoid a rise in Bank rate. It is difficult to escape the conclusion that the needs of the Treasury were the dominating factor at this point.

In 1930, when the gold returned, it was duly offset, so that no permanent increase in the cash basis resulted. Again, in the first quarter of 1931 a loss of gold was accompanied by more than an equivalent contraction of the cash basis, so that the old policy seems to have been in force again. During the critical periods in the third quarter of 1931, however, the Bank was again under pressure to increase the cash basis even though gold was flowing out on an abnormal scale. But at this time it is completely understandable: this was a period of crisis both national and international, and it was in accordance with the Bank's traditions and practice that it should do its utmost to support the market. In fact it seems that the Bank pursued a straightforward policy throughout the period with the exception of the one patch in 1929.

¹ See above, p. 99.

It failed in the task of building up new short-term assets to be held against the short-term liabilities which London had acquired on its return to gold. But it did succeed in preventing the position from getting worse.

The damage had been done before 1928. As we know, there had been considerable claims on London in the years just after the War. Subsequently Britain had been participating in a number of international loans designed to stabilize the currencies of countries which had found themselves in difficulties. From the middle of 1924 the pound had been attractive to floating balances, and T. E. Gregory has put our short-term borrowings during 1924 and 1925 at over £100 million. Thereafter the industrial troubles of 1926 weakened Britain's balance of payments, and the short-term liabilities accumulated further. "We think it probable that in the period between the return to the gold standard and the end of 1927 London's net liability was increasing substantially, since the French balances abroad were mainly built up during that period."¹

The Macmillan Committee collected figures of London's position on short-term account, which they summarized as follows : ²

End of Year	Deposits and Sterling Bills held in London on Foreign Account *	Sterling Bills accepted on Foreign Account	Net Liability of London
	£ million	£ million	£ million
1927	419	140	279
1928	503	201	302
1929	451	176	275
1930	435	161	274
1931	407	153	254
(March)			

* Exclusive of sterling bills held by foreign banks in their own custody.

The figures are admittedly incomplete, but at the same time they do suggest that from 1928 onwards Britain's position was not getting worse. "These figures show that in the last three years so far from there having been a

¹ Cmd. 3897 of 1931, para. 261.

² Para. 260.

large increase in London's short-term liabilities, there has been a small decrease in their amount, so far as we have been able to ascertain it."¹ The new issue market was floating a considerable volume of issues for overseas, but there is no evidence that it was excessive in relation to the available surplus on the balance of payments when we have regard to the proportion of these issues taken up by foreigners, and to the constant inflow of funds on capital account in repayment of past loans. On the other hand, it might be argued that Britain was lending too much abroad by purchasing existing securities on foreign stock markets, but it does not follow that this exceeded the extent to which foreigners were buying securities in Great Britain.

The position was a difficult one. The pound was always faced with potential dangers, but nothing could be done to reduce them without increasing unemployment at home and possibly producing a crisis in some of the economically weaker countries abroad. It is arguable that as far as prices were concerned the pound and the dollar had come into equilibrium by 1928.² But even if this were the case, it would not mean that Britain's short-term assets had been increased sufficiently to counterbalance the short-term liabilities which had been inherited from the original stabilization and its immediate aftermath. For practical purposes there was only one remedy: that of going off the gold standard and starting all over again. The force of events was such that this remedy had unwillingly to be applied in September 1931. Only extreme measures, such as a general mobilization of securities, could possibly have maintained the position.

3. POLICY SINCE SEPTEMBER 1931

It would be out of place here to discuss at length the circumstances surrounding the movements of the pound

¹ Para. 261.

² See N. F. Hall, *The Exchange Equalization Account*, pp. 72-73.

since the departure from gold in the autumn of 1931. The general circumstances are clear enough ; the actual details are largely matters for conjecture, and are discussed at some length in studies such as N. F. Hall's *Exchange Equalization Account*, already referred to.

The main features are two. In the first place, the freedom which the authorities gained once they were relieved of the obligation to meet claims in gold enabled them to tackle with vigour the problem of the National Debt. The conversion of 5 per cent War Loan was the beginning of a very substantial reduction in interest rates. This has not only enabled the cost of the National Debt to be substantially reduced, but has given industrialists opportunity to secure a lightening of the charges which they have to pay on loans. Cheap money is thus one result of the freeing of the exchange.

The second feature was the setting up of an Exchange Equalization Account in order to control the exchanges and, more specifically, to offset inward or outward movements of floating balances. As the demand for sterling increases, the Account is in a position to supply sterling and to take over balances in foreign countries. These balances it may—and usually does—turn into gold. Its gold holdings are undoubtedly substantial, but no published information is given of the activities of the Account.

In the converse case of balances being repatriated, the Account is in a position either to release its foreign assets or to allow gold to flow out. It is thus an institution which can automatically provide assets to be held against any short-term claims on London. The problem of floating balances has thus been dealt with and, on the assumption that the Account has done its work effectively, such difficulties should not arise in the future. Britain is thus in a much stronger financial position now than she was in 1928 or 1929.

The devaluation of other currencies since 1931—Germany is the only country which professes to be maintaining the value of its currency in terms of gold, and

Germany has, in effect, already secured most of the advantages of devaluation—has certainly prepared the way for a more balanced position. At the moment, currencies are more or less pegged through informal agreements governing the pound, dollar and franc, and exchanges are, therefore, relatively stable. More than this is impossible as long as political difficulties overshadow the international scene. It is an open question whether the advantages of an international system with stable exchanges can be maintained in the long run without undue sacrifices in other directions. At the moment, political difficulties make such a possibility appear remote, but at least Britain should be in a position, with the assets which the Account has put at her command, to play her part in an international system while avoiding such difficulties as faced her before 1931.

To sum up the general run of the argument, certain aspects of post-War financial policy—in particular the action taken in 1920–21, and again in 1924–25—are open to criticism ; yet the fact is that the capital market was hampered surprisingly little. The remarkable feature of the period is the freedom it enjoyed at a time when the competing claims of Government finance or of exchange considerations were inevitably strong. If anything, the capital market had too much freedom ; some qualitative control of new issues in 1920 and again in 1928 might have been all to the good, as we shall see in discussing the flotations of those years. In so far as monetary policy is concerned, the industrialist in search of finance would seem to have no strong ground for complaint, whatever his legitimate grievances in other directions—as an exporter, for example. This does not, of course, mean that the capital market was necessarily working satisfactorily, but that blame for its shortcomings can hardly be laid at the door of restrictive policies pursued by the authorities.

PART THREE

THE LONG-TERM CAPITAL MARKET

VII

THE NATURE OF THE CAPITAL MARKET

1. SCOPE OF THE MARKET

IN its widest sense the capital market consists of a series of channels through which the savings of the community are made available for industrial and commercial enterprise and for public authorities. It embraces not only the system by which the public takes up long-term securities directly or through intermediaries, but also the elaborate network of institutions responsible for short-term and medium-term lending. A definition so comprehensive that it includes banks and building societies within the limits of the capital market may at first sight seem surprising. But credit is a form of temporary capital ; the absence of short-term lending would, in effect, mean an increased necessity for long-term capital. If the capital market is to be seen in true perspective, the various channels which enable business enterprises to economize in their use of long-term capital must be included in the survey. And credit is clearly an important part of the system by which the savings of the public reach those who can put them to profitable use.

But usually the conception of the capital market is restricted to long-term investment and, even more arbitrarily, to long-term investment in the form of marketable securities. This latter restriction may prove misleading if it disguises the fact that many types of investment in business do not and cannot take a form which results in the production of securities which can be freely bought and sold. At all times money is being used to

finance the business of ordinary partnerships and private companies, which are debarred from making any appeal to the general public. It must be emphasized that the Stock Exchange and the new issue market—which for obvious reasons arouse most attention—are only a part of a much wider whole in which must be included loans, mortgages and other types of private financing which seldom appear in statistics and about which little information is available. Some of the most important channels through which the savings of the public reach industry are the least spectacular ; hence, it is important in any analysis of investment in post-War Britain to scrutinize those methods of financing which are liable to escape notice, but which nevertheless are of vital importance, especially in the earlier stages of the development of new enterprise.

Further, it must be remembered that the picture is never a static one ; under the impact of events the channels of saving are always liable to change their course. Some methods of saving grow in relative importance ; new types of business come to demand capital in a new form ; fresh intermediaries come into being to bring together the public that makes the savings and the concerns that put them to productive use. But with so many factors making for change, there is no guarantee that progress is steady and balanced and that different types of saving ultimately find appropriate types of investment. Hence, if it is to be effective, any analysis of the working of the capital market must be wide in its scope.

2. THE CHANNELS OF SAVINGS

The savings made by the community, that is those portions of individual incomes that are set aside instead of being devoted to consumption expenditure, sooner or later find their way into a number of recognized channels.

First, the banks. The banking system—with over ten million accounts—acts as an automatic collector of

savings in small amounts ; these savings are employed in various directions, mainly being lent out to industry and commerce and private individuals for relatively short periods, or used for the purchase of high-class securities. In the process the banking system fulfils one function which is sometimes overlooked : it moves savings in one part of the country to businesses in another, and so provides a mobility of capital which would be impossible with organizations on a lesser scale.

Second, savings banks. These collect small savings, which for the most part they employ in the purchase of long- and short-term Government Securities ; the most conspicuous example is the Post Office Savings Bank. In this category might also come various other non-profit-earning bodies—for example, trade unions—which have large sums to invest.

Third, building societies. These are a special type of institution borrowing direct from the public in order to finance the purchase of house property. Building societies have grown enormously in importance since the War, and at present are increasing their resources by something like £50 million a year.

Fourth, insurance companies. The sums in the hands of insurance companies are also growing by something around £50 million each year. These funds are spread over different types of investment. Insurance companies are not only very large holders of Stock Exchange Securities, but also advance considerable sums on mortgage, and a number of them to a small but increasing extent are financing enterprises which find it difficult to get money through the new issue market or from the banks.

Fifth, direct purchase of securities. Members of the public are not only investing indirectly by putting their money on deposit with institutions and by buying insurance policies ; they are also buying securities themselves direct. They buy Government Bonds or the shares of public companies, and in addition invest in investment trusts and similar institutions which spread risks over a

wide field. Private individuals and corporate institutions are thus investing side by side in the stock market.

Sixth, mortgages and other private direct investments. In spite of the growth of public joint-stock enterprise, the number of partnerships and private companies is still enormous.¹ Most new companies are started with the aid of money provided or raised by those who propose to carry on a particular undertaking, and it is only after the concern has been going for some time that it is in a position to borrow on any scale from financial institutions or ultimately to make an appeal to the public. There is no exact evidence as to the actual amount invested by individuals privately in their own or their friends' businesses, but the amount is very considerable.²

Lastly, profits put back into business. This is by far the most important item of all. Most businesses grow because only a part of the profits made during each year is distributed. The remainder, and it is a substantial remainder, is ploughed back to enable the business to grow, or else is invested in securities. The savings made in this way will vary very considerably from year to year, as they depend on the profits which are being earned. It is not easy to measure this item, but Dr. Coates—with special facilities at his disposal—put the total at £194 million for 1924, and on this basis it may be assumed that savings under this head would be some £200 million or more in a prosperous year. Colin Clark estimated £228 million for 1935.³

These channels of saving, of course, overlap to a considerable extent. One cannot add up the individual items, and call the resulting total the "national savings"

¹ According to figures collected by Messrs. Jordan & Sons, Ltd., during 1936 alone, 13,324 Private Companies were registered, with a total original nominal capital of £108·9 million. Public Companies were 418, with a capital of £49·4 million. But many public companies start life as private companies.

² In 1934 the total paid-up capital of private companies carrying on business came to £1697 million (Board of Trade figure for Great Britain). Public companies had a capital of £3851 million.

³ *National Income and Outlay*, p. 187.

for a particular year. Insurance companies are constantly buying securities ; business undertakings may be buying securities or employing such funds in the business, or increasing their balances with banks ; in particular the banking system itself is buying and selling securities in accordance with the policy of the Central Bank and its desire to make credit cheaper or dearer. The various intermediaries are employing the funds they get in such a way as to spread risk and to maintain liquidity. The requirements of the various parties are changing from time to time : some need to have large sums available at short notice, others are quite prepared to lock up funds for considerable periods. The whole financial system is constantly borrowing short and lending for longer periods, relying on the fact that its short-period liabilities will not be called simultaneously. The necessary interlocking which results makes any attempt to study any individual channel of savings without regard to the others quite illusory.

3. THE VOLUME OF NEW INVESTMENT

Estimates of the national savings in 1935 would probably—though not certainly—put them at between £350 and £450 million. But the conception of national savings is a nebulous one : it is that of the increase in the national capital during the year, and it is completely dependent on the arbitrary definition of the wealth to which this increase has been added. After certain unspecified resources have been employed in maintaining the capital of the country intact, all further additions are defined as a net saving. But what proportion of new enterprises and extensions of existing enterprises are to be looked on as replacing existing enterprises wearing out and becoming obsolete, and what proportion is to be considered as a net addition ? It is in drawing this line that the arbitrary element comes in, with the result that estimates of the national savings vary widely.

This difficulty centres on the fact that the maintenance of existing wealth does not only take the form of replacing a machine with another identical machine or with an improved model of the same machine. Even a business itself may reach a point after which it is faced with decline. If those in charge of it have anticipated such a state of affairs, they will have amortized their undertaking in advance, and will have sums of money available to invest in some other direction. The consequence of this is that to the total of new savings to be invested each year must be added a further total of previous savings which have been released during the year owing to changes in economic conditions, and which require reinvestment. In short, the total of net annual national savings is no guide to the total new capital available for new enterprise. New forms of economic activity will be called for both to compensate for past enterprise that is worn out and to take up the entirely new additions to the national savings ; hence the capital market will be affected on a larger scale than appears at first sight.¹ Hence the total demand for new capital goods must be far larger than the total of new savings.

We are thus faced with a sum considerably greater than the net savings of £400 million, or whatever total statisticians may suggest. This total must be increased not only to the extent that provision for depreciation and obsolescence made by business concerns releases capital for employment in new channels, but in other ways as well. For example, the Government, by raising money for Sinking Fund purposes, is releasing money for investment elsewhere, since the National Debt Commissioners, in purchasing Government Securities from their previous holders, leave those holders with considerable sums for which they must find fresh employment.

¹ It may be advisable to point out that the simple distinction drawn here between the national savings and the larger total available for new investment in each year is entirely distinct from the highly specialized use of the concepts, Savings and Investment, made by Keynes in his *Treatise on Money*.

In the main this reinvestment problem is one for business concerns themselves. It is their task to find new economic opportunities to exploit in place of the old ones which are disappearing; to this extent their preponderance in the sphere of investment is increased still further since, as we have seen, the most important item of saving is that which results from the policy of putting large sums to reserve. But even individual members of the public may sometimes be faced with reinvestment problems not of their own choosing, when debenture issues or Government Securities are repaid in cash.

What, then, is the total available each year for financing new economic operations? For 1924 Flux estimated the total put by for replacement of equipment at £300 million.¹ Colin Clark's estimates for maintenance and depreciation 1924-34 range between £341 and £386 million per year.² A large part of this is, no doubt, sooner or later applied automatically to the maintenance or renewal of existing plant, and does not involve any major change in the form of the enterprise. Nevertheless, the economic landscape is always slowly altering its appearance, and in this process sums set aside for depreciation and obsolescence must play a very considerable part. Adding to net savings sums thus applied to the changing of enterprises, as opposed to maintaining them in their existing forms, it may be hazarded that in recent years something between £500 and £700 million per year has been devoted to new economic development. This is the volume of capital—as distinct from estimates of the national savings—which each year is called on to discover new economic opportunities.

4. THE EARLY DEVELOPMENT OF ENTERPRISE

Economic expansion is financed in various ways. The process is simplest in certain special cases such as that of housing, where banks, building societies and other

¹ *Journal of the Royal Statistical Society*, 1929, pp. 21-22.

² *National Income and Outlay*, p. 86.

institutions are generally willing both to provide capital for the building of house property, and to finance its sale over considerable periods of time.

But the most usual form of new economic development is through the expansion of existing undertakings. An established concern has reserves which it can use in the business, depreciation and obsolescence allowances which it must reinvest, and the power to raise new capital if it so desires. It will have connections which it will want to strengthen and develop, and its own experience may suggest opportunities which can profitably be followed up. It is only natural that the bulk of economic expansion should take place under the auspices of existing business.

But this is only an explanation of the growth of concerns already in existence. How do new industries start when they do not fit in naturally with the operations of some existing industry ?

Any new enterprise which cannot call on the support of an established concern is in the beginning completely dependent on those who are prepared to take a personal interest and to stand the risk of loss in return for an uncertain chance of big profits. Once a certain minimum of capital has been secured, it may be possible to supplement it with credit from those with whom the business deals, or with bank loans. But this only becomes important at a subsequent stage. At the start a new business is dependent on the finance of private individuals, and ultimately the power of the economic system to expand depends largely on the existence of a supply of risk-bearing capital. Quantitatively, perhaps, this form of expansion is not as important as that undertaken by existing enterprises when they intensify their activities on ground they are already occupying, or extend them over adjoining fields. But there are innumerable opportunities for original development in the "no-man's-land" between established industries which no existing concern is prepared to occupy. Hence the great economic importance of new businesses starting on a small scale.

At some subsequent stage access to the banks and even transformation into a public company may facilitate development. But to begin with, the initiative must remain very largely with the people putting up the money. They are backing their fancies, and are not lending against collateral security. As a result they have more freedom to experiment than has a big firm tied by the roots to clearly defined forms of activity. But against this must be set the fact that they are operating in an untried field, and taking risks in return for the possibility of unspecified profits at some future date.

Money may be put into a firm for two reasons : either because in the opinion of the lender it offers security and is good for the amount lent, or because it offers promise of large if indefinite profits in the future even though as yet it has little to show. Security may be of several kinds. Those in charge of the concern may be rich men who can personally guarantee a loan. Or the firm owns land and plant and equipment which could always be sold for some alternative purpose if the firm fails. (In passing, it should be remarked that the security offered by fixed capital is often illusory,¹ since buildings and plant may become valueless once a concern is making a loss ; at any rate their break-up value may be very small.) Finally—and this is the real security which any business has to offer—there may be the fact that a concern has a good record for some time past, and would appear to be assured of continuing to earn profits. Ultimately earning power is the most satisfactory form of security.

Businesses which can offer no security may yet be able to raise capital on prospects. Prospects leave the investor with little to go on except the feeling that the objects which the company has been formed to fulfil are going to prove remunerative in the long run. Only in the case of some enterprises which start their careers with the right

¹ In the past, land has proved a satisfactory form of security, because, with increasing population, site values have always been tending to rise. But we may revise our opinion when population begins to fall.

to exploit a form of monopoly can the investor feel even approximately certain of the profit which he should make. Hence the need, in the early stages of new business undertakings, of investors broad-shouldered enough to tie up their money in face of uncertainty and the possibility of loss. Only at a later stage should capital be sought from the general public.

In the case of a new enterprise with only prospects to offer, an essential factor is the inside knowledge possessed by those in charge of the undertaking. For this reason economic development often takes the form of the expansion of existing concerns, with both capital and experience at their command. Where entirely new concerns are set up, the bulk of the money must be found by those actively engaged in the business. If they cannot provide it themselves, they must secure it privately.

5. ENTERPRISE AND THE STOCK MARKET

The stock market is often allowed unduly to dominate the picture of the way in which enterprise is financed. This is the result of the attention which it naturally excites, and of the advertisement with which new issues appealing for public subscription are accompanied. But the Stock Exchange is primarily an institution for imparting marketability to securities ; only very secondarily is it an institution for providing new money for enterprise. It enables established enterprises to make their securities marketable, and, exceptional cases apart, a new issue means nothing more nor less than the sale of an existing enterprise to the public. Capital to be used for *new* development (*i.e.* development in the future) will seldom play a predominant part in the issue, a large part of which will be to pay for development which has already taken place in the past. The notion that the Stock Exchange in any sense provides " new " industrial capital is completely misleading. Perhaps it is due to the fact that during recent years municipalities, railways and public

utilities (which may make issues in advance of the capital works they propose to carry out) have been conspicuous in the market.

For these reasons the Stock Exchange is best approached in terms of a market in which existing securities change hands. The fact that new securities are constantly being added to those already being marketed is in reality an incidental factor. The main advantage of the Stock Exchange is that it enables individuals to exchange their holdings to suit their own particular preferences.

The essence of a security market is that both the buyer and seller of a share are on a common basis of knowledge, so that a price for the share can reasonably be made. The facts must be common to both parties. They have certain data about the concern in which they are interested, and these data are common property. While the facts may be interpreted differently by buyer and seller, the difference is one of interpretation and not of access to information. A public stock market would become unworkable if dealing was always taking place under conditions in which some of the parties had permanent advantages because they had access to facts hidden from the others. The London Stock Exchange is elaborately organized to prevent any one party having bargaining advantages over another, through the existence of the "jobber". The stock jobber quotes both for buying and selling the securities he is asked about before he knows which he is expected to do. All business passes through the hands of jobbers though they do not deal direct with the public. The effect of these arrangements is to put the onus of balancing sales and purchases in the same expert hands, and so to preserve the freedom of the market.¹

The existence of a market thus organized provides holders of securities with an opportunity of turning them

¹ In intention at any rate. How far there is in fact a free market in any given security is another matter, which will largely depend on how widely holdings of the security are diffused among the public to begin with. See below, pp. 162-164.

into cash whenever they so wish. Securities become more or less liquid¹ assets since in an emergency holdings can be disposed off. As a result of this, the provision of capital for industry is made easier. Individual investors are able to take up a larger volume of securities, because they know that should some unforeseen accident occur they will be able to turn them into cash without difficulty; if no organized market existed, they would need to hold larger cash balances.

Investors gain other advantages also. In addition to being able to hold more securities because they know that they can dispose of them for cash should it prove necessary, they can buy different securities in varying proportions so as to secure a spreading of risk. This power to spread risk—losses in one direction being cancelled by gains in another—is essential to modern investment. In these ways the Stock Exchange facilitates investment by enabling the public to take over established concerns; but it cannot—and should not—be a major factor in the direct provision of capital for new industry in the early stages of development.

6. THE FLOW OF NEW MARKETABLE SECURITIES

As we have seen, the stock market in the main is a machine for enabling people to exchange holdings in enterprise to suit their convenience or personal preferences. In theory, the Stock Exchange could continue to work perfectly well even though no new securities were being added; all this would mean is that all new savings were passing to enterprise through alternative channels. In practice, however, the advantages of marketable securities are such that there is a steady demand for them, so that new securities are being added at irregular intervals to those already listed.

¹ "Liquid" in the sense that one can secure the full market price even though selling in a hurry; but securities are always changing their individual values.

At what stage of development can securities be properly launched on the Stock Exchange ? What is it that makes a security marketable ? This question should be answered in terms of short-term as well as long-term securities. A Bank advance is not marketable ; a Bill of Exchange is. A private loan is not marketable ; a Stock Exchange security is. In the case both of the Bank advance and of the private loan the deciding factor which enables the lender to make the loan is special knowledge of the position of the borrower. The bank manager has access to the private accounts of the client who comes before him for an advance. The private lender making a private loan expects information of a confidential character. In contrast, the holder of a bill, or of quoted stocks and shares, has no access to any special information. But he has sufficient facts to go on. In the case of a bill, it may have been accepted by an institution of repute which is, in effect, imparting marketability to a short-term security by selling its name. Again, a public company whose shares are dealt in publishes a balance-sheet and profit-and-loss account, and from these buyers and sellers of securities have got to judge the value of the shares and the price at which they will do business. Marketability is largely a matter of common knowledge ; where a basis of common knowledge exists to which both buyers and sellers have access, business can be done since buyer and seller are on the same footing. It is this basis of knowledge which is the essential factor in imparting marketability. In its absence, a security should not, properly speaking, be marketable. It only attains marketability when a reasonable estimate of its value can be made without access to confidential information, and when there is a sufficient supply of the stock available for a market to be created in it.

New enterprises do not provide this common basis of knowledge until they have a record which they can show. Once their earning power over a series of years is known, and the personalities of those connected with the business

are familiar, some assessment can be made of the value of any securities which may be offered. But this can only happen after a considerable lapse of time. If the stock market is working properly,¹ issues on behalf of new companies imply that at some time previously private individuals have put their money into a concern and allowed it to develop to a stage at which it can stand on its own record. Thus the issue represents the replacing of old money more than the provision of new money, though the sellers of the business will now have liquid funds which they may be prepared to tie up once more in building up a new business.

The implications of this stand out clearly. The new issue market is nothing more than a system by which going concerns are sold to the public or developed with the aid of public money. There is this further interesting implication, that the new issue market cannot function properly unless there is a supply of going concerns which have reached such a stage of maturity that their securities can be sold to the public. An active new issue market implies a considerable volume of private investment at a much earlier stage. Marketability and access to the Stock Exchange are the rewards of successful growth. The early stages when risks are taken and profits or losses made are already past. And these early stages represent an essential part of the work done by the capital market in its widest sense.

¹ *I.e.* if its facilities are not being abused, as they were to a considerable extent in 1928.

VIII

THE NEW ISSUE MARKET SINCE THE WAR

1. NEW ISSUES : THE GENERAL COURSE OF EVENTS

SOME account of the working of the new issue market since the War is a necessary preliminary to any analysis of developments affecting investment machinery.

Statistics of new issues are published regularly by the *Economist*, the *Statist*, the Midland Bank and, from 1927 only, by the Bank of England. The *Economist* figures are restricted in their scope, since until recently they have been confined to public issues on the London market. The other sets of figures are comprehensive and cover much the same ground. The trend of activity in the new issue market may, perhaps, be best set out with the aid of the figures collected by the Midland Bank and published and discussed in detail in their *Monthly Review*.¹ These figures include all issues which come to the notice of the bank, whether issued publicly or privately placed. They exclude, however, issues for the redemption or conversion of securities held in this country, all vendors' and bonus shares, all issues made by private companies, unless particulars are publicly announced, all short-dated bills, and all British Government loans raised directly for national purposes. Issues made in whole or in part for repayment of debts are included. All issues are valued at issue price.

The following table sets out the position from 1920 to 1936 :

¹ In particular in the December-January number, at the turn of each year.

NEW CAPITAL ISSUES IN THE UNITED KINGDOM, 1920-36
(Midland Bank Figures: £ million)

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
HOME :																	
Public Bodies	61.5	36.4	25.3	0.5	13.4	23.6	41.1	29.8	17.6	3.6	46.0	10.3	32.6	34.5	34.3	24.6	48.1
Production								$\left\{ \begin{array}{l} 53.5 \\ 20.4 \end{array} \right.$	$\left\{ \begin{array}{l} 86.5 \\ 43.1 \end{array} \right.$	$\left\{ \begin{array}{l} 80.1 \\ 27.1 \end{array} \right.$	$\left\{ \begin{array}{l} 34.9 \\ 10.3 \end{array} \right.$	$\left\{ \begin{array}{l} 16.3 \\ 4.7 \end{array} \right.$	$\left\{ \begin{array}{l} 25.3 \\ 11.4 \end{array} \right.$	$\left\{ \begin{array}{l} 34.5 \\ 16.6 \end{array} \right.$	$\left\{ \begin{array}{l} 41.7 \\ 18.6 \end{array} \right.$	$\left\{ \begin{array}{l} 62.2 \\ 26.3 \end{array} \right.$	$\left\{ \begin{array}{l} 73.1 \\ 16.8 \end{array} \right.$
Trade	263.1	63.7	75.2	67.1	75.9	108.5	99.8	$\left\{ \begin{array}{l} 28.8 \\ 43.5 \end{array} \right.$	$\left\{ \begin{array}{l} 8.2 \\ 63.8 \end{array} \right.$	$\left\{ \begin{array}{l} 3.7 \\ 45.0 \end{array} \right.$	$\left\{ \begin{array}{l} 20.2 \\ 15.9 \end{array} \right.$	$\left\{ \begin{array}{l} 4.3 \\ 7.1 \end{array} \right.$	$\left\{ \begin{array}{l} 8.9 \\ 5.5 \end{array} \right.$	$\left\{ \begin{array}{l} 3.7 \\ 5.9 \end{array} \right.$	$\left\{ \begin{array}{l} 2.7 \\ 9.5 \end{array} \right.$	$\left\{ \begin{array}{l} 32.6 \\ 16.2 \end{array} \right.$	$\left\{ \begin{array}{l} 33.1 \\ 19.7 \end{array} \right.$
Transport																	
Finance																	
Total Home :	324.6	100.1	100.5	67.6	89.3	132.1	140.9	176.0	219.1	159.4	127.4	42.6	83.8	95.1	106.7	161.9	190.8
% of all Issues	84.5	46.4	42.6	33.2	39.9	60.1	55.6	55.9	60.5	62.8	53.9	48.0	74.1	71.5	71.1	88.6	87.8
EMPIRE :																	
Public Bodies	12.0	78.7	65.8	67.5	57.2	31.5	33.6	56.9	52.1	30.6	56.0	30.6	25.7	25.0	11.0	2.9	0.9
Companies	28.6	12.1	9.7	20.1	16.3	25.9	18.4	30.8	34.0	23.8	14.0	6.2	3.2	4.8	29.4	16.1	22.5
Total Empire :	40.6	90.8	75.5	87.6	73.5	57.4	52.0	87.7	86.1	54.4	70.0	36.8	28.9	29.8	40.4	18.0	23.4
% of all Issues	10.5	42.1	32.1	43.0	32.9	26.1	20.5	27.9	23.7	21.5	29.7	41.6	25.6	22.5	26.9	9.8	10.8
FOREIGN :																	
Public Bodies	..	5.9	21.3	26.9	43.0	2.3	22.4	19.9	19.8	4.1	12.6	0.2	..	5.3	..	0.5	..
Companies	19.1	19.0	38.4	21.7	7.7	28.1	38.0	31.0	37.5	35.8	26.2	9.0	0.3	2.7	3.1	2.3	3.1
Total Foreign :	19.1	24.9	59.7	48.6	60.7	30.4	60.4	50.9	57.3	39.9	38.8	9.2	0.3	8.0	3.1	2.9	3.1
% of all Issues	5.0	11.5	25.3	23.8	27.2	13.8	23.9	16.2	15.8	15.7	16.4	10.4	0.3	6.0	2.0	1.6	1.4
ALL ISSUES	384.2	215.8	235.7	203.8	223.5	219.9	253.3	314.7	362.5	253.7	236.2	88.7	113.0	132.9	150.2	182.8	217.2

The course of events since the War may be summarized as follows. The end of the War is followed by an extremely powerful burst of activity. During 1920 this boom reaches its climax, and begins to fall off. The next three years are lean years, though to some extent issues for abroad compensate for the spectacular decline in the demand for capital at home. After 1923 activity is again increasing, and the peak is reached in 1928. In 1929 there is already evidence of decline; this continues, especially as regards home enterprise, throughout 1930. In 1931, under the impact of events, depression is acute. After 1932 there is revival, though foreign lending has almost ceased, and Empire lending is much diminished; most of the new capital is going to home industry. The picture is dominated by certain events: the return to the gold standard in 1925; the General Strike in the following year; the boom in 1928; in 1929 the stock market break in New York; in 1931 the departure from the gold standard; in 1932 the War Loan Conversion operation, the prelude to a sensational fall in interest rates.

As might be expected, activity in the new issue market and movements in the prices of Stock Exchange Securities are broadly related; new issues increase when share values are rising, and vice versa. The general course of security values during the period is shown on the following page.

Ordinary share values go up steadily till 1928; then comes a downward movement with the slump. Fixed interest securities remain remarkably stable from 1922 to 1930. In 1932 there is a rise which reflects the fall in interest rates following the War Loan Conversion. There are, of course, various minor movements throughout the whole period which are not reflected in the above figures which only show year end values.

It is important to remember, however, that the *Bankers' Magazine* Index tends to give a conservative impression. An index which included a higher proportion of speculative securities would show more violent movements, especially during certain significant periods.

The whole period falls into several clearly defined parts : first, the post-War boom and after, covering the years from 1919 to 1923 ; then the period of post-War

“BANKERS’ MAGAZINE” INDEX OF SECURITY VALUES

(December of each year. December 1921 = 100)

	Fixed Interest	Variable Dividend
1921	100·0	100·0
1922	111·0	117·6
1923	111·2	115·9
1924	112·9	126·9
1925	108·8	132·5
1926	109·3	135·7
1927	111·2	146·9
1928	112·1	158·8
1929	108·5	147·1
1930	112·5	118·5
1931	102·2	90·7
1932	116·1	95·8
1933	122·0	108·4
1934	132·7	113·5
1935	129·5	120·1
1936	130·9	138·7

“prosperity” up to 1929 ; next, the years from 1929 till the end of 1931, and Britain’s departure from the gold standard ; thereafter the period of cheap money.

2. THE POST-WAR BOOM AND AFTER—1919 TO 1923

Towards the end of 1920 Stock Exchange nominations cost between £50 and £100. Twelve months previously the figure had been about £450. Early in 1920 it had touched £650. The post-War boom was over.

During the War new issues had been strictly controlled by those informal methods (effective in fact but with no basis in law) which were to be used again to much purpose in later years. After the close of hostilities, resentment against official control grew all the more acute in view of the cumulative demand for capital on the part of in-

dustries which could minister with profit to reconstruction and to normal peace-time requirements. As the protests grew in volume, the authorities relaxed their grip. On March 25th, 1919, the new issue market was freed on condition that a statement was published on behalf of each issue that "no part of the proceeds of the issue is to be applied for capital purposes outside the United Kingdom or to replace money which has been so applied". In November of that year—by that time the Victory Loan was successfully launched and major funding operations were out of the way—a general licence freed capital even for foreign destinations.

But the boom, nevertheless, was essentially an internal boom. Home issues accounted for 79 per cent of the total in 1919 and 85 per cent in 1920, and it was only in the years which followed the collapse that investors began once more to turn their attention overseas. It was also primarily devoted to the provision of industrial *capital* (that is ordinary and preference shares as opposed to *loans*—industrial debentures and fixed-interest securities of public authorities) which accounted for 84 per cent of the total issues of all types in 1919 and 68 per cent in the following year. The magnitude of British Government operations (not allowed for in the above figures) provided an inexhaustible supply of fixed-interest securities on the one hand; the attraction of an early share in anticipated profits, coupled with an unlimited reversionary interest in peace and prosperity, led to an enthusiastic demand for equity shares on the other; little room was left for those prepared to launch fixed-interest securities whether for home or abroad. Only when the boom had collapsed did borrowers on fixed interest or borrowers from overseas (most of whom could only borrow in London on fixed interest) come back into their own. By then the Government was enjoying a substantial surplus on revenue account, even though funding operations might continue, while the prospects of prosperity at home seemed less alluring than they had some months before.

The boom was for the most part in home industrials. The *Economist* figures, classified in more detail than those of the Midland Bank though they refer to a narrower sphere since they include only public issues on the London market, show quite clearly in which directions activity was greatest. The first column in the following table shows new issues of various classes in 1920, the next the annual average for the three succeeding years :

CLASSES OF NEW ISSUES, 1920 AND 1921-23
(£ million)

	1920	Average, 1921-23
Manufacturing and Miscellaneous .	133.7	22.5
Iron, Coal, Steel, Engineering . .	25.3	9.4
Motor Traction and Manufacturing .	8.6	0.4
Stores and Trading	6.1	2.3
Merchants and Importers	1.8	0.2
Breweries	1.9	3.4
Hotels, Restaurants, Entertainments .	6.5	1.4
Patents and Proprietary Articles .	1.1	0.1
Electric Light, Power and Telegraph .	6.2	6.9
Tramways and Omnibus	1.0	0.5
Gas and Water	1.0	1.7
Docks, Harbours, Shipping	18.2	8.3
Mining	7.5	1.9
Rubber	5.9	1.4
Oil	13.0	12.6
Exploration, Financial	14.1	7.3
Estate and Land	1.7	1.1
Banks and Insurance	16.9	2.9

The biggest burst of activity is in the Manufacturing and Miscellaneous item which, though one would expect it to be the largest, is relatively greater in 1920 than in subsequent years. (In 1920 it is five times the size of the next largest item ; subsequently it is less than twice as great.) Iron and Steel, and also Motor Manufacturing, are also very active in 1920 ; so is Shipping. Public utilities,

though their needs must have been pressing, are content, like breweries, to bide their time. Banks and insurance companies are busy re-capitalizing themselves to prepare for peace-time needs at a much higher level of prices.

Already in December 1919 the *Economist* had been criticizing what is called "the get-rich-quick brotherhood", which it took to include the shipping, motor and cotton industries, and even drapery. The re-financing of the Lancashire cotton industries at inflated values (the rise in textile prices¹ had given an opportunity to the company promoters of which they were quick to take advantage) is notorious. The frozen assets of certain of the banks, a by-product of this period of finance, have been a theme for moralists and reformers alike. Shipping also was over-capitalized as a result of extremely profitable freights which were to be earned in the period just after the War.

H. W. Macrosty has collected evidence on this wave of speculation, particularly violent in cotton and shipping :

Lancashire had enjoyed large profits in 1918 and 1919, dividends of 10 to 30 and up to 75 per cent being paid by spinning-mills in the second half of 1919. A wave of speculation swept over the country, and by January, 1920, over 150 mills had changed hands. Mr. Tattersall, in his *Cotton Trade Circular* (January 19th, 1920), gave a list of 62 such companies whose old share capital was £2,670,000, sold for £15,308,000, of which £8,234,000 was provided from the proceeds of the new share capital and the remainder from loans by banks and private lenders. Other mills which were not sold were re-capitalized on the basis of the current replacement values ; others had to obtain fresh working capital to cover the cost of raw cotton and of credit to customers ; and a third movement took the form of consolidations of spinning-mills, most of which were made by local syndicates. The most important of these consolidations was the Amalgamated Cotton Mill Trust, whose original capital of £1,000,000 was raised to £7,300,000 after the acquisition of Horrockses, Crewdson & Co., Ltd. Mr. S. B. Joel, one of the prime movers, was credited

¹ The retail price of clothing rose, according to the Ministry of Labour Index, from 360 in November 1919, to 430 in July-October 1920. By December 1922 it was 225. (July 1914 = 100.) The highest point touched by retail food prices was 291 in November 1920.

with the remark, "Isn't it better that we should take them over, than that a lot of old fogeys should have charge of them?" (*Textile Mercury*, November 29th, 1919). Anyhow, the original capital of Horrockses' was £1,218,000 and the purchase price was reported to be "not less than £5,000,000", so that the "old fogeys" did not do badly out of the smart Londoner. Sir Herbert Dixon of the Fine Cotton Spinners' and Doublers' Association, Ltd., said at the annual meeting (*Economist*, May 29th, 1920), with reference to the recapitalization movement: "I can only compare the movement to the South Sea Bubble, and the day of reckoning will come as surely as it did to that period of wild speculation. . . . An inevitable reduction in values must take place, leading to an enforced writing-down again, and a consequent serious loss to the present buyers. . . . I defy anyone to deny that it is a bad thing for the industry, and what is even more important, a real danger to the nation itself."

In 1919 and 1920 freight rates were extraordinarily high, and earnings were three to four times the pre-War scale, so another orgy of speculation broke out in Cardiff, and in one month alone 30 companies were floated with £4 million capital. The experienced shipowner sold, the ignorant man bought, and the banks financed the deals. *Fairplay* (November 27th, 1919) alleged that "probably £150 million has been advanced upon shipping securities", probably an exaggerated figure, but large bank overdrafts were not uncommon with shipping companies. The classic case is the Western Counties Shipping Company, which raised its capital from £42,300 to £3,500,000 to purchase the Moor and Sutherland Lines, and in 1921, after the bubble had burst, ships which it had bought at £24:10s. a ton were sold for £5:10s. In other industries also there was over-capitalization, as in the formation of various combines. Several of the shipbuilding yards changed hands at high prices, and some sections of the shipping industry, unfortunately, capitalized their war profits of some £60 million, instead of leaving them to offset the inevitable fall in the value of the new tonnage built to replace war losses.¹

Demoralization of finance was a natural by-product of the War. Profits were incalculable, investors had large sums of money at their disposal. There were plenty of individuals willing to batten on public optimism. In this

¹ *Journal of the Royal Statistical Society*, 1927, pp. 71, 72.

atmosphere a burst of speculative financing was natural, if unfortunate.

In due course the break came. There were stoppages in the coal and cotton industries, wages were reduced, unemployment grew by leaps and bounds, and in May 1921 reached a maximum of 23 per cent. In these circumstances activity on the new issue market was on a much smaller scale. But normal conditions were gradually reasserting themselves after the bout of hectic finance. Foreign lending began once more, and unemployment was diminishing from 1922 onwards.

3. POST-WAR "PROSPERITY", 1924-29

From 1924 onwards the volume of activity in the new issue market was increasing noticeably. In the first place, the reconstruction of the international economic system was in full swing during the period. 1923 had seen the British *tranche* of the Austrian 6 per cent Reconstruction Loan, a matter of £14 million. 1924 saw loans to Hungary, £8 million; Germany, £12 million; and Greece, £7.5 million. In 1925 there is a ban on foreign lending owing to Britain's return to the gold standard, and the only reconstruction loan is one for Danzig of £1.5 million. In 1926 there are loans to Belgium, £7 million, and Bulgaria, nearly £2 million. In 1927 there is a loan to Poland of £2 million. In addition, money is flowing freely to governments and public bodies in the Empire. Secondly, there were conspicuous items both in 1925 and 1926 connected with the commodity markets. In the former year no less than £13.9 million went into rubber production (*Economist* figure). During the year the price of rubber had rocketed from 1s. to 4s. per pound under the influence of restriction. In 1926 there were heavy borrowings by Brazilian coffee interests through the issue of bonds. Lastly, from 1927 onwards we have the beginnings of the conspicuous burst in new issue activity for the home market which was to be at its

height in 1928 and the beginning of 1929, and which has come to be known as the 1928 new issue boom.

Certain contemporary trends may be noted. During the period Bank rate, which had risen to 4 per cent in the middle of 1923, remained the same during 1924, rose to 5 per cent on March 5th, 1925, was down to 4 per cent on October 1st, rose again to 5 per cent at the beginning of December and remained at that level till April 1927, when it came down to $4\frac{1}{2}$ per cent, where it remained throughout the rest of 1927 and 1928. Increasing new issue activity was thus accompanied by increasing rates up to 1926, but only to a limited extent was it accompanied by a decrease in unemployment. The downward movement in the numbers of unemployed which progressed fairly steadily from the end of 1921 to the middle of 1924 came to an end. Unemployment was slightly higher in 1925, the year of return to the gold standard. It was lower again at the beginning of 1926, but rose owing to industrial disturbance, and fell again in 1927.

The rising pound and its stabilization, though adverse in its influence on employment in the unsheltered industries, did not reduce the volume of capital passing through the new issue market, possibly because increased expectations of benefits in store outweighed the immediate disadvantages of the high level at which the pound had been stabilized. The capital market does not seem to have been hampered to any great extent by the rising level of short-term money rates. Fixed-interest securities suffered a slight setback during 1925, but equities advanced and, taking all in all, "members of the Stock Exchange will, generally speaking, look back on 1925 as a busy and lucrative year".¹

In spite of the Coal Lock-out and the General Strike, security values ended 1926 at a higher level than a year before. While the total amount of capital supplied by the London market rose, the amount taken by companies operating at home was slightly smaller, though still above

¹ *Economist*, January 9th, 1926, p. 54.

the 1924 level. Further, considerable sums were raised for amalgamating existing businesses and for investment trusts. Nevertheless, an attack on sharepushers in the *Economist* in June 1926 suggests that the public was already on the feed, and it is after 1926 that the new issue boom really begins.

In 1927 the boom in speculative securities is well under way. During the year there were greyhound racing and film issues on a considerable scale. Gramophone shares were rocketing. Brazilian Traction doubled in price. The 10s. share of British Celanese rose in price from 5s. 9d. to 89s. 3d. During the year the *Bankers' Magazine* Index of variable dividend securities, as we have seen a conservative index, rose from 135.7 to 146.9. At the end of 1928 it stood at 158.8.

1928 represents the high-water mark of activity in the new issue market for the post-War period. The demand for ordinary shares was such that the yield to be obtained from them had been falling rapidly.

RUNNING YIELD IN BRITISH ORDINARY SHARES ¹

	March	June	September	December
1926	6.28	6.36	6.18	6.14
1927	5.91	5.64	5.40	5.31
1928	5.31	5.31	5.28	5.16

The rate at which new industrial debentures could be floated had also improved in favour of the borrower. The average rate on new issues of such debentures was 6.48 in 1926, 6.21 in 1927, 6.10 in 1928 and 1929. Enterprises of every kind took advantage of the favourable conditions to raise capital.

A survey of the various headings under which the new issues for the year can be classified suggests that the outstanding characteristics of the new issue market in 1928 are two in number. First, there are many issues of a purely financial character, so that allowance must be made

¹ *Economist*, March 2nd, 1929, p. 456.

for double counting if we are to get an estimate of the amount of capital available for new enterprise as such. (The Bank of England, which attempts to classify investment trusts separately, shows some £34 million for the year.) Secondly, the amount of capital going to miscellaneous commercial and industrial issues is conspicuously increased. This latter feature deserves examination at some length.

These miscellaneous issues covered a multitude of purposes and concerns. In regard to home enterprise "companies engaged in the provision of entertainments of all kinds accounted for £13 millions in 1928, as compared with £3½ millions in the previous year. Companies concerned mainly in the production of films, gramophones, wireless apparatus and similar goods absorbed £7 millions, as against only about a quarter of that sum in 1927. The home textile industries absorbed £11½ millions in 1928, or £4½ millions more than in the preceding year, almost the entire amount going to artificial silk companies."¹ And enterprises of this kind were to the liking of the public. "A feature of the year has been the repeated over-subscription of speculative issues, the attractions of whose deferred shares as gambling counters were more regarded by the public than their merits as an investment."² Finally, there was a great deal of parent-and-offspring financing: companies engaged in producing something sold the right of producing it somewhere else to companies specifically formed for the purpose at the expense of the public—often before the parent company had effectively commenced operations on its own account.

The boom continued into the early months of 1929; then came a dramatic change. "At the outset prospectuses were appearing with extraordinary frequency and a fair degree of variety; at the end they were almost as rare as a swallow in winter."³ A number of causes

¹ *Midland Bank Review*, December 1928–January 1929.

² *Economist*, November 10th, 1928, p. 854.

³ *Midland Bank Review*, December 1929–January 1930.

contributed to this result : the rise in Bank rate to $5\frac{1}{2}$ per cent early in the year, and the relatively greater profit to be obtained from keeping money on short term ; the attraction of funds to New York where the Stock Exchange boom gave opportunities both to the speculator and to the lender on short term ; the disappointment of those who saw the speculative issues of the previous year failing to bring in the sensational returns which had been anticipated ; later in the year, the Hatry failure and the collapse of the New York market.

Already by the middle of the year the faith in speculative equities had worn exceeding thin.

	Highest 1928		June 1929	
	s.	d.	s.	d.
Duophone Ord. (10s.) . . .	89	$4\frac{1}{2}$	1	6
Blue Bird Petrol Def. (1s.) . . .	3	3	0	9
Ner Sag Ord.	£9 6	3	14	$4\frac{1}{2}$
Waste Food Products (1s.) . . .	40	$7\frac{1}{2}$	13	9

And it must be remembered that in June 1929 unemployment was at the lowest point in the year, 9·5 per cent, a whole point less than in June 1928 ; Hatry was still prosperous ; the American boom was encouraging a belief in still further progress. Yet already the gilt was wearing off the gingerbread, and underwriters were being left with issues on their hands.

The history of the 1928 new issues had been studied in detail. As is well known, within eighteen months they had depreciated by 41 per cent ; but what is sometimes overlooked is that the fate of companies with past records was not at all unreasonable, and that it was the quite new companies that collapsed. Excluding investment trusts, there were one hundred and nine issues for entirely new ventures, involving £26·7 million of capital. The main groups were gramophone and radio, 21 issues ; artificial silk, 10 ; finance, 10 ; films, cinemas and theatres, 8 ; portrait machines, 7 ; safety glass, 4 ; colour photography,

3 ; automatic machines, 2. This group depreciated by no less than 83 per cent.¹

Certain significant characteristics may, therefore, be noted concerning this culminating phase of post-War prosperity. First, the fall in values preceded the fall in activity and the collapse of the New York Stock Market. This is in contrast to New York, where industrial activity was slowing down while the stock market still went on rising. Second, the boom left the greatest wreckage in its train in the case of companies without past records who appealed to the public for money. Third, and last, and this is a point which is often overlooked, the instinct of the public was right. The world was certainly going to need more artificial silk, films, cinemas, safety glass, automatic machines and similar things. It is easy to dismiss the whole disaster as the consequences of public stupidity, but the instinct of the man in the street was perfectly correct. It was the mechanism which let him down.

4. DECLINE AND FALL—1929-31

1929 ended in discomfort. 1930 saw rapidly increasing unemployment and deepening gloom. Nevertheless, the history of the new issue market is exactly the converse of that of 1929. The year was one of "early quiescence, with a substantial recovery towards the end and money for investment accumulated in more plentiful supply".²

Less was left on the hands of underwriters than in 1929, while public authorities, both at home and abroad, benefited as a result of the money available, especially towards the end of the year. But though the total of new issues was barely less, the amounts going to production, trade and finance at home during the year fell off very considerably.

And in 1931, the year of standstill, the amount

¹ R. A. Harris, "A Re-Analysis of the 1928 New Issue Boom", in the *Economic Journal*, September 1933, pp. 453-459. Also see below, p. 178.

² *Midland Bank Review*, December 1930-January 1931.

going to general enterprise at home is half that of 1921, which previously had held the low record for any year since the War. Risks and uncertainties, and the general lack of confidence, eliminated all the more speculative borrowers from the market and tended to put a premium on the safer forms of borrowing. The movements in the Midland Bank omnibus item, "Miscellaneous, Commercial and Industrial", illustrate clearly how the more speculative types of enterprise disappear at the onset of depression :

ISSUES FOR MISCELLANEOUS, COMMERCIAL
AND INDUSTRIAL PURPOSES

(Midland Bank figures : £ million)

1928	.	.	.	114·7
1929	.	.	.	92·3
1930	.	.	.	29·5
1931	.	.	.	14·7
1932	.	.	.	12·6
1933	.	.	.	26·6

Thus, as far as new issues are concerned, the period between the beginning of the stock market fall of 1929 and the departure of Great Britain from the gold standard in 1931 is relatively unimportant. The new issue market is overshadowed by, and at the mercy of, external events. A large part of such issues as were made seem to have been for the purpose of paying off existing loans. Another portion was devoted to meeting the requirements of local authorities and public utilities. The ordinary industrial borrower has more or less disappeared from the picture and does not begin to reappear again until 1933 onwards.

5. CHEAP MONEY, 1932-36

The fall of the pound in September 1931 in due course made possible a sensational reduction in money rates in Great Britain. After a short interregnum of dear money, Bank rate was reduced by stages to 2 per cent. The fall in short money rates was duly followed by the conversion

of £2000 million of War Loan from a 5 to a $3\frac{1}{2}$ per cent basis. This was the precursor of other Government conversion operations, and these exerted a powerful influence on the general level of long-term rates of interest. The fall in interest rates continued after 1932, and rates tended to fall further.

The conversion operation had been accompanied by strict control of the money and capital markets. During the actual period of the conversion itself, all new issues were banned, and even when home issues were freed, restrictions were—and still are—maintained on issues on behalf of borrowers overseas, especially borrowers outside the Empire. The effect of all these measures of control was to give considerable impetus to the natural tendency for interest rates to fall at a time of unappetizing business prospects.

Thus from the end of 1932 onwards, the low yields on gilt-edged led investors to turn to new fields in the search for openings bringing in a larger return. The new issue market begins to revive; the developments are best set out on the basis of Bank of England figures relating to home industry.

Several suggestive features emerge from this table. In the first place, "Coal, Iron and Steel" is up sensation-ally, mainly as a result of the tariff and the considerable extensions of plant which have followed it. The effect of the change in fiscal policy has been to create an opportunity which seems to have been sought out with considerable vigour by investors. The increase in capital going to iron and steel is thus not unexpected, though it remains to be seen whether it is, or is not, excessive.

Second, large sums appear under the heading of "Land, Building and Building Materials". It must be remembered that the new issue market is only one of the ways, and not the most important at that, in which new building is financed. Building societies, insurance companies and local government authorities are all involved in housing.

INDUSTRIAL ISSUES FOR UNITED KINGDOM, 1928-36 *
(Bank of England figures : £ million)

	1928	1929	1930	1931	1932	1933	1934	1935	1936
Brewing and Distilling	6.5	4.9	2.8	0.7	0.7	5.6	2.4	3.1	5.3
Cinematography	9.4	3.5	0.3	0.8	0.1	1.0	3.2	2.1	3.8
Coal, Iron and Steel	5.7 ^a	2.2 ^a	1.7	0.3	2.6	1.5	18.6	8.0	18.2
Land, Building and Building Materials	12.0	14.0 ^b	3.6	4.3	5.0	10.7	13.7	16.4	13.6
Motor and Aircraft Manufacture . .	6.6	3.4	0.7	0.9	0.1	0.6	3.5	10.8 ^c	25.6
Other Engineering	4.6 ^a	6.6 ^a	2.9	0.3	1.7	1.9	2.1	2.3	3.6
Printing and Paper	9.3	3.7	4.0	0.9	7.5	6.3	1.9	3.6	4.8
Shops and Stores	22.4	15.3	4.6	1.3	1.9	7.9	5.6	9.5	6.4
Miscellaneous	63.0	59.9	20.9 ^d	9.9 ^e	9.2 ^f	13.1	19.5 ^g	31.7	31.7
TOTAL GENERAL ENTERPRISE . . .	139.5	113.5	41.5	19.4	28.9	48.7	70.7	87.3	109.4
Central Electricity Board			12.6	2.9	16.3	7.5	5.6		3.5
Other Electric Light and Power			9.3	5.0	12.7	5.0	6.1	11.0	8.0
Gas	13.4	17.4	7.0	1.5	4.7	2.1	2.4	7.8	7.1
Water			1.9	2.2	3.8	2.7	2.5	1.4	1.8
Canals, Docks, etc.					2.2	1.7	3.0	0.9	0.3
Railways	2.8	1.9	18.6 ^h		8.5	2.5		31.7 ⁱ	35.0 ^k
Trams and Omnibuses	3.7 ^h	1.9 ^h	1.3	1.9	0.5	0.1	0.8	1.0	0.5
TOTAL PUBLIC UTILITIES . . .	19.9	21.2	51.4	13.5	48.7	21.5	20.3	53.8	56.2
Grand Total	159.4	134.7	92.9	32.9	77.5	70.2	91.0	141.1	165.6
Public Utilities as % of Total . .	12.5	15.7	55.3	41.1	62.8	30.6	22.4	38.1	33.9

* Investment Trusts excluded.

^a In 1928 and 1929 "Iron and Steel" included with "Other Engineering".

^c In 1935, aircraft accounted for £6.3 million of "motor and aircraft manufacture".

^d Of which Unilever £6 million, and Agricultural Mortgage Corporation £3.5 million.

^e Of which Furness, Withy £2.1 million.

^f Of which Shipbuilding £5.5 million.

^g Of which London Underground £11.4 million.

^h Of which London Electric Transport Finance Corporation £31.0 million.

ⁱ Of which London Electric Transport Finance Corporation £31.0 million.

^j Of which London Electric Transport Finance Corporation £31.0 million.

^k Railway Finance Corporation £26.2 million, and Railway Clearing House £8.8 million.

^b £8.4 million of "Land and Agriculture".

Nevertheless, the new issue market has been active in providing capital for urban real estate. The Midland Bank figures (which show property separately) show nearly £40 million as having been raised by property companies from 1933 onwards. In the last four years such issues amounted to £9·1, £11, £12·1 and £6·5 million respectively. This development in real estate is the direct result of investors being unwilling to buy gilt-edged owing to the fall in interest rates, and looking for a larger return in house property ; but a significant fall in the last year suggests that this opportunity may be getting exhausted.

There is an increase in the capital going to aircraft manufacturers and to motor vehicle manufacturers in 1935. This increase is largely to be explained by the activities of Government, though to some extent it is in the natural course of events. In particular, the re-armament programme has called for expansion in the manufacture of aircraft.

It is interesting to observe that issues on behalf of public utilities show comparatively little change under the influence of business fluctuations. The figures vary from year to year owing to certain specific demands for capital coming in one year rather than another. Throughout the period, or rather throughout the later years of the period, the Central Electricity Board is a borrower on an extensive scale. Loans on behalf of railways also are distributed irregularly. But there is no evidence to show that the fall in interest rates, of itself, has increased the demand for capital on the part of public utilities. Such concerns are not in a position to postpone or accelerate their capital programmes easily in accordance with conditions in the capital market.

There are certain other significant features which cannot show themselves in the Bank of England figures given above. The volume of conversions has been considerable, but Government operations with £2479 million in 1932, and £50·8, £105, £204 and £37·2 million in succeeding

years, overshadow other conversions. But an analysis of other conversions may be of interest :

REFUNDING AND CONVERSION ISSUES

(Bank of England figures—British Government and Investment Trusts excluded : £ million)

	1932	1933	1934	1935	1936
UNITED KINGDOM :					
Local Authorities .	2.7	0.5	5.1	14.9	19.7
Industrial . . .	14.7	64.3	44.3	44.6	30.3
	17.4	64.8	49.4	59.5	49.9
EMPIRE :					
Public Authorities	18.4	117.6	65.5	58.0	41.3
Industrial . . .	6.0	12.0	3.4	4.2	1.9
	24.4	129.6	68.9	62.2	43.2
FOREIGN :					
Public Authorities	Nil	Nil	23.1	2.5	14.3
Industrial . . .	0.1	Nil	3.1	6.9	1.5
	0.1	Nil	26.2	9.4	15.8
Grand Total .	41.8	194.4	146.6	131.2	109.8

The average reduction in the rate on home industrial borrowings was from 5.7 to 4.5 per cent in 1932, 5.6 to 4.5 in 1933, 5 to 4 in 1934, 4.6 to 3.8 in 1935 and 4.7 to 3.8 in 1936. But only a limited number of borrowers have the opportunity to carry through conversions owing to the terms on which their existing loan capital has been obtained. The *Economist* concludes that "since the amount of 'callable' stock bearing high interest rates is limited, the benefits of cheap money are likely, henceforth, to accrue mainly to 'new' rather than to 'old' borrowers".¹

A further characteristic of the post-depression period

¹ *Economist*, December 28th, 1935, p. 1305.

is the flow of capital into the gold-mining industry on account of the high gold premium. The Midland Bank mining figures show £2·9 million in 1933 ; £17·7 million in 1934 ; £9 million in 1935 ; and £11·4 million in 1936 ; and most of these refer to gold mines. The spectacular profits earned by holders of mining shares, through capital appreciation when the pound went off gold and the price of gold rose, paved the way for gold-mining propositions of all kinds.

Lastly, very considerable sums of money have been subscribed by the public to Unit Trusts. Since 1931 Unit Trust certificates set out to give those who are saving on a fairly small scale the advantage of a spreading of risk. This movement will be examined at greater length later.

In general, it may be remarked that under the influence of cheap money the public has found itself forced to go farther afield than it might have wished. The high rates on gilt-edged before 1929 led many individuals and institutions to look upon the purchase of Government Securities as a normal investment avenue. With the spectacular fall in rates, investment policies had quickly to be revised, and this revision is not yet finished. The banks were left as the main purchasers of Government Securities, while individuals and some institutions began to fight shy of them. One of the results of this outward pressure on the investment system has been the boom in urban housing which still remains to be examined in detail. This pressure to find new investment openings has, so far, not led to the extensive development of investment opportunities abroad, owing to the high risk premium and general uncertainty prevailing, and to restrictions on the market. The flow of funds to New York, for the purchase of American securities, shows, however, that the British investor is only too anxious to take any chances that come his way. Were the international political and economic situation clearer, the disparity in interest rates between Great Britain and elsewhere could hardly be maintained without drastic action, failing which

either rates here would rise or purchases of foreign securities from this country on a gigantic scale would be inevitable. Uncertainty abroad is the explanation of the paradox by which Great Britain (like the United States and one or two more of the fortunate countries) at the moment enjoys both a high level of internal economic activity and interest rates ruling at low levels.

IX

THE WORKING OF THE CAPITAL MARKET

1. INSTITUTIONS OF THE NEW ISSUE MARKET

THE issuing agencies operating in the capital market range from the old-established houses of the merchant banking type down to company promoters and ephemeral syndicates formed for the purpose of launching a particular issue and then dissolved when the work is done. The old-established houses are of world-wide repute: Barings, Rothschilds, Morgan Grenfell, Schröders, Hambros, Erlangers, Higginsons, Lazards. These are the great houses which provided the channels for much of Britain's lending overseas. Most of them have special connections with particular areas of the world from which a demand for capital is likely to come, in addition to working in close contact with other capital markets such as New York and Paris. They have special knowledge of credit conditions overseas and can command large resources, and most of them combine issuing operations with acceptance business. In the years when overseas lending was important, their high repute gave an especial standing to any issues which they handled, and they watched over the issues after they had been launched.

They were thus primarily concerned with the export of capital. But the diminution in overseas lending since the War, and the tremendous reduction in new issues for abroad since 1931, have led them to turn their attention to the handling of large issues on behalf of home industry. This development is a natural one, though it is difficult to say what the ultimate effect will be on the organization

of the big houses and the business which they handle. The volume of issues made by these houses is now enormously reduced since they confine themselves to large issues, and the bulk of home industrial issues are small.

Next come a number of finance houses, some of which from the beginning have played a large part in the financing of industrial developments at home. Many—though not all—of these have special connections with particular types of industry. The following examples of houses which have been active recently have been taken from the *Issuing House Year Book*: the British Shareholders' Trust, the British Trusts Association (understood to have placed the bulk of its issues privately among its members), the Charterhouse Investment Trust (handling many of the smaller issues, and responsible for some significant developments in the financing of growing enterprise), Helbert, Wagg & Co., the Investment Registry, the London & Yorkshire Trust, the Standard Industrial Trust. The paid-up capital of most of these is under £500,000, and some even £100,000 and less. These are, of course, only a part of the resources which finance houses of this sort command, but they are considerably smaller than investment trusts proper, whose average resources are over £1,500,000. The real strength of these institutions is to be found in their reputations and their connections with the investing public.

In the third place, there are various syndicates of varying degrees of repute formed by company promoters for the purpose of launching certain particular issues. Mushroom houses flourish in boom periods when the public is on the feed, and were prominent in 1928 when companies of dubious origin and prospects appeared not infrequently; complaints about "bucket-shops" are again frequently heard now. The fact that many dubious issues are put out by syndicates specially formed to put through a particular piece of business does not, of course, imply that this method is necessarily a bad one.

Lastly, certain stockbroking firms with powerful con-

nections handle issues without assistance, and place them through their special contacts with investors. This is probably the most important development of recent years, and is made possible by the increase in the number of smaller industrial issues.

In general, the new issue market works as a whole. Underwriting and sub-underwriting would seem to be highly profitable, and in consequence individual firms are not able to pick and choose freely what sub-underwriting to accept and what to refuse ; if they are not prepared to take the rough with the smooth, they are in danger of being left off the underwriting lists.

2. THE SUPPLY OF CAPITAL

The channels of saving have already been described shortly. The sources from which money may come for the purchase of newly issued securities are three : first, individual members of the public willing to add to their holdings of stocks and shares ; second, institutions such as insurance companies, investment trusts, and others, which act as a buffer between the investing public and industrial and commercial borrowers ; lastly, large companies actively engaged in production or distribution which carry part of their reserves in the form of security holdings.

To what extent do members of the public buy industrial securities, and what type of person is most important as a purchaser ? Information on the savings habits of the population is to be found in the annual classification of property passing at death, made for Estate Duty purposes. This analysis shows the different forms of property left by estates of different sizes. The savings habits which the figures reveal are rather as might be anticipated. In the case of the smallest fortunes, houses and business premises, followed by insurance policies, are the main forms of property left at death apart from cash. A little higher up in the scale, British

Government securities and money lent on mortgage are items of growing importance. When we come to fortunes of five figures and more, stocks and shares of joint-stock companies become by far the largest single item among the different forms of wealth. Some 30 per cent of the total property is represented by stocks and shares of joint-stock companies, and the most important purchasers of these are the definitely well-to-do.

Further, there is evidence to suggest that the ownership of industrial capital is widely diffused; it is not a case of some rich people holding most of their wealth in stocks and shares, but of most rich people holding some of their wealth in that form. In the case of large well-known undertakings there are many small shareholders, and the average holding is not very high. The Rt. Hon. Walter Runciman, in October 1924, gave figures showing that the average holding of nominal capital in the "Big Five" banks was £219.¹ The *Economist*² in 1926 made a sample analysis in two groups of concerns consisting of Imperial Tobacco, Courtaulds, Anglo-Persian Oil, Brunner Mond, Vickers, Dunlop Rubber, Cunard, with a total nominal capital for the whole group of £119·7 million. The average holding of preference shares over the group was £350, and the average holding of ordinary shares £291. The *Economist* also analysed the holdings of a group of moderate-sized concerns—the General Electric, Spillers Milling, Phoenix Assurance, Vale's Steel, Bass, Ratcliffe & Gretton, Marconis, English Sewing Cotton, Debenture Corporation, Cairn Line, Rover, and Savoy Hotel. In this group the average preference holding was £300 and the average ordinary holding £259. It will be noticed that in both cases the average ordinary holding is smaller than the preference. But all these are figures of *nominal* capital; in most of these cases market values would be much higher.

¹ Committee on Industry and Trade, *Factors in Commercial and Industrial Efficiency*, 1927, p. 127.

² *Economist*, December 18th and 25th, 1926, and January 1st, 1927.

There is also evidence on the distribution of the holdings. In the case of the *Economist's* group of large concerns, 85.2 per cent of the total number of holdings were ones of less than £500 nominal capital, and in the medium-sized concerns the percentage was even a little higher. This is borne out by an analysis made by the *Financial News* in January 1932, which showed 87.7 per cent of the total number of holdings of ten large concerns as consisting of holdings of £500 nominal and under. In contrast to this, Sir R. L. Wedgwood has shown that in January 1926 only 56 per cent of the holdings of capital in the four main-line railways were under £500 nominal.¹

The well-to-do, therefore, hold stocks and shares in large amounts, but the average size of the holdings cannot be called low as many of the ordinary shares of the first analysed stand at a very substantial premium. But how do the direct holdings of individuals compare with their indirect holdings through the agency of investment trusts and insurance companies? A discussion of certain statistical evidence may be anticipated;² the outcome of it is that stocks and shares held indirectly through investment trusts and insurance companies are completely dwarfed by those held direct; for every £100 worth of industrial securities held by a trust or an insurance company, more than £1000 worth is held by private individuals on their own account.

In size intermediary security holders are small beside the investing public, though this is in no sense a measure of relative importance. Investment trusts and insurance companies have a big part to play in the launching of new issues because of the underwriting that they do, and though the public takes up securities as soon as they become well known, there are stages when the support of the big institutions is essential. Further, the big City institutions are organized and in a position to take a strong line if any problem affecting shareholders' rights comes up;

¹ *Factors in Commercial and Industrial Efficiency*, p. 129.

² See below, pp. 197, 198.

the public is seldom in a position either to make up its mind or to make its voice heard.

3. THE DEMAND FOR CAPITAL

For what purposes is the capital raised through the market used? Only in exceptional cases can it be expected to go to the setting up of entirely new businesses. Transport undertakings, electricity companies and concerns of a like nature with a definite concession to exploit alone can provide that certainty of profits which would impart marketability based on knowledge to the resulting securities. In the main, one would expect new issues to finance the expansion of existing businesses, to take over bank and similar loans already made, or to provide capital for new businesses acquiring businesses already in existence. In general, new money would be used, partly for the taking over of existing assets, and partly for the provision of working capital and capital for expansion in the future.

Attempts have been made to analyse the purposes to which money raised on the London market was intended to be put, but the results are, as might be expected, inconclusive. The basis of the following analysis was the prospectuses published in the *Financial Times*:¹

METHODS OF SPENDING NEW CAPITAL, 1927-33 *

(£ million)

Existing Assets acquired	81.9
New Capital	75.6
Conversion and Repayment of Loans	101.1
Preliminary Expenses	12.8
Ambiguous	344.4
	615.8

* Home Government and all Overseas Issues excluded.

It is impossible to draw any certain conclusion when

¹ Analysed in "Recent Capital Issues", by "A Group of Cambridge Economists", in *Studies in Capital and Investment*, edited by G. D. H. Cole. The figures are compiled from material on p. 125.

more than half the capital raised cannot be assigned with certainty ; but it is noticeable that money going to replace existing capital and to acquire existing assets far outweighs new capital.

A different approach was used in an analysis made by the *Economist*.¹ This study dealt with company prospectuses issued in 1933, 1934 and 1935 (up to the first week in November). The total cash raised during the period was £77·8 million, 84 per cent of the total being put up by the public and 16 per cent by insiders. In addition, scrip was allotted to the value of £21 million in payment for businesses taken over. " On the assumption that the public have taken all offered to them, the figures show that for every £1 subscribed by the public, inside interests have put up a cash subscription of 3s. 8½d., and have been allotted shares, for considerations other than cash, to the amount of 6s. 5d. The inside interests, however, have retained in their hands a much higher proportion of the equity capital than of the total capital. . . . Altogether of a total ordinary share capital of £51,064,700, the public has obtained 44 per cent, and inside interests 56 per cent."

The total cash received of £77·8 million was expended as follows : £4·1 million represents the costs of underwriting and issue ; £37 million went as cash to the vendors of existing businesses ; £35·8 million remained in the businesses as new capital. Thus just under half of the money raised was left at the disposal of the concerns for carrying on business and for development. As far as these figures go, the picture is a reassuring one : the public is neither paying too much in cash to vendors (and so leaving business short of working capital and capital for development), nor putting excessive capital at the disposal of businesses which have not developed very far. On the other hand, it must be remembered that the period was a good one. The shadow of the depression was teaching investors caution, and the more extravagant

¹ December 14th, 1935.

company promoter had little scope for his activities. The position throughout 1936 and at the beginning of 1937 is perhaps less reassuring.

4. METHODS OF FLOTATION

There are several methods by which securities are sold to the public in the London market. First, the usual method, securities may be offered by means of a prospectus inviting applications from the public. This method has the advantage that the transaction is carried on in the full light of publicity, and that a fixed quantity of stock will have to be allotted among applicants on a non-discriminating basis. The issue is thus widely distributed before dealings commence, and the danger of an artificial restriction on the quantity of stock available is avoided. The chief drawback of this method is its expense in the case of small issues, as the cost does not vary directly with the size of the issue.

Second, new issues may be launched by means of an Offer for Sale. A third party, having taken over a large block of a company's securities, offers these publicly at a fixed price. This method comes to much the same as the first, a known quantity of shares being distributed among the public in a non-discriminatory manner, though in certain cases the margin between the amount received by the business and the cost paid by the public seems to be unduly large.

Third, private placing followed by an introduction. This old-established method has aroused a great deal of recent controversy. The technique is as follows: a company making a new issue places its shares privately with the aid of its brokers. When this is done, the issue is advertised in at least two leading London dailies for purposes of information, and then permission is sought for dealings to begin on the Stock Exchange. Introductions have aroused criticism: although the number of shares in which dealings are permitted is known, there is

no knowledge as to how many may effectively be available. To begin with, the holdings of the shares are not widely diffused among the general public, but are in the hands of relatively small groups who might find opportunity to create an artificial scarcity of stock.

Apart from placing and introduction, with advertisements "for information only" in two or more London dailies, certain statutory companies are allowed to introduce stock without advertisement of this type; the Great Western Railway placed several millions in this way in 1933.¹

Lastly, there is the method of offer by circular "to shareholders only", the shareholders being given an option on new shares at an advantageous price. This form of issue is the most economical of all, as it enables a successful company to raise fresh capital without having to involve itself in large issue costs; but only a company whose shares are at a premium can use it.

As we have seen, the prospectus and offer for sale methods are the more satisfactory from the point of view of the investing public, since everybody has an equal chance of getting an allotment and holdings of securities are diffused more widely. Nevertheless, the introduction method is being used for large amounts; the larger part of the securities thus placed and introduced appear to have taken the form of ordinary shares; preference capital comes next, while debentures account for the smallest proportion.

In favour of the method is the economy in expense which it makes possible; legal and advertising costs are kept at a minimum, and there are no underwriting expenses to pay (though the last point is more apparent than real since the finance house which does the placing will have done so after having calculated for a margin of profit for itself and for its clients when dealings begin). Further, the opportunities for deception are reduced, for it is easier to sell a dubious proposition with a glowing

¹ *Economist*, October 14th, 1933, p. 723.

prospectus than to place it with experienced investors in the City (though the moral scruples of the latter may be much reduced if there is an early prospect of a large profit from re-selling such securities to the public). Against these advantages, however, must be set the restricted market and the power of controlling it which may be left with a limited number of investors when holdings are not widely diffused to begin with. Buyers and sellers are not on an equal footing if the latter have the power suddenly to behave as monopolists. The subject was examined by the Stock Exchange Committee, whose verdict was, on the whole, unfavourable. The official announcement was :

The Committee for General Purposes have had under their consideration representations which have been made to them that the distribution of securities by means of a private placing (as opposed to a prospectus or offer for sale) reacts unfavourably upon the public and the general body of members.

An examination of this question has led to the conclusion that while the issue of a prospectus or offer for sale is, in most respects, the preferable method of distribution, there are instances in which its use is precluded by considerations of expense or otherwise, and that the abandonment of the method of private placings would prejudice the public by rendering impossible the distribution of securities in which they might advantageously participate.

In the opinion of the committee it is desirable that all issues, particularly those of Ordinary capital, should be made by prospectus or offer for sale unless from the public standpoint the necessity or advantage of a private placing is indicated by the circumstances.¹

Nevertheless the flow appears to have continued unchecked ; the Midland Bank noted 240 publicly advertised private placings in 1936, as compared with 180 in the previous year.

There is one consideration, however, which is an important one and which so far has been ignored—that of the time between the placing of the securities and the commencement of dealings in them. It appears to be

¹ *The Times*, February 12th, 1936.

assumed—and with good reason—that the placing and the dealings follow closely on one another. But need this be the case? The securities of an untried company might well be placed privately among informed City investors willing to take risks, and then sold after a period during which the company has had opportunity to prove its profit-earning capacity. Trusts holding equity shares in untried companies and subsequently disposing of the shares of the successful companies and gaining the benefit of capital appreciation to compensate them for losses in other directions would be fulfilling an important economic function. Yet it is difficult to see how such a system could work without private placing and introduction at a later date. In particular, this would affect ordinary shares—and the larger part of recent placings have been ordinary shares. While it is true that sometimes the shares might quite easily be issued by a sale offer, it is nevertheless important to stress that under certain conditions, where genuine nursing has taken place, the introduction method may be both economical and appropriate.

The Stock Exchange regulations concerning new issues are designed to secure compliance with the Companies Acts, to guarantee a free market in any securities dealt in, and to prevent fraud, but all responsibility for the issues themselves is declined. A company making an issue must publish full particulars of itself and its history. There must be an exact statement of the shares offered for subscription, and in particular of any portion of the issue on which interested parties already have an option. The amount being paid to vendors must be specified, and the working capital available for the business must be set out together with a statement that in the opinion of the directors it is sufficient for the purpose. Details are also required of the profit record of any businesses being taken over by the company making the issue. A list of contracts entered into must be given, and all the relevant documents must be made available for inspection by the general public.

But the Stock Exchange Committee has full and absolute discretion as to the companies in whose shares it allows dealings. As long ago as 1928, the Committee took the step of announcing that it would not grant permission to deal in the shares of any totalisator company " unless the prospectus, offer for sale, or advertisement in the press required to meet Stock Exchange regulations states that the machine with which the company is concerned has been adopted by the Race Course Betting Control Board ". On the face of it, such a step might seem to be outside the normal functions of the Committee of guaranteeing a free market or preventing fraud, but in fact the step was a necessary one. At the time, totalisators were illegal except under the auspices of the Betting Control Board, and no company would be able to carry on if it could not sell its machines to the Board.

Since 1928 regulations have been tightened up considerably, and the Committee exercises its discretion more strictly where highly speculative issues are concerned. It is safe to assume that many of the issues which were admitted in 1928 would fail to secure permission for dealings to-day.

5. TYPES OF SECURITY

The form in which a business concern obtains its capital—by the issue of Debentures, Preference or Ordinary shares—varies not only with the type of concern but also with general economic conditions and the general expectations of the public. The Midland Bank gives figures dividing up company issues under the headings of " Debt " and " Capital ".

The volume of " Capital " fluctuates with every change in business expectations, whilst that of " Debt " remains relatively stable. After the boom of 1919–20, the large " Capital " issues disappear, while the annual total under the heading of " Debt " even increases. After 1924, with bright prospects and a steady rise in security prices, " Capital " is again an increasing factor. After 1929 comes

TYPE OF SECURITY ISSUED BY COMPANIES
(Excluding Rail, Gas and Water)

	" Debt "		" Capital "		Total Company Issues, £ million	Total all Issues, £ million
	£ million	% of Total	£ million	% of Total		
1919	21.0	9.6	199.0	90.4	220.0	238
1920	46.7	15.2	261.0	84.8	307.7	384
1921	42.2	46.8	47.9	53.2	90.1	216
1922	48.8	49.5	49.8	50.5	98.6	236
1923	44.7	49.4	45.8	50.6	90.5	204
1924	38.1	38.1	62.0	61.9	100.0	224
1925	45.2	34.2	87.1	65.8	132.3	220
1926	49.9	35.4	91.0	64.6	140.8	253
1927	50.0	27.9	129.0	72.1	178.9	315
1928	65.4	26.0	186.1	74.0	251.5	363
1929	44.6	22.5	153.9	77.5	198.6	254
1930	33.9	43.6	43.9	56.4	77.9	236
1931	23.1	56.0	18.2	44.0	41.3	89
1932	17.0	43.9	21.7	56.1	38.8	113
1933	31.2	50.5	30.6	49.5	61.7	133
1934	35.6	35.4	65.0	64.6	100.6	150
1935	40.7	35.1	75.4	64.9	116.1	183
1936	38.5	29.9	90.3	70.1	128.8	217

the turn and the position of " Capital " falls off, only to increase once more as conditions improve. The increase and decrease in the proportion of capital with an improvement or deterioration in business conditions is quite clearly marked ; the only exception is in 1932, when Government conversion operations put an artificial handicap on fixed interest borrowing.

The proportion of " Debt " and " Capital " will naturally vary with the particular type of enterprise. If an enterprise can offer assets by way of security for a debenture, it will borrow a higher proportion of the money required in this way ; the converse will apply in the case of a concern whose main asset is its profit-earning capacity. Figures are available (Midland Bank) which show the position in respect of different industries which raised money from the public in 1919-28.

“ DEBT ” AND “ CAPITAL ” IN PARTICULAR INDUSTRIES,
1919-28

	“ Debt ”, £ million	% of Total	“ Capital ”, £ million	% of Total	Total, £ million
Trams and Omnibus	10·8	56·1	8·4	43·9	19·2
Electric Light and Power	42·0	53·0	37·3	47·0	79·3
Shipping, Canals and Docks	44·5	51·4	42·0	48·6	86·5
Iron, Coal, Steel and Engineering	59·3	48·9	62·0	51·1	121·3
Breweries and Dis- tilleries	13·7	40·0	20·5	60·0	34·2
Tea, Coffee, Rubber	14·8	27·4	39·1	72·6	53·9
Financial Land, In- vestment and Trust	52·1	22·5	179·8	77·5	231·9
Mines	8·8	16·5	44·6	83·5	53·5
Telegraph and Tele- phone	2·6	15·0	14·6	85·0	17·1
Motors and Aviation	5·0	14·3	30·1	85·7	35·1
Banking and Insur- ance	12·3	12·9	83·5	87·1	95·9
Oil	6·1	7·6	74·2	92·4	80·4
Miscellaneous, Com- mercial and In- dustrial	179·8	25·6	522·3	74·4	702·1

6. THE PRICE OF NEW CAPITAL

The price of new capital consists of two items : first, the rate of interest which a company has to pay to the lenders, and, second, the cost of making the issue.

The *Economist* publishes figures of the average rate of interest payable on new public issues on the London market each year.

The figures of debenture yields are on the whole more informative as to the general trend of interest rates, as the character of the preference shares (*e.g.* as regards participation or cumulation) may vary from year to year. It will be seen that on the whole the trend has been down-

	Average Yield on New Issues of Industrial Debentures	Average Yield on New Issues of Preference Shares
1913	5.50	5.74
1920	7.92	8.09
1921	8.09	8.39
1922	6.72	7.17
1923	6.40	6.59
1924	6.61	6.27
1925	6.43	6.10
1926	6.48	6.70
1927	6.21	6.67
1928	6.10	7.37
1929	6.10	6.58
1930	5.96	6.00
1931	6.33	6.50
1932	5.44	6.32
1933	4.58	5.28
1934	4.48	5.00
1935	3.83	5.03
1936	4.17	4.99

wards throughout the period, with especially pronounced falls after 1921 and again after 1932. It cannot be said that rates are absurdly high except just after the War, and at present they are far below the 1913 level, while the height of income tax reduces the real return to investors, which is thus exceptionally low. One word of caution must be added, however; while the rates payable on flotations on the London market are exceptionally low, it is improbable that rates paid privately for loan capital by companies too small to make issues in London have fallen anything like in proportion.

As regards cost of issue, figures are again available for London flotations. The *Economist* analysis of issues in 1933–35 shows £4.1 million out of a total of £77.8 million going in underwriting and issue expenses—that is, 5.3 per cent. But an average of this kind conceals many differences, and this reasonable figure is no proof that the smaller issues do not have to pay a great deal more. In fact they certainly do. Thus Candidus, writing in the

Investors' Chronicle (February 15th, 1936) :

I picked up at random a number of recent prospectuses and found that the expenses of issue were extremely high when small issues of capital had been made. For example, British Aircraft Manufacturing Company recently issued £180,000 in 5s. shares and disclosed preliminary expenses of £16,000 and underwriting and overriding commissions of £9000, a total of £25,000, or 14 per cent of the issue. There was nothing to suggest that this issue had not been made as cheaply as it could be. Another recent issue—Kavirondo Gold Mines—for £150,000 disclosed preliminary expenses, including underwriting, of £20,000, or 13½ per cent of the issue. These expenses include the formation expenses of the new company.

An examination of prospectuses published in *The Times* in the second half of 1935 confirms the high cost of making issues for small firms. In the case of issues of under £100,000, underwriting and overriding commission usually comes to nearly 4 per cent, and expenses to 9 per cent, a total of 13 per cent.¹ The effect of this is to raise the real rate that a company has to pay on a 6 per cent cumulative preference share—which is the type of security smaller companies were then putting out—to 7 per cent. It is natural that advertising and other overhead expenses should be high, and weigh more heavily on a small issue, but it is not easy to see why underwriting expenses should take a much higher percentage in the case of small companies than of large ones. It is difficult to escape the conclusion that either some of the smaller issues should not be made at all, or else, that they should have been made more cheaply.

¹ This would seem to be moderate judged by standards early in 1937, when the writer picked up (on the counter of a bank) an offer for sale of ordinary shares in a small manufacturing business with a good profit record on the £10,000–£15,000 a year scale. The shares were nominally 2s., had been purchased at that price by the Trust responsible for the offer, and were being re-sold at once to the public at 2s. 6d. The company was to receive £70,000 clear ; the public was to pay £87,500. Expenses were estimated to account for 3·8d. per share, including 3 per cent underwriting commission ; the Trust making the offer was to collect a clear profit of 2·2d., or over 7 per cent.

X

THE IMPACT OF CHANGE ON INVESTMENT MACHINERY

1. NEW ISSUES : PRE-WAR AND POST-WAR

THE history and working of the new issue market cannot be seen in proper perspective without some assessment of the underlying changes which have taken place since the War.

These changes may perhaps best be illustrated by means of statistics. In the following table the pre-War figures are calculated from the *Statist*, the post-War from

TYPES OF NEW ISSUES : PRE-WAR AND POST-WAR
(£ million)

	Average, 1910-13	Average, 1927-30	Average, 1933-35
HOME :			
Public Authorities . . .	6·8	24·2	31·1
Transport	11·2	15·2	13·0
Finance	7·1	42·1	10·5*
Production and Trade .	19·1	89·0	66·6
	44·2	170·5	121·2
OVERSEAS :			
Public Authorities . . .	52·7	63·0	14·9
Railways	58·0	13·2	0·6
Other	66·7	45·1	18·6
	177·4	121·3	34·1
Total	221·4	291·8	155·3

* During this period some £15-£20 million of Unit Trust certificates were also sold per year.

the Midland Bank, but the basis on which they are compiled is more or less the same. The only real difference—and it does not affect the figures to any great extent—is that the pre-War figures include Government borrowings, while the post-War do not; but such borrowings were relatively small, and their exclusion would only heighten the contrast.

These figures reveal a number of striking features.

In the first place, there is the spectacular decline in lending overseas. This decline is already very marked in the period before the depression. More capital is going to the home market than overseas, whereas before the War the proportion was something like 4 to 1 in favour of capital going abroad. But after 1931 there is an even greater fall. Overseas investment is discouraged by the authorities and, in any case, seems unattractive in view of unfavourable developments in certain parts of the world; the most significant form of capital export is the purchase of securities in New York—a case of one creditor country speculating in the stock markets of another.

The second feature—a particular case of the tendency just discussed—is the disappearance of overseas railway financing as the main channel of investment. Before the War, British capital built railways all over the world, and especially in the United States. During the War, British foreign investments were mobilized, and American railway obligations in particular were handed over in payment of War purchases. After the War, America appeared as an exporter and not an importer of capital, so there was no question of Britain financing American railway development. In other parts of the world, railway development was also becoming less important; the economic universe was no longer expanding at the same rapid pace as in the pre-War years.

The third significant tendency is the emergence of large-scale borrowings by municipalities in Great Britain; these have been resorting to the London capital market on an increasing scale. This growth in their borrowing is,

in the main, accounted for by expenditure in connection with housing programmes, though other forms of increased capital expenditure also help to swell the total.

The fourth striking feature is the much increased importance of home enterprise. Production and trade are coming to the London capital market in search of their resources, a thing they did not do to any very noticeable extent in the years before the War. This tendency is of especial significance, and will have to be examined separately as it not only involves the question of the ability of the London market to handle this type of financing, but also raises wider issues concerning the financing of home enterprise generally.

Lastly, there is the emergence on a much increased scale of financial enterprises pure and simple, such as investment trusts. Intermediate links between the investing public and those carrying on enterprise are growing more important. This tendency would seem to be a natural consequence of the increasing part taken by home enterprises as borrowers in the London market, and is connected with the process by which the capital market is adapting itself to a changed environment. These intermediate links give the smaller investor the chance of securing a spreading of risk, which is very necessary when he is ultimately investing in a large number of securities about which he knows comparatively little.

This last tendency, partly due to the emergence of the small investor, is to some extent reflected also in the growth of the assets of the insurance companies and in the increase of the funds left at the disposal of building societies by the general public. Both these agencies provide forms of investment which cater for the needs of the typical saver of the period.

2. THE CHARACTERISTICS OF PRE-WAR INVESTMENT

Pre-War investment had certain definite characteristics. The channels of investment that led through the Stock

Exchange were all clearly marked. The money raised on the London capital market flowed in certain specific directions : to public authorities at home and, to a much greater extent, abroad ; to railways ; to public utility enterprises ; to commodity production—gold, rubber, tin, oil, tea—which, though speculative, was not unprofitable in view of steadily expanding world demand under conditions of comparative economic and political stability. Most of the investment which took place on the London market followed these channels, and comparatively little was engaged in searching out and developing new forms of enterprise outside these comparatively restricted spheres.

Another characteristic is the complete absence of anything that can be described as industrial banking. Industry and the banks are independent of each other, and in this they differ from most other countries. The banks are merely leading institutions ; they do not participate in business or exercise any control over it, except when their loans are threatened. From this follows a further characteristic : that before the War personal and private financing was providing industry with capital on a large scale.

The absence of industrial banking is, of course, a most remarkable feature which has been surprisingly neglected by general business opinion, in spite of belated voices raised to draw attention to some of the difficulties which arise in consequence. The reason for the independence of British industry from the City of London, and the contrast with the state of affairs ruling in other countries, is set out clearly in the report of the Macmillan Committee.¹

The explanation of the self-supporting character of British industry is, in the first place, historical. England was a great commercial and trading power before the industrial revolution ; commerce preceded industry. London was thus a financial centre of world-wide importance before the great period of growth of British industry

¹ Paras. 377 to 381.

in the nineteenth century. From the side of finance, there was no reason why it should occupy itself to any major extent with industrial development since it was already profitably occupied in financing trade.

Industry on the other hand began, so far as the individual units were concerned, on a comparatively small scale and, in the main, on a family basis. Capital was provided privately, and businesses were built up and extended out of the profits which they earned at a time when British industry, as a pioneer, was being well remunerated. Local banks provided what banking facilities were necessary. Further, there was a large class of investors with money at their disposal who relied on their own judgment of the enterprises in which they invested. As a result, industry as such was able to remain independent of the control of financial institutions, which were in any case busily occupied elsewhere.

This position was very different in other countries, which were poorer and embarked later on industrial development, and had to face a shortage of capital and a scarcity of independent investors. In order to compete against the start which British industry had already secured, industries abroad were forced to look to institutions, such as banks, for a measure of permanent as well as short-dated capital. The result was a much more intimate connection between industry and finance.

The Macmillan Committee drew special attention to a description of the German system made by Dr. Goldschmidt in his statement of evidence :

It should never be forgotten that Germany owes the great industrial development of the sixties, the nineties and the first decade of this century in a large measure to what one may well describe as this "entrepreneur" spirit in banking. . . . The relationship between a bank and an industrial or trading company commences with the latter's foundation. Scarcely a single important company in Germany has been founded without the collaboration of a bank. Whether it is a case of converting a private firm into a limited company, or of exploiting a new invention by establishing a new enter-

prise, the assistance of a bank is always invoked. The bank examines the situation and, when necessary, obtains reports from experts in the particular line. . . . If the bank, after examination, decides to found the company, it draws up the scheme of financing, determines the amount and the type of capital to be issued, and then, in some cases, itself takes a part of the shares into its security portfolio with the idea of issuing them at a later date. In this way the founding bank becomes at the same time the issuing bank, the latter functions beginning, however, only with the introduction of the shares to the Stock Exchange through the intermediary of the bank (*Statement of Evidence*, paras. 5-6).

As might be expected, Germany provides the most methodical example of close working between finance and industry. In France, and also in the United States, the relationship is less clearly defined, but in both cases the connections with industry are far more intimate than they are in Great Britain.

Thus the emancipation of British industry from financial control is the result of historical development, of large profits reinvested, and of private lending on an elaborate scale. The system by which industry was developed in these early stages—if it can be called a system—has never been described in detail. Solicitors and accountants helped to some extent to provide money for growing enterprises by bringing together borrowers and lenders. Individuals with faith in the business which they proposed to start, mortgaged their houses in order to secure some initial capital, and then raised money where they could.

The Lancashire cotton industry was financed almost entirely with local money.¹ In the case of the spinning section of the industry, capital for the creation of new undertakings was largely obtained through the creation of public joint-stock companies which placed their securities locally among interested parties and among

¹ The description of pre-War financing which follows is largely summarized from Lavington, *The English Capital Market*. See in particular pp. 263-273 and 278-288.

others who had knowledge of the business reputation of those concerned in the venture. Cotton operatives were in the habit of lending their savings, on a fixed-interest basis, to the companies for which they worked. In addition, trade credit and bank loans played an important part, these being repaid in due course out of the company's profits.

With cotton-weaving, less capital was required to begin with. Room and power companies might equip a mill which they would let out in floors to prospective weavers. A small weaver with the aid of trade credit from machinery makers and perhaps some assistance from a bank would begin with possibly 100 looms, hiring power and a floor in the mill. As profits increased he would buy new looms and repay his debts, in due course perhaps building a mill for himself. "At least one large centre in Lancashire has developed in this way, expanding and subdividing like an organic thing." The industry has been built up on accumulated profits, but trade credit and the banks have played an important part.

The Belfast linen industry seems to have grown out of profits, much of the initial capital being obtained by placing the securities of private joint-stock companies among those connected with the enterprise through personal or business interests. In the case of the Northampton boot trade, the original capital also appears largely to have been secured through personal connections. The same is true of the woollen and worsted industries, where, before the War, the family business was the backbone of the industry.

The heavy iron and steel trades in the North of England started as private undertakings, though at a subsequent stage the sale of securities in local markets and later on in the London market proved an important factor in facilitating development. The same is true with ship-building and ship repairing on the Tyne. Profits, partnership and private contract provided the channels through which early development was financed. In the engineering

trade in Yorkshire, public companies were rare. Most businesses began in a small way, possibly obtaining permanent capital through partnerships, while the banks also did much to finance development.

Lavington also mentions a sample enquiry covering 91 leading firms in Gloucestershire, excluding Bristol, in 1904; "of these, 54 were private firms, 37 were limited liability companies; and of these 37, only 4 or at most 7 originated as joint-stock concerns; the remainder were conversions".

Trade credit also was important. Ships could be bought on instalments, especially when business in the shipyards was slack. Machinery could very often be rented, for example, in the cotton and the bootmaking industries. Someone starting a shop could make any capital he owned himself go a long way with the aid of facilities offered by those who supplied him with goods.

The way of a man starting a new business was, to some extent, smoothed for him by the fact that there were many others who might be willing to take a chance. But he could look for no aid from financial institutions, apart from such loans as the banks might be prepared to give him, and in supporting him the banks would refuse to accept any responsibility for dictating policy or controlling the business. Thus the rapid growth of the national wealth left home industry more or less independent both of the banks and of the stock market.

3. CHARACTERISTICS OF POST-WAR INVESTMENT

An outstanding development in the post-War period has been the decline of overseas landing, balanced by an increasing tendency for home industry to resort to the London capital market. This tendency is noticeable throughout the years since the War. It was conspicuous in the immediate post-War boom, and finally reached its culmination in the new issue boom of 1928. Since depression cleared, the London capital market has gone

on devoting increasing attention to home industrial ventures, but the extravagances of 1928 so far have been avoided.

The 1928 issues have been analysed in some detail, and it is instructive to note with what disastrous results the capital market was used to float issues of concerns which should not by right have been there since they could show no record of past profit-earning capacity. The analysis¹ may be summed up as follows :

Type of Concern	No. of Issues	Cash Subscribed	Depreciation, May 31st
Public Companies established before 1928	41	£ million 36.3	Per cent 23
New Companies guaranteed by established companies	4	3.9	3
Companies formerly private	11	3.6	28
New Companies acquiring going concerns	74	28.9	18
New Companies acquiring businesses failing to certify past earnings	29	8.0	95
Entirely new Ventures .	109	26.7	83
New Investment Trusts .	9	7.4	32

The period between 1928 and 1931 is one of rapidly deepening gloom and deteriorating economic conditions. The *Bankers' Magazine* Security Indices which in 1928 (average of mid-month figures) had stood at 112.3 (fixed interest securities), 154.3 (variable dividend) and 126 (general index combining the two), stood, on June 1931, at 111.1, 103.6 and 108.6 respectively. The general index had thus depreciated by some 14 per cent, and that of variable dividend securities by 33 per cent. If we compare these records with those of the different classes of companies analysed above, it will be seen that all the issues which

¹ R. A. Harris, "A Re-analysis of the 1928 New Issue Boom", in the *Economic Journal*, September 1933, pp. 453-459.

had some history of profit behind them did not do unsatisfactorily in view of the troubled period in which they so soon found themselves. On the other hand, those issues which had nothing behind them in the way of past profits failed dismally. The moral is plain enough.

Why is it that home industrial enterprise is going more and more to the London capital market? The factors to be considered fall into two classes: on the one hand, the reasons which make those who are in the habit of investing their money through the Stock Exchange, put it into industrial concerns; on the other, the reasons which make industry itself look to the Stock Exchange and not to various types of alternative financing for their new capital.

The explanation of the willingness of the investor in Stock Exchange securities to interest himself in home industry is to be found in the decline, and ultimately disappearance, of overseas investment. The effective demand for capital for overseas, as well as the amount this country can afford to lend, having regard to the balance of payments, has lessened; even before 1929, it did not approach the pre-War scale. At the same time, capital was being made available in the United States for the development of other countries, and the outcome of these two forces was a very much reduced outlet for British capital overseas. Political difficulties and restrictions on capital export at this end have reduced this outlet almost to vanishing point. As a consequence, the investor who previously bought foreign bonds has had to turn his attention to development at home (and to a lesser extent to speculation in New York).

The other set of factors leads to the inference that local private financing is taking place on a smaller scale. First, the War undermined private financing as a whole. People who would in the normal way have financed small growing enterprises were persuaded to put their money into War Loan. Anybody who had money to spare was expected and persuaded to put it at the disposal of the authorities

in one form or another. On top of this, after the War rates of interest were so high that there was no inducement for people to seek out new opportunities of private investment since they could get a very satisfactory return by buying securities on the Stock Exchange.

Second, there was a shift in the relative importance of industry in different parts of the country. The coal and textile industries found themselves in a bad way ; the prosperous parts were in the Midlands and the South. In consequence, savings were being made most extensively in one part of the country, and unemployed labour for new enterprises was available in another. The sudden impact of change had led to a maldistribution of capital, and the situation could only be remedied by imparting a new mobility to capital, so that savings made in one part of the country could be used to build up new businesses in another. The only method of giving mobility to capital was by means of the Stock Exchange ; hence the concentration of funds in London. But the Stock Exchange by itself was unsatisfactory ; the need was also for private participating capital, and not only for capital in the form of marketable securities. Hence the more undesirable aspects of 1928. The opportunities for private local financing had been reduced in so far as savings, on the one hand, and labour and opportunities on the other, were in different localities.

Third, since the War the saving habits of people with fair-sized incomes have probably changed. The opportunities for luxury expenditure have increased with the coming of the motor car, and with the growth of expensive amusements. Improved standards of education and a better proportioned sense of values have undermined the passion for accumulation which to some extent characterized the earlier period, and private savings are more closely related to personal needs. People save with specific objects in view, and therefore there is a tendency for these savings to be kept in a more liquid form so that they are available if they are needed. Company reserves,

on the other hand, are either used to extend existing businesses, or to build up security holdings ; they are not available for new enterprise outside the scope of the business that makes the savings.

Fourth, it is often alleged that the effect of the heavy post-War taxation is to re-distribute income in such a way as to take it away from the rich saver. This is true only to a limited extent. The forces making for an increasing inequality of incomes are very strong, and existing scales of taxation are doing little more than keep them in check.¹ It would be gross exaggeration to suggest that growing enterprises are forced into the Stock Exchange because the local capital with which they should have been financed has been dissipated by the tax collector.

There are two ways, however, in which the activities of the tax collector may have changed the preference of individual for certain types of investment. Death duties make it desirable for investments to be in an easily realizable form. Stocks and shares answer to this test ; private loans and investments do not, and can only be realized with difficulty. Hence a possible preference for liquid forms of capital.

Another way in which the requirements of national finance might concentrate funds on the safer types of investment is through Sinking Fund operations. Money raised by taxation from individuals of all kinds with every type of investment preference may be used to pay off Government debt ; the holders of Government debt who receive these payments and use the money to make fresh investments would tend to seek out securities of the safest type.

It may be desirable at this point to raise a wider issue. At intervals since the War, the cry has been raised that the nation as a whole is not saving enough. The argument would appear to be that a larger proportion of the national income was being saved before the War than since the

¹ See Daniels and Campion, *The Distribution of National Capital*, for an authoritative examination of this point.

War. Such an argument is completely misleading ; there is no reason why any fixed proportion of the national income should be looked on as an appropriate proportion for saving purposes. The question of over-saving or under-saving can only be answered in terms of the opportunities for economic development open to the nation. These opportunities certainly are not unlimited. At the present time there is a superfluity of capital. The real difficulty, so far from being a shortage of capital, is a shortage of openings in which it can be employed successfully. Hence the importance of the question, whether the type of savings which are being made are appropriate to the requirements of industry and commerce. If they are not—and it has been suggested that in some respects this may be the case—then the argument must turn on the working of the investment machinery which links up the individual who saves at one end of the scale and the business man who uses the capital at the other. A balance can only be restored through the proper working of those institutions which bring the two together. It will, therefore, be important to examine the workings of these institutions in some detail.

Finally, there have been changes in the working of the capital market between, say, 1929 and 1935. The number of small issues has increased, and the minimum amount which could be raised through the new issue market may be said to have fallen. The low return on all investments as a result of depression and of the cheap money policy pursued by the Treasury and by the Bank of England since 1932 has driven individuals and institutions alike to look further afield for new money-making propositions. Here also we have tendencies which call for careful examination.

XI

INVESTMENT INTERMEDIARIES

1. THE SIGNIFICANCE OF INVESTMENT INTERMEDIARIES

THE institutions which link savers at one end and users of capital at the other, justify their position by performing a number of functions. They have a knowledge of the problems of investment and of opportunities of employing funds profitably which is denied to most individual investors. They can go farther afield geographically ; they know the personal reputation of would-be borrowers ; they can command expert advice of the highest quality. In this manner they can secure a higher return on the savings of individuals owing to superior knowledge and bargaining power.

But this is only one of the purposes which they serve. They are able to put savings into a more useful shape, from the point of view of the borrower, by combining small amounts into large. Further, relying on the fact that individuals will not all withdraw their savings at one and the same time, some of these institutions lend a proportion of those savings for periods longer than those for which they have borrowed them, and change the quality of the savings which they handle by making them available for longer periods than could the original saver, each acting on his own account. An economy of cash results ; in the absence of such institutions both individuals at one end of the scale and business borrowers at the other would have to keep a far higher proportion of their resources in liquid form.

Lastly, the investment intermediaries have a further

special advantage owing to the volume of resources which they command. They are able, by spreading their investments over a wide range of business, to earn compensation for losses in one direction through profits in another. This risk-spreading policy enables them to be more venture-some in the investments which they take up, and in the process not only do they earn a higher return for themselves but also they are able—should they so desire—to adopt a more experimental attitude towards the undertakings in which they take an interest.

Thus investment intermediaries have an important function to perform. They are enabling the investor to invest more wisely ; to go further afield ; to employ his money profitably when otherwise he would have to hold larger idle balances ; and to get the benefit of the spreading of risk over different types of enterprise. The borrowers in their turn benefit, as otherwise the difficulty of finding capital would be greater and proportionately more expensive. Hence the importance of banks, insurance companies, investment trusts, building societies, and other institutions which bring borrower and lender into touch with each other.

2. THE BANKS AND HOME INDUSTRY

As we have seen, the banks profess to take no part in providing long-term capital for industry in this country, and have always denied that such provision is within their competence. Where they do so, it is a matter of accident, as when they find that the short-term loans which they have made are unrepayable, and in consequence as creditors they are left with an interest in an undertaking not of their own seeking. The banks' admitted function is to provide short-term credit by means of advances ; these credits are to finance particular pieces of business, and are paid off in a short period and renewed again for new transactions. In theory, the banks hold that they are thus protecting themselves since, if they chose, they

could always reduce or withdraw credit facilities on short notice.

The banks themselves lay emphasis on the short-term character of their advances and point to their commitments to the public in explanation of this. But in fact the advances the banks make are liquid and callable—where they are so—only individually ; a general demand for repayment would be impossible, and even in individual cases a sudden calling in of loans would probably bring a business to a standstill if it could not obtain working capital from other sources.

Indirectly, the banks might be said to be ultimately supplying long-term capital since the facilities they offer enable their clients to economize in the amount of long-term capital which they employ ; without adequate banking facilities the volume of long-term capital necessary to finance business would be vastly increased. Waste would result if business had to borrow long-term capital to cover requirements which varied from period to period, as a large part of capital requirement does. The banks in providing short-term capital not only make for economy, but also enable business to carry on and expand more rapidly.

The argument of the banks is that

as our deposits are repayable on demand or at short notice, our advances must be arranged on the same conditions. This does not mean that in practice the repayment of advances is arbitrarily demanded but that, in making an advance, we must be reasonably confident that the transaction will be self-liquidating in a comparatively short period, or alternatively, that the amount advanced will be forthcoming with reasonable promptitude in the event of a demand for repayment being made.¹

But statements of this sort are not very helpful in 1936 or 1937. Everybody knows that if there were a run on the banks, they would only be able to meet a small

¹ W. F. Tuke, Chairman of Barclays Bank, at Annual Meeting, January 23rd, 1936.

proportion of their liabilities in cash if it were not for the certainty that such a run would immediately be followed by a suspension of the Bank Act, and emergency measures to make currency available. The one thing the banks could not and would not do would be to start calling in wholesale their advances to industry and commerce. Their appeal to liquidity is largely illusory. Quite naturally banks want to see their loans secure and their accounts turning over, but this is often a question more of the solvency of the concerns to whom they lend than one of finding loans of a self-liquidating character. Transactions are not isolated. They are usually one of a series, and businesses borrow because they are confident that the banks will finance not one transaction but a whole series of transactions of the same kind. If banks are "reasonably confident" that transactions will be self-liquidating in a comparatively short period, they are deceiving themselves. The whole relationship between bank and client is based on the assumption that the bank will not call in loans without regard to the client's interest.

Emphasis on the importance of bank loans being for short periods only is especially misplaced at a time such as the present, when the banks are finding difficulty in finding a sufficiency of industrial borrowers and are buying Government securities on a large scale to take the place of those advances which they would like to make but cannot. The analysis of bank advances given by Lord Wardington at the Annual Meeting of Lloyds Bank in January 1937—the figures are to be published regularly in the Bank of England *Statistical Summary*—is most illuminating. The first column shows advances as analysed for the Macmillan Committee towards the close of 1929 and the beginning of 1930; the second—the recent analysis.

The fall is even greater than indicated above, as the latter total should be reduced by £28 million (advances of the District Bank) to be on a strictly comparable basis. But even as it stands the fall is striking enough; with a

CLEARING BANKS' CLASSIFIED ADVANCES

	1929-30	31st October 1936
	£ million	£ million
1. Textiles (cotton, wool, silk, linen, jute)	81·6	39·9
2. Heavy Industries (iron, steel, engineering, shipbuilding)	63·0	40·7
3. Agriculture and Fishing	68·6	57·7
4. Mining and Quarrying (including coal)	30·0	18·1
5. Food, Drink and Tobacco	63·2	29·4
6. Leather, Rubber and Chemicals . .	22·0	12·6
7. Shipping and Transport (including railways)	25·2	23·2
8. Building Trades	47·8	61·5
9A. Miscellaneous Trades }	146·5	{ 67·4
9B. Retail Trades }		{ 60·1
10. Local Government Authorities and Public Utilities Companies (excluding railways)	52·4	50·4
11. Amusements, Clubs, Churches, Charities, etc.	26·5	40·5
12. Financial (including banks and building societies)	142·5	109·6
13. Other Advances	218·4	258·5
	987·7	869·5

volume of activity distinctly above the 1929 level, bank advances are down by 12 per cent. This might largely be explained by the fall in prices were it not clear from the individual items where the real changes have taken place. The total is supported by items 8, 11 and 13, the latter including advances to private individuals; in contrast the sum of items 1-6 (essentially productive industries) is down by 40 per cent. Whether they like it or not, industry has become largely independent of the banks. Industry is now financing itself, to some extent as a result of greater integration and the development of holding companies (any company with liquid assets in a group will tend to use those assets to pay off the

overdraft of other companies in the group), and for the rest partly from resources raised in the capital market, and even more out of profits put to reserve.¹ Other possible factors are the sale of securities to the banking system—someone must have owned the government stocks which the banks have been purchasing so industriously—and the development of attractive financial facilities outside the banks. But it all comes to the same thing: that the banks are losing an important and profitable type of business.

While it is natural that banks should prefer not to use their money in providing long-term capital when they can use it in lending on short term, the present state of affairs is such that the banks would be well advised to take a wider view and in one way or another to lend for longer periods where they are satisfied that their clients are solvent. Certainly the danger of losing money through this type of lending might be less than the danger of depreciation on holdings of long-term Government securities, purchased at prices so high that they were returning around 3 per cent.

It is, of course, difficult to say how far the facts of bank lending accord with the theories of it propounded so vigorously by bank chairmen. In many cases businesses able to offer collateral security are able to borrow fairly freely, and the time element is not the most important consideration. But the old country banker with capital of his own in the business, and not only his depositors to think of, probably could do more in supporting businesses with only prospects to offer, where he had personal knowledge, than can the bank manager who has taken his place to-day. Will the banks be satisfied to remain holders of Government securities on the present scale when the yield is low, and when the danger of a rise in the rate of interest might involve them in capital loss on these securities? At least they might reconsider their relations with industrial undertakings, and the possibility

¹ See the *Economist*, January 9th, 1937, pp. 71-72.

of lending, either directly or through associated financial enterprises, for longer periods than they are prepared to do at present.

3. INSURANCE COMPANIES AND HOME INDUSTRY

Of all institutions, insurance companies command the largest sums available for long-term investment. Life assurance is bringing about £50 million net every year as an addition to the national savings. The invested funds of the companies total over £1500 million. These figures give some impression of the magnitude of the operations of the insurance industry, and of the power which they exercise in consequence in the investment world. The activities of these companies thus have two aspects: they are performing their functions not merely as savings institutions helping the individual to deal with future contingencies in an uncertain existence, but are also doing much to provide capital for enterprise and doing it on an increasing scale since they have to invest additional funds at the rate of a million a week.

The distribution of insurance companies' investments is shown on the following page.

As will be seen, between a quarter and a third of the funds are in the form of securities in railway companies and industrial and commercial enterprises. This type of investment has grown rapidly since the War. Francis Williams¹ has analysed the assets of the four largest companies, the Prudential, the Pearl, the Alliance and the Sun Life of Canada, in 1920 and again in 1933. He found that debentures, preference and ordinary shares together accounted for 12·9 per cent of the total assets at the end of 1920, and for 29·3 per cent at the end of 1933. These companies are fairly representative, and together account for about one-third of the total investments held by insurance companies. Nor does their support for

¹ "Insurance Companies and Investment Trusts", in *Studies in Capital and Investment*, edited by G. D. H. Cole.

INSURANCE COMPANIES' INVESTMENTS IN 1928 AND 1934
(Board of Trade figures : £ million)

	1928	1934
Securities :		
British Government	272·7	363·4
United Kingdom Municipalities . .	58·2	91·1
Empire Government and Municipalities	93·7	120·4
Foreign Government and Municipalities	89·0	82·3
Debentures	185·8	244·8
Preference and Guaranteed . . .	67·3	104·1
Ordinary	66·2	108·0
Total Securities	832·9	1114·2
% of Total Assets	70%	73%
Mortgages	134·3	163·8
Land, House Property, etc.	57·6	76·0
Loans on Policies	70·6	60·6
Other Assets	92·5	101·7
Total All Assets	1187·9	1516·3

enterprise end there, since a large proportion of loans on policies and mortgages may ultimately be providing capital for business in one form or another.

And this tendency towards an increased holding of industrial securities has shown itself since 1920, during a period when high yields were easily obtainable, and when there was no real pressure on investing institutions to seek out unorthodox but profitable forms of business. Since 1932 such pressure has become an important factor. With long-term Government securities bringing in but 3 per cent, the insurance companies have every inducement to find more remunerative investments. To some extent they have gone in for a more direct support of businesses large and small ; they are prepared to make loans on security to established companies at 5, 5½ and 6 per cent ; they are prepared to lend money on mortgage at 4 or 4½ per cent.

They also have bought property because of the higher rate of return which it brings in.

The low yield on suitable Stock Exchange Securities has led us to invest a somewhat large proportion of our new funds in the property market, where the return obtainable is, on the average, somewhat higher. In this manner we have obtained during 1935 a yield of $5\frac{1}{4}$ per cent on over three and a half millions of money.¹

It may be mentioned that the assets of the Prudential alone exceed £302 million.

Thus during the period of cheap money the companies have been in search of new investment outlets, and this has had some effect in providing capital at reasonable rates for established businesses in need of it. Insurance companies have certain advantages in doing this type of work since they have enormous funds at their disposal, can spread widely in order to reduce the dangers of loss, and can command the best expert advice. Their disadvantage is that to some extent they feel themselves tied, since their funds are almost entirely provided by their policy holders and not by their shareholders. This means that, while they are quite prepared to lend to industry when there is adequate security, they will be much less willing to experiment by launching out in new directions with speculative investments. Such misgivings would apply most strongly in the case of the small companies ; the largest companies could experiment on a substantial scale, and yet only a small proportion of their funds would be involved.

4. INVESTMENT TRUSTS AND HOME INDUSTRY

The investment trust movement has long been established in this country. The *Economist*, in its *Investment Trust Supplement* of December 1st, 1934, analysed information covering 197 companies in Great Britain, and

¹ Sir Edgar Horne, at the Prudential Annual Meeting, March 12th, 1936.

these include only investment trust proper and take no account of finance companies, specialized trusts or fixed trusts. The paid-up capital of these enterprises totalled £295·6 million, and their security holdings £332·3 million. Thus, though substantial, they command smaller resources than the insurance industry, since all their holdings put together are not much larger than those of the Prudential alone.

Investment trusts were started with the primary object of securing a distribution of assets over a large number of securities in order to get the benefit of a spreading of risks. The oldest trust dates from 1863, and most trusts were formed during periods when Stock Exchange values were rising. Forty-six companies were started between 1879 and 1890; in 1890 came the Baring crisis and temporarily put an end to developments of this kind. From 1905 to 1914 came another burst, and thirty-two companies were formed; then came the War. Between 1925 and 1929 eighty-two companies were formed; the period again is one of rising share values. Thus, 160 out of 197 companies were formed in these three periods. Lastly, from 1932 onwards there has been the Unit Trust¹ movement, which requires separate discussion.

In origin, investment trusts had an important part to play in the machinery for overseas financing. In the samples analysed by the *Economist*, more than half the trust holdings are overseas. The spread was not merely over different forms of activity, but over different areas of the globe.

The types of securities held by investment trusts also vary. They hold some 30 to 40 per cent of their assets in the form of ordinary shares, a much higher proportion than in the case of insurance companies, most of whom hold only between 5 and 10 per cent of assets in equities. Through their holdings of industrial securities they are bringing together the conservative investor on the one

¹ "Unit" Trust is used to cover both "fixed" and "flexible" trusts.

hand and the established business on the other. But in the process the investment trust proper does not do much to assist the undeveloped enterprise which as yet is unable to obtain capital through new issues ; while it can hold securities of a fairly risky nature, it cannot go very far outside the established channels for providing capital.

The capitalization of investment trusts is a peculiar one. Roughly one-third of their capital is raised through ordinary shares, one-third through preference shares and one-third through debentures. Capitalization of this sort works reasonably well during periods when fluctuations in business activity are not very sharply marked. But since the War, and especially since 1929, high gearing has proved a big disadvantage. While the spread of investments serves to make risks in different industries and in different parts of the world cancel out, the heavy prior charges have played havoc with the equity during depression. The popularity of unit trusts may perhaps largely be put down to this account. The interests of the investing public would have been better served if a large part of the capitalization of the trusts took the form of equity capital, so that the strain of depression was less acute. As it is the faith of the ordinary investor has been much shaken when in his mind he has had to class the shares of investment trusts among speculative securities.

Certain general conclusions would seem to emerge. In the first place the size of the trusts is limited—the average capitalization would be something over £1.5 million each—and this means that it is impossible for an individual trust to go very far in developing any one particular line of business and at the same time maintaining a real spread of risk over many industries and countries. They will always tend, therefore, to remain security-holding bodies rather than financing bodies.

Second, though their functions are thus limited, they are an admirable institution for bridging the gap between the individual saver and the established business. In doing this they are a part of the machinery which makes

the Stock Exchange work ; they enable a larger volume of speculative issues to be digested by the London capital market. They do this owing to their ability to spread risks geographically and industrially, and to their underwriting activities.

Third, they are to some extent hampered by their past. All the trusts have large holdings of securities abroad at a time when overseas holdings are no longer popular. It remains to be seen how far new investment trusts will be able to adapt themselves to changed conditions.

Lastly, their highly geared capitalization has proved very unfortunate during the slump. If the ordinary shares of investment trust fluctuate violently, the confidence of the ordinary investor is bound to be undermined.

The misfortunes of the trusts during the slump led to the unit trust movement, which has proved extremely popular since 1932. "Fixed" trusts have defined holdings of certain specified proportions, and these cannot be changed except in certain strictly defined contingencies.¹ Thus the management factor has been eliminated ; for good or for ill, the investor has made his choice in the spread of securities when he buys his sub-units at the beginning. Gearing also has been eliminated. The bulk of the holdings of unit trusts—at least of the earlier fixed trusts—is in home industrials. In addition, there is a tendency for unit trusts to specialize, *e.g.* in Insurance or Bank or Commodity shares.

This new method of investment, to which about £50 million has been subscribed by December 1935, has its advantages and disadvantages. The advantages are that the investor knows what he is getting and that he gets it in a convenient form together with a fairly wide spreading of risk. The disadvantages are that the cost of setting up the trust may be excessive and that the inclusion of a number of gold shares or other speculative enterprises returning a high yield may make the yield on the unit as

¹ But many of the later "Flexible" trusts allow a much wider margin of discretion.

a whole seem both higher and safer than it really is. In short, the unit trust may be of great service to the investor who looks critically at what he is getting, but may seem too attractive to the casual investor who accepts everything that he is told in print without working out for himself how and where the money is really earned. Further, it remains to be seen what happens in a period of falling share values ; the small investor may suddenly get frightened, and get rid of all his certificates, with the result that large blocks of securities are suddenly flung on the market.

On the whole the unit trust has good qualities. It undoubtedly meets the needs of the small investor, though there are possible abuses to which a Departmental Committee has drawn attention.¹ The unit trusts, like the investment trusts, are helping established concerns, though they can never be in a position to provide finance for industry except by purchasing marketable securities. There is a tendency in the case of the more recent unit trusts to allow more discretion to those responsible for eliminating certain securities ; but it is doubtful if there is any real half-way house between an investment trust which employs expensive expert management, and the fixed trust which dispenses with the cost of management and leaves market prices to work themselves out.

In many ways there is much to be said for investment trusts of the old type, with full discretion to the management, provided they did not have to bear heavy prior charges in their capitalization and provided they paid more attention to home and less to overseas investment than did the older trusts.

In addition to investment trusts there are various types of finance companies to be considered. These are concerned more with development than with the holding of securities, and most of them specialize in particular types of activity. They are best known in connection with

¹ *Fixed Trusts : Report of the Departmental Committee appointed by the Board of Trade, 1936.* (Cmd. 5259 of 1936.)

overseas development, and have played a very important part in the building-up of mining and of commodity production. A number of finance companies are engaged in financing home industry by providing hire-purchase facilities. Since 1932 several finance companies have turned to the provision of capital for small and developing industries, and these will be considered later separately and in some detail.

5. THE SECURITY HOLDINGS OF BUSINESS CONCERNS

The largest single item of the national savings takes the form of company profits put to reserve. These reserves may be employed in several ways. They may be used to enable the business itself to expand and develop, and to a large extent are so used ; generally speaking, the larger the profits the greater the opportunity for expansion. Second, the reserves may be used to purchase new concerns which can be worked in with the original concern. Expansion may be horizontal, when a company buys out other companies in the same line of business, or vertical, when it buys out either companies which supply it with its raw material, or companies to whom it sells its finished product. This method of using reserves is very like the first, since it involves extending operations more or less in a given sphere.

But there is a third way in which company reserves are employed : in the purchase of securities. A company may build up its investment holdings in order to secure itself against changes in fortune. In doing so, it is playing the part of an investment intermediary, and helping its shareholders to spread risks. The security holdings of large companies are very considerable. The four main-line railways above have investment holdings of some £40 million. Recent balance-sheets (years ending December 31st 1935 or later) showed the following companies with large holdings : Courtauld's £16 million, Shell Transport 10·8, Imperial Tobacco 9·9, P. & O. 9·5, I.C.I. 8·2, Vickers

6·7, Anglo-Iranian 5·6, Distillers 5·5, Guinness 4·9, J. & P. Coats 4·2, Morris Motors 3·8. These eleven concerns together hold securities—mainly marketable securities and largely governmental—to a total of £85 million. The nominal paid-up capital of these undertakings was £296 million. Their security holdings were therefore equivalent to some 35 per cent of their nominal issued capital.

Such companies thus have holdings the equal of those of several investment trusts taken together. How these holdings are employed will vary from company to company. A large number—a surprisingly large number—show the item as consisting mainly of Government Securities; others, on the other hand, would appear to be more venturesome. But the potential significance of what might be described as “matured” companies, attempting to build up holdings, outside their normal line of business, is very great.

6. THE RELATIVE IMPORTANCE OF INVESTMENT INTERMEDIARIES

What is the relative importance of, say, industrial securities held through insurance companies and investment trusts on the one hand, and by private individuals on the other? Two conclusions may be suggested; first, that as yet the private holder is far more important than the intermediaries, and second, that the intermediaries are growing in importance very rapidly.

Estate Duty figures show the value of securities in joint-stock companies left at death, and the value of insurance policies left at death. The proportion is not less than 15 : 2.¹ But under a third of insurance companies' holdings consists of securities in joint-stock companies; this would bring the proportion to, say, 22 : 1. On the

¹ *E.g.* in 1933-34 stocks and shares totalled £165·6 million, and insurances £21·4 million. In 1930-31 the corresponding figures were £175·6 million and £21·9 million.

other hand, we still have to subtract private individuals' holdings though investment trusts form the first item, and add it to the second. We know, however, that in 1934 the investments of insurance companies in joint-stock companies totalled £437 million, while the total assets of investment trusts (who would not be interested in companies alone) only came to £332 million, and to these something must be added for fixed trusts. Therefore, it is clear that the proportion, even after allowance is made, is well in excess of 10 : 1. On the other hand, a much higher proportion of private holdings are invested in home industry ; investment trusts especially have placed money abroad. To offset this, some allowance must be made for those savings handed over to insurance companies in return for benefits to be received within the savers' lifetime, *i.e.* which will not appear in the return. When all is said and done, private holdings in home industry must exceed insurance company and investment trust holdings by something over 10 : 1—possibly very much over. But it must be remembered that this still leaves the security holdings of large undertakings on the side of "private" holdings ; they will go to increase the capital values of the original securities in the hands of the public.

But dwarfed as investment intermediaries may at first sight appear to be, it is certain that additions lie mainly in that direction, and quite possible that no new net savings made by the public are going to the direct holding of industrial securities. Colin Clark has expressed the view that the well-to-do saver is now no longer important.

The outstanding fact of the situation is that three channels of saving—namely, the obligatory saving funds of local authorities, trading profits held back by company officials, and savings for security by the working and middle classes—provided nearly enough to meet nearly the whole of investment requirements in recent years, and more than enough at the present time. Large private incomes have ceased to count as a source of saving.¹

¹ *National Income and Outlay*, p. 191.

Without necessarily subscribing to this view, it is only fair to point out that there is no evidence inconsistent with these facts.¹

Broadly speaking, it is uncertain whether the new savings made by the industrial security-purchasing classes each year are enough to take up the existing securities sold by those classes during the same year (*e.g.* to pay Death Duties, or for similar purposes). It is difficult to see how any net addition over and above this can be of any size. In 1935 industrial issues for the United Kingdom came to £141 million (Bank of England figure). During the same year insurance companies must have spent something between £15 and £20 million in adding to their holdings in joint-stock companies; unit trusts raised some £25 million during the year (*Economist* figures); investment trusts raised some £14.2 million of new money (Bank of England figure). At the same time business concerns were adding to their security holdings, and repayment of existing debentures, purchases of Government Debt by institutions, and money derived from the sale of existing businesses, were all being made available for the purchase of securities. If the public added to its total holdings in industry at all, it would seem to have done so mainly by changing the form of its investments and not by putting in new money on balance. The new money went mainly to the institutions.

Arguments of this type must not, of course, be pushed too far, but all the evidence is in one direction: that the intermediaries are growing tremendously in importance. The private individual is having his investment done for him, by insurance companies, by unit and investment trusts, by savings banks, by public companies which retain

¹ In the present writer's opinion the admitted persistence of inequalities of wealth on the previously existing scale in spite of taxation may be explained by the rise in capital values rather than by net saving. The rise in land values round London (or any other large town, for that matter) must have been enormous in the last fifteen years, and must have done far more than "saving" to create large fortunes. But, of course, it is not easy to draw the line between "saving" and "capital appreciation".

a large share of the profits in the business. All these intermediaries, when they give assistance to industry, are giving it to *established* industry, which now enjoys a plethora of funds and opportunities. The funds available are so large that industry is becoming less and less dependent on the banks for the nominally short-term credit facilities which the banks have to offer. But with all this assistance to the established concerns, and this exceptional demand for marketable securities, the problem of financing the fringes of enterprise still remains.

XII

THE FINANCING OF THE FRINGES OF ENTERPRISE

1. THE PROBLEM IN ITS SETTING

THE working of the economy depends on a constant process of change and expansion. New enterprise is added to existing enterprise in order to increase the flow of wealth ; old enterprise dies out and has to be replaced in unfamiliar shapes and forms. Employment is dependent on new businesses being set up, and old business being maintained and increased. Expansion not only takes the form of an increased demand for bricks, mortar and machines, but also for capital out of which incomes can be paid to people expanding sales and providing services. If the process of increase is held up or made artificially difficult, dislocation and unemployment result. Especially since the War has the development of new industry been important.

The maintenance of some of our older industries on their pre-War scale has become impossible ; full industrial activity can be restored only by the development of new industries, and the discovery of new outlets for existing industries. In no previous period has new enterprise, in contra-distinction to existing enterprise, been so important ; at no time, therefore, has the question of financing new enterprise been so urgent.¹

This new industry has largely grown out of the old through the reinvestment of profits within businesses. But this in itself is only a part, although a very important part, of the whole process. Existing enterprises, however

¹ Clay, *The Financing of Industrial Enterprise*. (A paper read before the Manchester Statistical Society, March 9th, 1932.)

venturesome they may be, are inevitably tied to some extent in what they can do. New inventions and new needs may not fall within the province of concerns with large profits to reinvest; it is essential that new firms should be able to grow in new places to exploit new lines of business. But the ability of such new firms to obtain finance depends on the working of that part of the capital market which is submerged and hidden from view: the world of rich private investors who are willing to support ideas that appeal to them, and are prepared to back experimental enterprises on the chance that the investment may prove a profitable one.

This submerged part of the capital market is being carried on without the help of any form of large-scale industrial banking. The system of private financing worked fairly successfully before the War, though not without arousing misgivings at times. Since the War it has continued to work, but in a very changed environment and with less success.

The main characteristics of the changed post-War financial environment have already been discussed at some length, but it may be well to summarize these features once more in order to bring the discussion together.

First, owing to the falling-off in the relative importance of overseas investment, a large number of institutions are reorientating themselves. The Stock Exchange is doing much more business in home industrial securities, while foreign bonds and the shares of companies operating abroad are arousing less attention. The great issuing houses are turning away from the handling of issues on foreign account to the provision of capital for large established industrial concerns. Unit trusts with a large part of their holdings spread over home industry are attracting savings at a rapid rate, while the old style investment trust with more than half its security holdings overseas has fallen into the background.

Second, all these developments centre on the market

for securities rather than on the type of investment which calls for access to a firm's books, and possibly direct participation in profits, as an appropriate method of financing. Therefore they do not counteract the various factors which are making for a diminished willingness on the part of the private investor to put his money into businesses of which he has direct personal knowledge. The high rates of interest ruling up to the time of the depression left the investor with an opportunity of getting a safe $4\frac{1}{2}$ per cent on British Government securities and thus reduced the inducement for him to go farther afield.

Third, since 1932 the position has changed materially as there are large funds seeking investment, and the returns obtainable through orthodox channels have fallen spectacularly. Thus at present the premium on experimental financing has reasserted itself, and to some extent specialized finance houses are turning their attention inwards.

It is against this background that the case for new types of industrial financing, and recent developments in this sphere, have to be considered.

2. THE DEMAND FOR INDUSTRIAL BANKING

The early beginnings of the industrial revolution in Great Britain gave this country a lead which showed itself in large profits and large private fortunes ; these made organized assistance to industry, in the provision of long-term capital, unnecessary. But this lead was already disappearing long before the War, and demands began to be heard for a change in the machinery by which home enterprise was financed.

As long ago as 1909 a writer in *The Times* was recommending the establishment of "several industrial banks on continental lines, with a paid up capital of five to ten millions each".¹ Attention had been focussed on the

¹ Quoted by Foxwell, "The Financing of Industry and Trade", in *Papers on Current Finance* (Macmillan, 1919), pp. 98-99.

whole question through the case of the Rand Power Company. British companies had lost £2 million worth of orders for electrical equipment, because German banks had been willing to provide the capital on condition that the orders went to German concerns. Apparently the risk which the German banks took was not large, since they themselves only held debentures and were said to have placed the ordinary shares on the English market. This case provided the starting point for Foxwell's vigorous plea that financial institutions should be brought into closer touch with home industries.

The subject was examined at some length towards the close of the War by various committees. The Committee on Financial Facilities, which reported in November 1918, endorsed the various pleas which were made. "In our opinion, institutions are necessary to provide additional assistance for trade and industry by developing similar facilities to those which have been provided by the German banks."¹ But in spite of these and other pleas, for few who had studied the subject disagreed as to the need of closer contact, little was achieved.

The Macmillan Committee thirteen years later reverted to the subject, though their expression of opinion is lacking both in clarity and vigour. The Committee had two suggestions. First, they propose an institution which would mainly concern itself with providing capital for industry through new issues, these issues being placed with the public. They envisage it as a concern with substantial capital and an expert staff, fulfilling functions which they summarized as follows :

Acting as financial advisers to existing industrial companies ; advising in particular as to the provision of permanent capital, its amounts and types ; securing the underwriting of and issuing the company's securities to the public and, if necessary, assisting previously in arranging for the provision of temporary finance in anticipation of an issue ; assisting in financing long contracts at home and abroad, or new developments of an

¹ Para. 34.

existing company, or founding companies for entirely new enterprises; acting as intermediaries and financial advisers in the case of mergers or in the case of negotiations with corresponding international groups; and generally being free to carry out all types of financing business.¹

Quite distinct from this there is a second proposal to meet the difficulty experienced by the small and medium-sized business in raising long-dated capital in small amounts. The Committee, therefore, recommended the setting-up of a company "to devote itself particularly to these smaller industrial and commercial issues".² These two proposals are entirely separate, and though it is not quite easy to see the real line of distinction between the two, it appears mainly to be concerned with the scale of operations: the first proposed concern would deal with companies able to appeal to the capital market, and would pass on the securities issued, while the second would be a holding company which sold its own securities to the public, but retained the securities of the smaller companies with which it dealt in its own possession.

Finally, Clay has made some interesting suggestions in a paper already quoted.³ He wants the banks to play a more important part. His remedy is not to suggest that the banks should make long-term advances direct, but that they should consider setting up security affiliates—that "they may be forced to consider the American practice by which banks establish and maintain subsidiary companies for the purpose of providing long-term capital".

3. THE GROWTH OF NEW ENTERPRISE IN FACE OF RISK AND UNCERTAINTY

The issues involved may perhaps be clarified if we attempt to answer three questions: How does new industry start? What are the risks involved? How should these risks be carried?

¹ Para. 399.

² Para. 404.

³ *The Financing of Industrial Enterprise.*

First, How does new enterprise start ? New enterprise at the beginning may be the result of the setting-up of entirely new companies, or of abnormal development on the part of an already existing company. (We are leaving out of account the normal development of existing companies into fields naturally adjoining those in which they are already operating.) Before the War these early developments were financed out of the personal capital at the disposal of those carrying on the business, out of capital put up privately by those with special local knowledge and money to invest, by banks, by trade credit. Most of the firms which are now large—Clay reminds us—¹

began as small firms. Mr. Hans Renold, I believe, bought the roller chain business, out of which the great undertaking at Burnage grew, for £300 in 1879 ; Sir William Morris, when I was at Oxford, was the proprietor of a cycle shop, and when I went back in 1913, although he was manufacturing cars, he was doing so only on a small scale. For our present purpose, the discovery of the new ways in which the country's resources in the way of skill, enterprise, experience and capital can be best used, in a world that has undergone revolutionary changes and is changing rapidly still, as much is to be hoped—I put it no higher—from the diffused initiative of a thousand small concerns, which may include a Renold or a Morris among them, as from the science and resources of a giant concern.

But in many ways it is difficult to find a specific origin for new industries, since their roots are deep in the past.² The carriage and cycle industries became in time the manufacturers of motors and aircraft. Cabinet-making may lead to electrical engineering and to the radio industry. One or two examples may illustrate the process by which industrial evolution takes place. Ninety years ago a firm started with a sawmill near Stockton-on-Tees. It made shell-boxes on a large scale during the War, and after the War went in for joinery manufacture. Housing

¹ *Loc. cit.*

² The examples which follow are taken from *Planning* (a broad-sheet issued by P.E.P.), No. 68, February 11th, 1936.

schemes in the neighbourhood provided it with a very satisfactory market which went on expanding, and orders kept on coming in from farther and farther afield. In 1932 the company obtained a concession to make patent storm-proof wood casement windows to supply Durham, Yorkshire and Lancashire; the demand was so great that it had to put up a new factory at Stockton. But this did not prove enough and another factory was opened on a three-acre site in Manchester in May 1935. Later on in the same year a further factory was established at Stockton to produce low-price flush-panel doors. In view of the possibility that the building boom would break, the company is now beginning to manufacture small aircraft under licence. "So a sawmill in one area may lead to an aircraft factory in another."

Another case of evolution is provided by a pre-War ironmonger's which developed a small engineering business, then became a munitions factory during the War, and since the War has been in the window-making business manufacturing metal casements. Similarly, a maker of lighthouse equipment may go in for road traffic signals, or a concern making golf balls and motor tyres begin to produce rubber shoes, rubber cushions and similar products.

This process of development may be illustrated by taking a single town as an example. The prosperity of Coventry began under the influence of the Huguenots with silk-weaving and watch-making. As the silk trade became less important, Coventry went in for rayon manufacturing. Mass production elsewhere led to the decay of the watch-making industry, but in the meantime Coventry had turned to the manufacture of bicycles. From bicycles the road to motor cars, motor cycles and aircraft was an obvious one. The machine tool industry was a natural development in such an environment. Other industries grew up concerned with leather, rubber and electrical equipment. Coventry is now—according to *Planning*—one of the most prosperous towns in Europe.

Coventry also points a moral: new industries grow best in those places where old industries have left a supply of business men with experience and money at their disposal.

Lastly, it may be well to look at the position from the point of view of the inventor, an important personality who is often overlooked in discussions of this sort. O. W. Roskill has described vividly the process by which invention takes place.¹

Sometimes an invention comes from observance of a want—these are usually the smaller inventions like a new kind of can-opener or a new bottle-closure. Sometimes invention comes from availability of a new machine or material and the desire to find new applications for it, which involves a type of “cross reference” mind for which there is great scope as technical specialization increases.

Thus an electrical engineer who wishes to vibrate concrete may from a face massage machine get the idea of using an electromagnetic vibrator, while mechanical engineers into whose sphere the construction of vibrators falls are still using clumsy cams. Finally—perhaps most often of all—invention may come indirectly or by accident. A method of treating cast iron and steel to give special heat-resisting and other properties (which is shortly to be the subject of a public issue) was invented by two French chemists who tried to reduce zinc ores in a rotary kiln at high temperatures with an air blast, and found that no metal would stand up to their conditions.

But the inventor—in Roskill’s opinion—has considerable difficulty in disposing of his invention and getting it into profitable use. While the “patent broker” or promoter can do something in this field, the expense is very considerable.

The slowness of the process is illustrated by the fact that, as a broad generalization, the new capital flotations of one favourable period have frequently been looking for a home community in the previous one. Pobjoy Airmotors, the

¹ “The Finance of New Inventions”, *Financial News*, October 25th, 1935.

Follsain process, Monospar aircraft and Pollopas were all looking for finance in 1928-29.

The way of the inventor is not easy. That part of new industry which is concerned with developing new processes comes into existence with great difficulty, and at considerable expense, after a long lapse of time.

The second question is, what are the risks involved? It is important to notice that the risks before the War, and since the War, differ in character. Before the War finance was going into textiles, coal, iron and steel, engineering, railways, and mining activities and commodity production overseas. Since 1920 we have had bursts of activity in such divers fields as cinemas and other entertainments, electrical engineering, gramophones, artificial silk, distribution, canning, motors and aeroplanes, wireless and "patents and fads" of many kinds. To these must be added housing, though this is a special form of activity which requires discussion by itself.

Two main distinctions suggest themselves. First, in the case of the pre-War group of businesses, once a firm had established itself it was to some extent sheltered from the competition of new firms in the same line as itself. This applies to a greater or less degree to all the types of activity except possibly textiles, and even there an expanding market made for stability. Railways did not have to face competition before the War; a coal mine or a mining venture abroad is in a strong position once it is a going concern, and the main factor in its prosperity will be the natural resources which it has to exploit. An engineering works is difficult to duplicate. In contrast, the entertainment industry, canning, distribution, "patents and fads", are all of a type where new competitors come in relatively easily. The cost of establishing the business is less to begin with, but this very factor enables other competitors to enter the field. The initial profits may be very large for the business which first develops a new type of activity of this sort, but these abnormal profits will not last.

The second distinction lies in the nature of the demand which each set of industries has to face. With the pre-War industries the problems with which the management were faced were mainly technical. There is no question of carefully anticipating what the tastes of the public will be in the case of coal, iron and steel, railways, copper or rubber. The product is a more or less standardized one, and provided it is being produced cheaply and efficiently the main problems are for the most part solved, especially during a period when total demand is increasing steadily. But the post-War industries are very different ; cinemas, gramophones, canning distribution, even the demand for artificial silk, are more or less dependent on changing public tastes. The influence of the consumer is a much bigger factor in the case of post-War forms of new activity than it was before the War, when expansion followed more or less given directions and demand seemed more clearly defined.

These distinctions must not, of course, be pressed too far. But it does, generally speaking, seem true that in the earlier period once the technical problems of production had been solved, business was reasonably assured, while since the War the dominating consideration has been the direction in which public taste is likely to jump. This does not mean that average profits are less ; they may, in fact, be greater. But it does mean that profits are less evenly distributed, and that windfall gains in one direction may be balanced by losses in another.

In any case, the effect of the War would seem to have been to leave British industry generally in a state in which profits are less evenly distributed. The Committee on Industry and Trade ¹ quotes Dr. Coates to show that in 1922-23 the rate of profit on turnover was only slightly less than in 1912-13, but the dispersion of profit was very much increased :

All the evidence shows that, while on the whole the relation of " average profit " to turnover has been fairly stable with a

¹ *Factors in Commercial and Industrial Efficiency*, pp. 51-52.

slight tendency to fall, the individual results of business have shown greatly increased uncertainty in recent years, the final "average profit" being the result of balancing increased gains at one end of the scale against increased losses at the other.

Unfortunately, there are no figures to show whether this tendency has increased or decreased in recent years, but it does seem reasonable to expect a fall in the stability of profits owing to the increased importance of variable human tastes where our newer industries are concerned. This tendency must further be strengthened owing to the slowing down of population growth and the consequent more rapid increase in real wealth per head of total population.

Looking at the position generally, we should be prepared for two forms of instability which broadly correspond to the distinction often drawn between "risk" and "uncertainty". Risk is defined in terms of those changes and chances which can be offset by combining a large enough number together so that they cancel out. In this sense risk can be insured against, since profits in one direction will balance losses in another. In contrast to "risk" in this sense, is "uncertainty"; changes and chances which affect all industry generally in the same direction. Thus the increased dispersion of profit since the War represents an increase of risk, while the increased severity of business fluctuations, of the sequence of boom and depression, represents an increase in uncertainty.

It must be pointed out that this distinction is one of practical rather than theoretical significance, since in theory it is impossible to draw a line between the two which will stand close scrutiny. But in practice this distinction is useful since it emphasizes two different aspects of the same problem, that of so arranging any one of our economic activities that it is fitted to withstand the impact of an unknown future.

This leads straight to the third question, How should risks be carried? The answer comes out fairly clearly.

Risks in the narrow sense can be married ; by spreading, windfall losses and windfall profits can be made to cancel out, and capital appreciation in the case of the successful enterprise will reimburse losses on the failures. As regards uncertainty, the only remedy for the up-swings and down-swings of the business cycle is strong finance which will support enterprises when the going is bad, and carry them through to more prosperous times.

The general conclusion emerges that in either case strong financing is very important. Weak financing may mean loss, because several failures come in succession before a successful venture turns up, or again because finance is inadequate to see a fundamentally promising venture through a slump. These considerations all go to suggest the importance of strong institutional financing ; unless he is very rich or can command powerful outside support, the individual may find—even though he has special knowledge of the industry in which he is engaged—that an unexpected depression may rob him of his due.

4. RECENT DEVELOPMENTS IN INSTITUTIONAL FINANCING

There have been several developments in recent years in the machinery for financing home industry. Two separate forces have been at work, both favouring the development of such machinery. Before the depression there was the desire to “do something” for the big basic industries which had been in difficulties since 1921, and which found themselves unable to attract capital. Secondly, since 1932 and the period of cheap money there has been the added inducement to find fresh ways of employing funds for which there is no longer any remunerative outlet on the old familiar lines.

The first steps towards providing a machinery for the support of the basic industries were taken under the direct auspices of the Bank of England. The Bankers' Industrial Development Company was set up in 1930 in order to

forward rationalization and reconstruction of such industries as shipbuilding, cotton, iron and steel, industries which had been starved of capital owing to the unappetizing prospects which they offered. The intention was to provide new capital to enable them to rationalize themselves, and the Bankers' Industrial Development Company made issues for this purpose. In the first half of 1931 capital was raised for the National Shipbuilders' Security Company and for the Lancashire Cotton Corporation; in January 1934 an issue was made (jointly with Helbert Wagg & Co.) for Stewart and Lloyds (iron and steel). Thus the purpose of the Company may be defined as being to provide reconstruction finance for depressed industries.

Also under the auspices of the Bank of England is the Securities Management Trust. The object of this institution is to separate off and administer the industrial interests of the Bank of England which survive from the time when the Bank did an ordinary commercial banking business, or which the Bank has taken up in the national interest during depression. It works in close co-operation with the Bankers' Industrial Development Company and has operated in connection with depressed basic industries, acting in the case of the Lancashire Cotton Corporation and of concerns such as Armstrongs and Beardmores. Thus both the Bankers' Industrial Development Company and the Securities Management Trust are engaged in salvage work as much as anything else, and are not concerned with the financing of new industry proper.

Financially the most striking development of recent years has been the growth in institutions specializing in instalment financing. The largest and best known of these is the United Dominions Trust, which has enjoyed the support of the Bank of England. Its origins go back to just after the War, but it has been very much to the front since 1928-29 owing to its rapid expansion and its successful record during the years of depression. It is a

business with total capital, reserves and surplus profits of some £2 million and a balance-sheet of nearly £6 million, financing the movement of goods of every type by providing instalment and deferred purchase facilities for varying periods up to three years. It is of assistance to new enterprise by financing the purchase of equipment and machinery. To begin with, it dealt with the motor, engineering and allied trades, but it has expanded its activities and now finances the purchase of all kinds of durable goods. It does not, of course, provide permanent capital, but by releasing capital which would otherwise be tied up, it facilitates expansion. It has branches or is represented in most of the larger industrial centres, and, unlike the banks, it goes out for business and offers its facilities direct to the manufacturer and trader instead of waiting for them to come to it. In addition, the Trust has started a subsidiary for the supply of long-term capital to the smaller businesses, and this subsidiary, Credit for Industry, will be described later.

There are other firms specializing in instalment finance. Bowmaker—which owns the entire capital of Banking Facilities Trust—has a balance-sheet total of over £1.5 million, and the Mercantile Credit Company—controlling three subsidiaries—has a consolidated balance-sheet of the same magnitude. Both these firms specialize in deferred-payment and hire-purchase agreements of many kinds. To these must be added certain companies which do a good deal of special business, for example, in hire-purchase of road vehicles, such as the British Wagon Company. Further recent developments have gone in the direction even of a more general financing of traders' accounts receivable. All these various aspects by no means exhaust the list; the significant feature is that financing of this type enables small concerns to economize in the need for long-term capital.

In many ways it is remarkable that the banks have done so little to try and take up this type of business themselves. By tradition they appear to be opposed to

it, and they have contented themselves with providing a large part of the funds with which the companies operate. But the companies have been doing very well up to the present, and losses have been small—apparently a fraction of one per cent in the case of the better companies—and it is surprising that the banks have not attempted to exploit at least a part of this field.

Another recent development has been the formation of a number of companies for the supply of capital to concerns unable to make a public issue. Credit for Industry was set up in June 1934, with the object of filling one of the deficiencies to which the Macmillan Committee had called attention, by meeting the capital requirements of small businesses where these could not be satisfied by means of the instalment facilities provided by the Trust itself. Credit for Industry sets out to make “suitable loans to tradesmen, manufacturers, and others engaged in various forms of industry, requiring additional resources in semi-permanent form”. Loans range from £100 to £50,000 and are repayable within periods up to twenty years, according to the circumstances. The usual security taken is a mortgage or debenture. It is understood that companies wanting loans should be able to show a profit record covering three years at least, and six years if possible. Rates charged vary according to circumstances. “In all cases, however, it will probably be something less than the rate usually paid on a preference share.” It is understood that at the present this would mean that 6 per cent would be a maximum.

This Company has the advantage of being represented all over the country through United Dominions Trust. Thus it gets around one of the main difficulties surrounding the financing of new enterprise: that the money is in London while new enterprises needing finance may be a long way away. But it will be noticed that Credit for Industry is a lending rather than an investing institution; it lends on security and achievement, and does not participate in business on the strength of prospects.

Another institution engaged in the financing of small and growing enterprise is the Charterhouse Industrial Development Company, founded in June 1934 by the Charterhouse Investment Trust, an institution which has specialized in home industrial issues since 1925. The present capital of the Development Company is £500,000, and in addition to the Trust, the Prudential Assurance Company, Lloyds Bank and the Midland Bank have taken an interest in the venture. The object of the Development Company is to provide money for small undertakings in amounts from £10,000 to £100,000.

The conditions which applicants for new capital are usually expected to satisfy if they are to receive support are as follows: first, the business must already be established with a profit record covering three years; second, it must have the power of growth into a larger concern; third, it must be under a management capable of bringing about such development; fourth, save in very exceptional cases, those running the business must have money in it themselves. These requirements suggest that the policy of the Company is fairly conservative, and that it is not prepared to launch out in support of industry at the experimental stage. But the emphasis on expansion strongly suggests that the Company is concerned more with prospects than with collateral security. It would appear that the Company generally prefers to take up preference shares, participating to some extent in the equity, and that the period of the investment may last for a considerable time, perhaps up to twenty years. The Company would appear to have no special contacts in the provinces; the usual channels—solicitors and accountants—presumably play their part in bringing in business.

A company with a similar object is the Leadenhall Securities Corporation, formed in 1935 by Schröders with a capital of £250,000. The object of the Corporation is "to engage in the finance of medium and small home industrial business for which the normal machinery of

the London market is inappropriate ". In its method of operation it would appear to have more in common with the Charterhouse Development Company than with Credit for Industry. This would appear to be to invest in the form of redeemable preference shares and a portion of the equity for periods of four to five years, the shares being repurchased by the proprietor of the undertaking at the end of the period, in businesses which can show a record and need capital for expansion. The Company has an office in Birmingham as well as in London.

All the above three companies—Credit for Industry, the Charterhouse Industrial Development Company and Leadenhall Securities—give prominence to the passage in the Macmillan Report, referring to the needs of small businesses, in their published literature.

The New Trading Company is another concern which interests itself in new business on a participating basis. There again for the most part it would appear to look for a record, though to some extent it may have interested itself in new processes which have been proved successful elsewhere.

Apart from firms set up specially to provide finance for home industry outside the confines of the new issue market, there are others which have taken on business of this type in recent years. The Industrial Finance and Investment Corporation devotes a portion of its funds—it has a capital of £1,500,000—to this purpose. The experience of this Company when it first launched out on this line of business may be worth quoting. It is from the chairman's speech at the Annual Meeting in 1935 (*Times*, September 27th, 1935).

We went very carefully through all the propositions put before us and regretted that we found very few suitable for further investigation.

The reason for this was that most of the applications came from people who had new inventions, patents, or even only ingenious ideas about which they held the most optimistic opinions. The next largest number of letters came from

existing firms which required further capital, not because they were on the point of expanding their business but because the existing business was equipped with insufficient capital and they had to fund loans which were repayable at short notice and which bore a fairly high rate of interest. The third category of applications came, however, from companies and firms which asked for credit or offered capital participations for the expansion of their business ; such applicants have always found us willing to enter into negotiations provided that the result of our investigations proved satisfactory.

The chairman then stressed the expense of supervision and control :

Outside experts must be consulted in every case, and even the preliminary investigations entail large expenses. A finance company whose only business is the provision of capital and credit for small enterprises should have its capital provided by people of means, for debentures based on participation in a number of small concerns would not, in my opinion, be well received by the public.

There are other companies which go in for this type of financing. The Lonsdale Investment Trust (and an associated finance company) are understood to do a certain amount not entirely confined to businesses with past records, while in Manchester there has been formed a Northern Territories Trust, with the object of handling local issues and providing finance to local industry. But the list of companies mentioned here is, probably, by no means exhaustive.

So much for the finance companies which have turned their attention towards providing capital for home industry without any public appeal in London. The big insurance companies must also be considered in this connection. The chairman of the Prudential (which, it will be remembered, has some interest in the Charterhouse Industrial Development Company) stated in his 1936 speech that the Prudential had continued its policy " of assisting British industry, particularly the small industrialist, by financing from time to time enterprises

which are in a position to give us adequate security".¹ By itself this statement does not go very far ; with the fall of the rate of interest in gilt-edged, any insurance company would be only too glad to finance people with adequate security. On the other hand, the Prudential is known to have adopted a progressive policy in relation to several home industries and to have interested itself in chain stores, the motor industry and even films. With its enormous resources the Prudential is in an especially strong position to be experimental, and to some extent other insurance companies may be following suit.

In addition, there are interests connected with the new issue market which would be prepared to do a certain amount of nursing, with the possibility of an issue ultimately in view. Where a company has got so far that an issue is in prospect in the reasonably near future, finance may be forthcoming either from *ad hoc* groups or from companies with funds at their disposal who could look for profits from the issue. Similarly, groups may be got together to finance the development of a new process or invention, provided there is a reasonable prospect of a public issue at some subsequent date.

Closely allied with this is the process by which companies with possibilities, but in a bad way, may be bought up, reconstructed and developed, an issue being made when the company is once more working satisfactorily. Certain groups in the City have been successful in such salvage operations, while it is said that one of the banks has also been able to reconstruct companies which have broken down, and so come into its hands, with a high degree of success. Large industrial companies, like Thos. W. Ward of Sheffield, have also bought up companies, set them again on their feet, and refloated them.

Lastly, any mention of the facilities for new enterprise would be incomplete without some account of attempts to encourage business in the depressed areas. The

¹ *Times*, March 13th, 1936.

Commissioner for the Special Areas in his *Second Report* put forward the view, dealing with small and growing businesses, that "the organizations which have been specially created to deal with the finance of these concerns seem to devote their attention mainly to the expansion of businesses which can show a satisfactory Balance Sheet and have assets to offer as securities".¹ The activities of the Commissioner have resulted in improved facilities, such as the preparation of sites and the setting-up of trading estates. In addition, the Special Areas Reconstruction Association has been formed to develop enterprises in the Special Areas.

The Special Areas Reconstruction Association, Limited, was formed for the purpose of providing additional capital to enable new industrial enterprises to be established or existing undertakings extended in the Special Areas. No capital is subscribed by the State, the assistance of which is limited to a contribution towards expenses of management, together with a guarantee against some 25 per cent of losses on the total amount of loans granted by the Association.

Applicants are required to satisfy the Association that their businesses have reasonable prospects of eventual success and that they are not in a position for the time being to obtain adequate financial facilities from other sources. The assistance given is by way of loan. The normal maximum limit of each loan is £10,000 for five years.

The Association has its head office in London, with three Area Boards—one for Scotland, one for Wales, and one for Durham, Tyneside and West Cumberland. All applications are dealt with in the first instance by the Area Board concerned, which passes them, with its recommendation, to the head office in London.²

The success of the Special Areas Reconstruction Association will depend entirely on the quality of the management and the venturesomeness with which its policy is pursued. It can achieve little if its policy is timid.

¹ *Second Report*, p. 15.

² *Times*, February 1st, 1937.

Lastly, some mention should be made of the Nuffield Trust—it is not yet known how the funds are to be employed—and of the public-spirited work done by private individuals in Jarrow and elsewhere to try and secure the development of new industries.

In general, it may be said that the facilities for any sort of business which already has something to show have been very much increased. In fact, probably the supply of finance—at a price, it is true—for established business needing new money exceeds the demand. The real difficulties lie elsewhere, and affect the new and potential business. Here little is being done ; some of the finance companies occasionally interest themselves in new propositions, but their resources are limited and they cannot go very far. Such business, as always, is still in the main dependent on private individuals and groups who may be interested in proposals put before them.

When all is said and done, though many developments have taken place, the general impression left is that recent developments have only touched the problem of financing untried enterprise. What does the small man who is starting a small business do to get finance ? It is interesting to see how the question is answered in David Finnie's *Finding Capital for Business*,¹ a book specifically designed for individuals contemplating starting out on their own account. Finnie takes it as “axiomatic that the best way of financing a new business is to do it from one's own resources”. He points out that the banks will do nothing until the business has security to offer, and draws the inevitable contrast with the position in other countries. He then goes on to discuss the alternative channels for finding capital, from friends and from strangers. As regards the latter, he issues a warning against agencies : “There have been so many scandals associated with them that as a class, with certain exceptions, they have been brought into disrepute”. To whom is the potential

¹ Pitman, 1931.

owner of a business to turn ? Finnie advises him to look to his solicitor and his accountant :

We have, of course, taken our accountant and our solicitor with us in drafting the Particulars and they may help us very considerably by introducing us to prospective shareholders. If we number among our friends an insurance manager, a good stockbroker, or the director of an investment trust or issuing house, we shall find them useful. Officially they can do nothing for us. An insurance company puts its surplus funds in realizable securities ; the stockbroker is only interested in marketable shares ; an investment trust looks askance at shares in a private company, and an issuing house, of course, cannot make an issue of such shares. On the other hand, these gentlemen are in touch with the investing public, and through them we may meet people who will be interested in our business. The same remarks apply to our bank manager.

We do not, of course, forget our customers and our trade suppliers ; but we must be careful here, for they are apt to make their subscriptions dependent upon conditions that may later prove irksome. Unless in exceptional cases—there are many instances in certain trades where large sums have been obtained from customers—it is better to obtain our capital from friends who have no special connection with our business.

Finnie was writing in 1931, and he has nothing to say about any assistance that might come from institutions, other than the banks. If he were writing again to-day would he be able to add much ? He might say that if a business is contemplating the purchase of certain kinds of capital goods, there are institutions which might finance the purchase on hire-purchase terms. Further, capital might be obtainable from institutions for land purchase and even the building of a factory, while the chance of being able to lease suitable premises is improved. But beyond this little could be added unless, perhaps, early expansion was contemplated on such a scale that some issuing house might be persuaded to take an interest with a view to recouping itself at an early date out of the profits to be made from handling the issue of the stock. But for most of Finnie's audience such advice would not be very helpful ; new businesses are still more or less

dependent on the personal resources of those in charge of them, and on money they can raise from interested individuals.

5. THE LOCAL FINANCING OF ENTERPRISE

So far the discussion of the capital market in this country has mainly been in terms of the London capital market. This is natural enough, for as London has been doing less and less to supply the rest of the world with capital, more and more finance for home enterprise has been passing through the City. Nevertheless, a distorted view is bound to come if the problem of industrial financing is approached from the standpoint of London alone; accordingly some attempt must be made to examine the position of enterprise in different parts of the country, and to see what facilities the business man enjoys for starting a new business or expanding an existing one.

Several developments have already been noted. The new issue market in London is providing more efficient facilities than heretofore. Small issues are appearing in considerable numbers, and the minimum amount which can be raised in this way appears to have fallen considerably. But the expense on the smaller issues is high: the costs of making an issue of, say, £80,000 (probably the smallest issue that one can reasonably expect the issue market to handle) will probably be about 20 per cent.

Local issues do not appear to provide a way out of this difficulty; the small issue of purely local interest would appear to be rare. The provincial Stock Exchanges work very closely with London, though the share prices of popular local undertakings are often dictated by the local market. At any rate there appears to be no economical local stock market for providing local capital; the expense remains high just the same.

But finance is available for the smaller undertaking in a way which was not possible previously. We have seen

that there are a number of finance houses in London which provide long-term and medium-term capital to established business too small to make an appeal through the stock markets. In addition, there are insurance companies prepared to finance small businesses when the security is adequate. The extension of facilities has not only helped the medium-sized industrial enterprise, but also the small enterprise—provided that such enterprises have a record to show. In general, there appears to be no shortage of capital for the successful established business, though the price of capital may be high.

The new enterprise is in a less happy position, but even here there have been some slight developments. Facilities for purchasing machinery and capital goods on the instalment system have been developed very rapidly in recent years. In addition, it is easier to get cash for book debts. Both of these developments are capital-economizing processes which enable the small business to start with less money and to expand more easily. But they are in no sense a substitute for some initial capital ; the would-be industrialist cannot purchase machinery on the instalment system unless he can show some means to begin with, to suggest that he will be able to keep up his payments on the equipment he is buying. And the possibility of discounting book debts does not arise until the business is well under way.

A further capital-economizing process has yet to be discussed. A business man starting an enterprise may either buy or build his factory or workshop, or he may rent it. In the former case he needs a large initial capital ; in the latter, the capital outlay is very much reduced. Hence the greater ease of renting factory space, the less the need for capital. There were considerable opportunities for renting space in certain trades before the War ; these opportunities have been increased through the development of trading estates and in other ways.

The first trading estate was that at Trafford Park, Manchester, which was started before the War and now

covers some twelve hundred acres and provides employment for over thirty thousand workers. The estate is well equipped with power and transport facilities, and some of the works are sold while others are leased to the users. Near London the best known trading estate is that at Slough. Again there are facilities of every kind, and small industries are catered for since space can be rented on easy terms. There are other such sites round London. The trading estate technique is being used to try and attract industries to the depressed parts of the country : an estate of 700 acres has been acquired at Gateshead and is being laid out, and others are to be started in South Wales and elsewhere. Increased facilities for renting factory space in different parts of the country are very important in allowing new enterprise to start up with the minimum of capital.

But the possibility of securing this minimum varies considerably in different parts of the country. In this connection the writer has made enquiries concerning the capital available for new and growing enterprise in certain large centres throughout the country ; he wishes to put on record his gratitude to all those correspondents who helped him by answering the questions which he put.

In the Birmingham district—interpreting this fairly widely, to include, for example, Coventry—the position is highly favourable. But Birmingham has several characteristics which are not common to other parts of the country. Conditions have been prosperous, and there are considerable local funds available for investment. Industries are highly diversified, and the small business predominates. There is a premium on certain types of technical skill—for example, in the stamped and pressed metal ware and the jewellery trades. Certain of the larger undertakings—for example, in the motor trade—are largely engaged in assembling work, and consequently there are openings for small businesses to supply parts to these larger firms. Plentiful funds, special openings and contacts, the premium on technical skill—all are in

favour of the development of the small new business. Designers and engineers may break away and start up on their own in newer markets, borrowing from those who believe in them. The small man has good opportunities for renting workshops and even hiring machinery ; if he is a skilled technician he will already, probably, have contacts and a ready-made market for his products before he starts operations. The funds in the main are supplied locally from private sources and through trade connections ; solicitors and accountants play some part. Businesses are then built up out of profits, until the time when—and if—a public issue seems appropriate. Banks have played no special part in providing capital, apart from the normal banking facilities. In general, Birmingham has been self-financing.

In Manchester, the conditions are rather different from those in Birmingham. New processes and inventions are frequently developed through the expansion of existing businesses, though there are a number of cases in the area which have involved the setting up of new businesses. In these latter cases the business is usually dependent for capital on those responsible for the undertaking and their friends, though solicitors and accountants play a fairly large part in finding funds. Such capital is often found in the neighbourhood. Established businesses find a considerable part of the capital for development from the banks ; the newer industries are in a better position in this respect than the older-established industries dependent on the export market. “ Banks play a much larger part both in providing capital and in marrying capital to business development than is generally supposed.” As regards new issues, “ there is a feeling here in some finance quarters that new issues are too frequently compelled to go to London, where often the cream of the underwriting is taken off although the particular issue may concern a Northern enterprise ”. The Northern Territories Trust has been set up to interest itself in the smaller issues of local business.

The position in Liverpool is described at some length by a correspondent :

Liverpool is primarily a commercial centre and not an industrial centre. The object of Liverpool business people is to provide services such as merchanting, warehousing, transport, distribution, insurance and finance for stocks of goods. It is only in comparatively recent years that one can point to the development of an industrial side to Liverpool activities, and even so, to-day Liverpool is very inferior in that respect compared with Manchester, which one would describe as being primarily industrial and only secondarily commercial.

For the purposes of rough time division, I would refer firstly to Liverpool before the War. At that time, there were a large number of prosperous local merchants and ship-owning houses. Liverpool was the headquarters of the merchant business with the west coast of South America, and it also housed the headquarter offices of several shipping companies. These were all family, or semi-family businesses, and the owners of them were all considerable owners of capital. There were many people who had considerable loose cash resources who were ready to discuss putting capital into new companies, and were in a position to make personal decisions when promoters came to see them. A great deal of the capital for the development of the nitrate industry was produced privately in Liverpool.

To-day this position has changed in a very remarkable way. The national organization of industry during the War tended to bring large numbers of individual merchants and capitalists into close contact, and in many cases their businesses were taken out of their own control and placed under the control of Government departments. These Government departments had their headquarters in London, and a tendency grew up to remove the control of local industries and commercial pursuits into the City of London, for purposes of convenience.

That period also saw the growth of large combines in industry, formed partially for the reasons stated above and partially in order to deal more readily and satisfactorily with combined labour movements. Shipping was collected into large groups, and naturally centralized itself in London, where the financial control was established. Liverpool business developed in those times what might be described as "the

London complex ", and unfortunately it became very fashionable to think it necessary to remove one's headquarters to the city of London.

The result of this movement has been the almost complete elimination of the small private capitalist in the Liverpool district. There are still a number of rich people, but it would no longer be as easy to raise capital to start a new industry here by personal contact with individuals, and one would be forced to approach corporate bodies and even then would probably find that the final decision on any matter would rest with somebody in London.

Disasters in the shipping industry and unfortunate adventures by financial houses in London have done something to change this position, and it might be reasonable to say that to-day the position is not so bad from the Liverpool point of view as it was some ten years ago. But the mischief has been done, and we shall never again assume the position of local independence which existed prior to 1914.

New processes and inventions are, it seems agreed, for the most part developed by existing businesses. One correspondent, dealing with this question in more detail, takes the view that minor inventions practically all originate in existing businesses and are financed by them, while in the case of substantive developments, 75 per cent are fostered and financed by existing businesses and the rest by outsiders. Conditions for new businesses starting from scratch would therefore appear to be unfavourable in Liverpool; such as do come into existence would appear to be financed privately in the neighbourhood, accountants and solicitors playing their part. Existing business, however, would not appear in any way to be starved of capital. Public issues for the most part are made in conjunction with the London new issue market. The banks would not appear to have played any unusual part.

Bristol is well placed as regards the local financing of industry. The diversity of Bristol industry, largely concerned with the production of consumers' goods, has meant that the effects of depression have been relatively light.

There are plenty of well-to-do investors, with a strong sense of local patriotism. One correspondent put forward the view that "more long-term capital is now available for the development of existing businesses than in 1930 or before the War, and there is an even stronger urge to invest the capital locally". But "the investor in Bristol is usually very cautious and tangible assets or securities are usually looked for: companies whose main asset is Goodwill find the greatest difficulty in obtaining capital". So that, though there is plenty of capital for the development of reasonably assured local opportunities, there is more doubt as to how far it would be prepared to sponsor experimental enterprise, though probably Bristol is considerably better placed than the average in this respect.

Such is the position in several large centres. Certain common features emerge. In all cases public issues are made in conjunction with the London capital market. There appears to be no shortage of capital for *established* industry. New enterprises are dependent on finding their capital locally from promoters and their friends, and with those they may get in touch in various ways. A verdict from a Liverpool correspondent—"the development of inventions and patent processes must be carried out by an existing organization; they are far too risky to start on their own before they have been developed"—seems to be of considerably more general application, except in districts such as Birmingham which are particularly favourable to the emergence of new enterprise.

In contrast to the large cities which we have examined, all of which enjoy in some degree, and some in an exceptional degree, the benefits of a diversification of industries, are the "special" areas and other areas not much less hard-hit. Here admittedly, there is a shortage of capital, but nevertheless when it is analysed again it does not affect established industry so much as potential new undertakings. The firm with a good record now can always get money for expansion at a price, and though the price may be relatively high, businesses do not reckon

to expand unless they see opportunities of substantial profits.

New undertakings are thus faced with considerable financial difficulties in certain parts of the country. This is not due to a shortage of capital in general in any sense, but in fact to a possible shortage of a certain type of capital—that which is prepared to carry risks and make experiments—and even more to a lack of mobility in this type of capital. The supply of such capital is to some extent maintained by the fact that rich people who float existing businesses on the Stock Exchange are left with considerable sums in their possession which require re-investment. But whether this be adequate or not, there is no doubt that such funds are distributed very unevenly throughout the country. The private financier backing his fancy will want to keep it under his eye; people putting forward new propositions must largely seek capital in their own locality; there is no machinery for moving risk-bearing capital throughout the country. As a result development is lop-sided.

How lop-sided can be shown from figures based on the Board of Trade *Survey of Industrial Development*; the four years 1932–35 are taken together:

FACTORY DEVELOPMENT, 1932–35

	Factories			
	Opened	Extended	Closed	Net Change*
I. South and South-West	118	43	54	+ 85·5
II. Greater London .	927	174	549	+ 465·0
III. Wales and Monmouth	21	15	16	+ 12·5
IV. The Midlands .	317	120	321	+ 56·0
V. The Eastern Counties	90	30	40	+ 65·0
VI. North-West England	420	131	519	– 33·5
VII. North-East England	165	85	219	– 11·5
VIII. Scotland .	75	28	104	– 15·0
	2133	626	1822	+ 624·0

* "Net Change" is obtained by subtracting "Closed" from "Opened" and adding half the extensions.

These figures—especially the rough and ready “net change”—must not be pushed too far. There are a number of factors—as the *Survey* in question shows—which determine the location of new factories, but the largest single explanation by far is that of “convenience of premises”—an “omnibus” item which may conceal any number of real reasons. The rapid growth of London industry—in spite of the very real danger of labour shortage and rises in wages—must largely be explained by proximity to finance, or more exactly, proximity to financiers. The relative immobility of that type of capital which requires watching (and those who finance new enterprises must undoubtedly keep a close watch on them) is a forceful factor making for geographically distorted industrial development in the United Kingdom. Expansion is taking place where there are prosperous industries and prosperous people.

XIII

INVESTMENT IN HOUSING AND AGRICULTURE

1. URBAN HOUSING SINCE THE WAR

It is a commonplace that business revival in this country owes much to the building boom which has developed since 1932. The building industry is economically important—all social reasons apart—because it is the largest single user of the national savings, and its output (and consequently employment-giving capacity) is liable to considerable fluctuations. For these reasons building is a significant factor in regulating the pace of economic development; a rise or a fall is liable to set in motion powerful cumulative forces which will affect employment, production and the economy generally.

Two agencies have been responsible for the provision of new dwellings since the War. Local Authorities, with the aid of Government subsidies, have built houses for working-class occupation, and in doing so have been meeting a specific social need since the rents at which these houses are let do not cover costs without assistance in one form or another. In addition, private enterprise has been providing houses on its own account, sometimes with subsidies, sometimes without. As the following figures suggest, up to 1929 the main variations in the number of houses built have been due to changes in public policy.

Certain significant features emerge from the following figures. The influence of public policy is clearly illustrated in the ups and downs of the total of houses built annually with State assistance. From 1924 to 1929 the number of

NEW HOUSES IN ENGLAND AND WALES, 1920-36

Year ending March 31st	Number of Houses built by—			
	Local Authorities	Private Enterprise with State Assistance	Private Enterprise without State Assistance	Total
1920	576	139	About 53,800	251,988
1921	15,585	12,964		
1922	80,783	20,288		
1923	57,535	10,318		
1924	14,353	4,311	67,546	86,210
1925	20,624	47,045	69,220	136,889
1926	44,218	62,769	66,439	173,426
1927	74,093	79,686	63,850	217,629
1928	104,034	74,548	60,332	238,914
1929	55,723	49,069	64,740	169,532
1930	60,245	50,124	91,691	202,060
1931	55,874	2,565	125,368	183,807
1932	70,061	2,333	128,418	200,812
1933	55,991	2,493	142,012	200,496
1934	55,840	2,913	207,869	266,622
1935	41,593	1,139	286,374	329,106
1936	52,357	222	272,281	324,860

(The above figures cover houses of rateable values up to £78, or £105 in the Metropolitan Police District. Self-contained flats, however, are each rated separately, and so would appear in the above figures provided their rateable value was below the maximum.)

houses built by private enterprise without State assistance has been fairly steady at between sixty and seventy thousand a year. But the houses built either by Local Authorities or by private enterprise under subsidy show the most astonishing fluctuations which can, in fact, all be accounted for by changes in policy.¹ Economic considerations play a subordinate role: for example, since 1932 when low rates of interest would have enabled Local Authorities to borrow cheaply, the number of houses built by them has fallen off compared with the period before the slump, when interest rates were much higher. Questions of housing policy have often been discussed in

¹ For a detailed analysis of housing policy since the War see L. R. Connor, "Urban Housing in England and Wales", in *Journal of the Royal Statistical Society*, 1936, pp. 1-65.

detail and need not be followed up here ; there is no mystery about the way that houses built by Public Authorities were financed, and reasons for changes of policy are set out in official statements and Party programmes.

But the changes in the volume of building undertaken by private enterprise are both more significant, and harder to follow. Since 1929 especially it has been of growing importance. The number of houses built without State assistance has gone up steadily year by year throughout the depression. Latterly the building boom has been such that it has not merely replaced the falling-off in subsidized building, but has gone very much further. It is generally looked on as a major cause of trade revival, and whether it be a cause or a consequence it is clearly an outstanding symptom.

The questions which emerge are obvious enough. Why did the housing boom happen when it did ? How did it happen ? How was it financed ?

2. HOUSING FINANCE SINCE 1928

The first stage must be to arrive at some estimate of the amount of money spent each year by the nation on new houses. In this calculation houses built by Public Authorities will be ignored ; the totals at which we want to arrive are those of amounts spent by individuals on buying dwellings, whether for their own use or as an investment. To get at this we need, first, a total of houses built, and second, an average cost for each house. The first figure is relatively easy since totals are available for houses built by private enterprise, distinguishing those with or without State assistance, for each year ending March 31st.¹ The only difficulty is that—till 1934—for houses built without State assistance in Scotland the year ended on December 31st, but this possible source of error is too small to affect results to any appreciable extent.

¹ In fact, for each half-year ending September and March.

Figures of average cost per house are less satisfactory. One hundred and forty-six Local Authorities, however, publish regularly the value of building plans passed and the number of dwellings involved, and from this one can arrive at an average building cost per dwelling which can be used as a multiplier. These figures cover only about one-third of the house-building in the country ; in particular, they exclude the L.C.C. district on the one hand and the rural districts on the other. To some extent these exclusions cancel out ; houses in London are likely to be above the average, and in rural districts below. Unfortunately, there is no way of getting a more accurate figure.

The average cost per house refers to plans passed, that is, to estimated costs of houses to be built in the near future. This difficulty fortunately solves itself to some extent, since the total of houses built is up to March 31st of the year following. This allows an automatic three months' time-lag. Thus, to get a total of building cost for 1928, we can reasonably multiply the total number of houses built between April 1st, 1928, and March 31st, 1929, by the average cost per house on the basis of plans approved during 1928.

The total resulting is, however, a total of building costs alone ; if we want to know what the nation is spending on houses we must add something for land, road charges, drainage and so on, as well as a further item of profit. There is no way of calculating this exactly ; what has been done is to add 25 per cent to the estimated building cost.

The figures are shown on page 236.

For the reasons that have been given, the estimated total of expenditure on private housing is a rough and ready one, but it should illustrate fairly accurately the general direction of the changes which have been taking place from year to year. The real problem is to discover how this housing development has been financed.

The agencies involved in the financing of urban housing

	No. of Houses built by Private Enterprise in Great Britain	Average Cost per House on Basis of Plans Approved	Estimated Building Cost	Estimated Total Cost
		£	£ million	£ million
1928	119,043	622	74.0	93
1929	146,791	626	91.9	115
1930	132,402	585	77.5	97
1931	135,541	578	78.3	98
1932	150,140	518	77.8	97
1933	224,695	525	118.0	147
1934	293,609	510	149.7	187
1935	279,829	499	139.6	175

are numerous, but building societies are far more important than all the others put together. These others would cover banks, insurance companies (both directly and as lenders on mortgage), property companies, and private individuals acting either by themselves or through solicitors and land agents. In addition, Public Authorities to some extent advance money for house purchase, as well as sometimes providing money by way of subsidy.

Something of the extent of the operations of building societies may be gathered from a comparison of the estimated total expenditure on housing with the new mortgage advances made by the societies :

	Estimated Expenditure on Housing	Building Societies' New Mortgage Advances	Estimated Excess of Expenditure
	£ million	£ million	£ million
1928	93	58.7	34
1929	115	74.7	40
1930	97	88.8	8
1931	98	90.3	8
1932	97	82.1	15
1933	147	103.2	44
1934	187	124.6	62
1935	175	130.7	44

These figures, and especially the relationship between

them,¹ are significant, but there is one qualification which must be entered at once. Building societies are not only financing the purchase of new houses, but also of houses already in existence. Sir Harold Bellman has estimated that between 1928 and 1931 a little over half the building societies' advances were for new houses. But this does not end the matter by any means, since money advanced for the purchase of an existing house may be used by the seller to buy himself a new one; in this way, building societies may be financing new housing indirectly as well as directly. It is thus impossible to tell exactly what part building societies are playing in the financing of the housing boom, and all we can do is to compare general changes in the relationship between the funds the societies advance and the total spent on buying new houses.

Two clear features emerge from the table. In the first place, building societies seem to be playing a proportionately larger part in 1930 and 1931 than in the two years previously. Second, after 1933 and 1934, there is a swing back, since the increase in the sums they lend does not balance all the increase in new building. These two tendencies clearly call for explanation.

The increased part played by building societies in 1930 and 1931 might just conceivably be due to people borrowing on their houses for various private reasons. But it is highly improbable that this is a major factor. Sir Harold

¹ The above figures ignore the time-lag element since the estimated expenditure on housing for each year covers houses completed up to the end of the following March, while the building societies would seldom come into the picture until the houses have not only been completed, but sold. One can check for this by subtracting the Advances for 1929 from the Expenditure for 1928, and so on, when we get "excesses" of 18, 26, 7, 16, minus 6, 22, 56, respectively. The best "shot" at the real figures would be then to average the results arrived at by the two methods. The averages are: 26, 33, 7.5, 12, 4.5, 33, 59. But all through the story is the same; there was a considerable volume of "outside" money going to finance building each year before 1929; after that this "outside" money was very much reduced; in 1933 it was back at the 1929 level; in 1934 some £25 to £30 million *more* than in 1929 went from outside sources to finance building; latterly it has fallen again. And, of course, the "excess" is an absolute minimum figure for outside money.

Bellman does not notice any significant change in the division of advances as between new and old house property between 1928 and 1931. It is improbable that as early as this people should be borrowing in order to tide over falls in their incomes on account of depression. It is quite inconceivable that they should be wanting to raise money in order to make new investments. We must look for an alternative explanation.

This is not very difficult to find. After 1929 the banks were adopting a policy of restricting advances. It is quite true that banks do not normally offer to finance the purchase of house property over any long period of time ; as we shall see, they officially disclaim that they lend in competition with building societies. On the other hand, they are handling a very large number of personal accounts, and a good client of a bank who wishes to borrow money to buy his house would—in a period when banks were willing to expand advances—probably receive favourable consideration on the understanding that the bank could call in the loan should it think it necessary. While it seems natural to suppose that banks would be prepared to do this sort of thing up to 1929, it is much less probable that they would do so in the deflationary period of the two or three succeeding years. A reasonable explanation of the fall in outside money going to finance housing from 1930 onwards would seem to be that the banks have become very much more cautious in financing house purchase by their clients.

A converse movement would also explain the increased part played by outside money after 1932. By then, so far from wanting to reduce advances, the banks were only too anxious to increase them by any means in their power. The yield on advances (officially $4\frac{1}{2}$ or 5 per cent) was high compared to the yield to be secured from any alternative form of investment. Lending on house property would have been a safer proposition than buying at high prices long-term Government securities which might depreciate, which only bring in about 3 per cent, and which have

already been bought by the banks to an astonishing extent. There is no direct information on this point, but it seems clear that the banks have become more and more active in financing house purchase, while other investors have also been attracted in this direction.¹

There are other agencies to be considered. First, the Government and Local Authorities. The subsidy was in full force during 1928 and part of 1929, and capitalized it represents roughly £3 million for each of these two years. Thereafter, it is very much less, say £5 million, and later on disappears almost entirely. Therefore, it is not a major factor in the *financing* of new building, though no doubt in 1928 and 1929 it played an important part in enabling the price of certain types of houses to be reduced and so brought within the means of prospective purchasers.

Rather larger are the advances made for house purchase by Local Authorities under the Small Dwellings Acquisition Acts, section 92 of the Housing Act, 1925, and parallel special arrangements for London and Birmingham. Money could be lent by Local Authorities for the purchase of houses by occupiers at low rates of interest—at present $\frac{1}{4}$ per cent above the Local Loans rate. Sums thus advanced were (in £ million) :

1927-28 . . .	12.5	1931-32 . . .	3.0
1928-29 . . .	8.5	1932-33 . . .	2.6
1929-30 . . .	7.5	1933-34 . . .	4.4
1930-31 . . .	4.2	1934-35 . . .	5.3

The amounts advanced are not very large, and are much below the pre-depression level. They do not necessarily refer to new houses ; the purchasers may not be the first occupiers. In any case, they do nothing to explain the new finance available for house purchases in the last few years.

Another agency, which both advances money and also purchases house property direct, is the insurance

¹ Advances both for building and to private individuals are well up. See the speeches of the Chairmen of Barclays and Lloyds at the Annual Meetings at the beginning of 1937.

companies. It is often assumed that the insurance companies have been doing a great deal in this direction in recent years, but the amount must not be exaggerated. Total insurance funds invested under the only three heads which could cover the financing of house property are as follows :

	Mortgages	Land, House Property, etc.	Loans on Policies
	£ million	£ million	£ million
1928	134·3	57·6	70·6
1929	151·3	59·2	86·4
1930	162·4	61·3	76·1
1931	165·7	64·4	73·8
1932	179·5	67·0	70·2
1933	162·2	71·5	65·7
1934	163·8	76·0	60·6

(Board of Trade figures.)

Mortgages have fallen off in 1933 and 1934 and the only increase is under the heading Land, House Property, etc. In these circumstances it is difficult to found an explanation of more than a part of the increased money available for housing on the basis of the activity of insurance companies.

Property issues have been quite considerable, and in the years 1933-36 amount to £10 million a year. They were probably at a considerably lower level in 1928 and 1929. Some of the change is to be found here, but only part of it.

The bulk of the change must be assigned to people investing their funds privately in house property (or lending on mortgage through solicitors and land agents), and to the banks. Solicitors have always played a large part in arranging mortgages and large sums pass through their hands. Unfortunately, very little is known about the extent of the business done in this way, but solicitors appear to some extent to have organized themselves for the purpose of providing mortgages and—according to one authority, though the present writer has not verified

this—to have established a clearing-house: “In fact, there are two, so that those having clients who wish to borrow on mortgage shall be put into direct contact with those having clients who wish to lend on mortgage”.¹ But much of the work they do is putting clients in touch with building societies, though advertisements of mortgages appear in papers like the *Law Society's Gazette*. Estate agents—as is quite clear from advertisements in *The Times* and elsewhere—also have had large sums at their disposal to invest recently. It seems fair to assume that a large part of the funds going to finance the purchase of new houses has come from these sources. The inducement to lend money on mortgage or to buy property is a strong one in view of the fall in gilt-edged rates of interest.

Lastly, there are the banks, about which something has been said already. They play a large part, it is well known, in financing the actual building process. Few building societies do anything to finance construction itself—as a rule they come in only when the house is completed and a purchaser has been found. Even then they only advance a proportion of the price. The earlier stages, from the purchase of the land and its development to the building of the houses, are financed by builders themselves out of their own resources, bank loans, credit from builders for materials and advances from specialized building finance companies. The position of the banks *vis-à-vis* building has been defined by Mr. W. F. Tuke at the annual meeting of Barclays Bank in January 1936:

It is important to notice that the part played by the banks in financing this significant and gratifying movement is complementary to that of the building societies. The banks assist the builder by advancing some portion of the actual cost of the building, while the building societies finance the buyer by advancing an agreed portion of the purchase price of the completed house. This is one example of the manner in which the activities of the various types of financial organizations existing in this country dovetail the one into the other, so that, taken together, they form a very adequate

¹ Joseph L. Cohen, *The Mortgage Bank*, p. 187.

financial machine, competent and willing to finance any credit-worthy borrower.

Mr. Tuke showed that something approaching £11·6 million had been advanced to builders, building material manufacturers, and public works contractors by his bank alone. "In the circumstances, it may appear that the item is rather small, but you will understand that in that big omnibus item 'Advances to Professional and Private Individuals' there is a substantial amount which, if it could be dissected, would properly be tabulated under this heading." The big omnibus item was over £55 million and accounted for 35·7 per cent of Barclays' total advances.

It is thus impossible to tell to what extent banks do in fact finance house purchase as opposed to house building. Nevertheless it seems not unreasonable to infer that in recent years they have looked with greater favour on such business on account of the general fall in their advances. Private individuals, as a rule, are not now being refused overdrafts on the security of house property, though they always run the risk of loans being called. But one cannot tell how far the inflow of outside money is due to the banks, and how far to the increased purchase of house property by private individuals as an investment.

Mortgage rates have fallen much less than other rates of interest. This may be illustrated by comparing year by year the effective rates charged by building societies on mortgages (*Economist* figures) with the yield on new

	Effective Rate Charged on Mortgages	Yield on New Issues	Yield on Consols
1925	5·85	6·43	4·44
1929	5·78	6·10	4·61
1932	5·88	5·44	3·75
1933	5·60	4·58	3·40
1934	5·48	4·48	3·10
1935	5·20	3·83	2·89

issues of industrial debentures (*Economist* figures again) and the yield on Consols.

While the rates charged on mortgages have only fallen a little over $\frac{1}{2}$ of 1 per cent between 1929 and 1935,¹ the yield on industrial debentures has fallen by something like $2\frac{1}{4}$ per cent, and if this comparison be ruled out on the ground that debentures in 1935 may, in general, have been of a higher quality than in 1929, there is the contrast with the yield on Consols, which has fallen over $1\frac{1}{2}$ per cent. One thing is clear, that the fall in interest rates has only very partially been reflected in the rates charged to borrowers who want to buy their houses. This, very forcibly, leads to the conclusion that the demand for new houses has not been evoked directly by a reduction in interest rates charged to borrowers.

The funds available for house purchase have been called forth by keeping the rates paid to depositors and shareholders relatively high. The following figures are all taken from the *Economist* : ²

	Building Societies : Rates paid on Shares	Building Societies : Rates paid on Deposits	Banks : Rates Nominally paid on Deposits
1925	4.38	3.85	2.55
1929	4.51	3.92	3.50
1932	4.49	3.71	1.00
1933	3.84	3.46	0.50
1934	3.69	2.80	0.50
1935	3.55	2.97	0.50

These contrasts are even more striking when it is remembered that interest paid by building societies is paid tax-free, while interest paid by banks or coming from securities is subject to tax. (Too much weight must not be put on the figures of rates paid by banks, as depositors

¹ Though probably the rates on new mortgages have fallen considerably more. It must also be remembered that the nominal rates charged by building societies may in fact appear lower than they are, which is the effect if the interest is calculated on the sum outstanding at the beginning of the year, instead of on the average sum outstanding.

² " Building Societies' Special Survey ", April 11th, 1936.

for fixed periods would command better terms. The yield on Consols—above—provides a better comparison.) The large sums which are put at the disposal of building societies, year by year, are readily explained when it is realized how high the return is on a fairly safe form of business compared to the return on other investments.

Looking at the demand for housing as a whole, it is not difficult to see why there should be a big demand for what might be described as “middle-class houses”. The proportion of the national income taken by salaried workers has increased very greatly compared to the pre-War period. The needs of the population have been changing and housing standards rising. There has been a very powerful drift towards the South, and away from the North. The number of families has been increasing rapidly while the average size has been falling. All these considerations point not only to a need for more houses, but also to a need for different kinds of houses and for houses in new places. Provided that such houses could be brought within the means of those who wanted them, there was clearly a large demand to be satisfied.

The real question is not why was there a housing boom from 1932 onwards, but why did not the housing boom come at some earlier period during the nineteen-twenties. There is no sign of any real increase in the demand for unsubsidized houses until we come to 1929—that is the year ending March 1930. Thereafter, we get a steady increase in the number of houses built by private enterprise without State assistance. Why is this not visible earlier?

Ultimately the real reason would seem to be that there was no strong inducement to the building industry or to investors to explore new possibilities. Up till 1929 the building industry was well occupied working for Local Authorities and for subsidized private enterprise. In circumstances such as these, builders were unlikely to start out building on their own, taking risks when there was safe money to be picked up in other ways. At the

same time, the inducement to invest money in building was a limited one. The yield to be obtained from investments on the Stock Exchange was a high one. Gilt-edged securities were bringing in from $4\frac{1}{2}$ per cent upwards, and much higher yields could be secured from investments of a more speculative kind. In consequence the money available for mortgages and for investment in house property was limited; how limited is shown by the fact that most new building by private enterprise was devoted to the provision of houses for sale rather than of houses to let. Only in 1929 were circumstances such that there was a substantial rise in houses built without State assistance.

After 1932 the state of affairs was very different. Builders found themselves being forced to take their initiative in developing new opportunities. At the same time, mortgage rates remained—as we have seen—much above the level of other comparable rates of interest. There is thus a position in which the builder is in search of opportunities, and building societies have funds to invest. With every inducement for new development, it soon became clear that there were enormous opportunities to be followed up.

This new position shows itself in the development of the pool system. Previously, the difficulty which every speculative builder had to face was that of finding finance to bridge a gap between the deposit which the purchaser could pay and the amount which the building society was prepared to lend. A society would lend 75-80 per cent on its own valuation. But 75 per cent on, say, an £800 house is only £600—and £200 is a large amount to expect a prospective purchaser to put up at the very beginning. On the other hand, the number of purchasers would be increased enormously if the deposit were £25 or £50 only.

The pool system served to open up this new demand from people prepared to buy houses but unable to put up large deposits. The building societies agreed to advance more than the 80 per cent on condition that builders put up collateral security. The builder buying a piece of land

would put up one or two houses and sell them ; his profits on the houses he had sold would help to provide collateral security on further houses. The builder's guarantee would enable the building society to lend more than its normal maximum, and so to keep at a minimum the cash deposit required from the purchaser.

In every case the builder enters into a personal agreement guaranteeing the whole amount advanced in excess of the normal and giving the society a lien on his cash deposit (which constitutes the "pool") until the loan on a given property has been reduced to a sum not exceeding two-thirds of the valuation, the society meanwhile paying interest on the builder's deposit account. Under this arrangement the builder may be called upon, if the borrower defaults, to repurchase the property from the society. On any loan being reduced to not more than two-thirds of the original valuation the deposit lodged in respect of that advance may be withdrawn, provided the society is satisfied that the circumstances generally justify the release.

The society makes full enquiry into the credit standing of the builder concerned, and the estate is carefully watched to see whether, and if so why, undue default is taking place. The builder's general financial position is also followed closely. Every individual house is surveyed when the prospective purchaser makes an application for an advance ; every individual application is considered on its merits, and the society has the protection of the borrower's personal covenant. On any large estate a society often limits its commitments and the business is shared by several societies.¹

Devices such as this are a definite result of the inducement to find new investment outlets. The building boom is an example of a latent opportunity exploited on account of the pressure for new and satisfactory investments. It is a result of cheaper money or increased risks in other parts of the economic system.²

¹ *Economist*, "Building Societies' Special Survey", April 11th, 1936.

² It is sometimes argued—and this argument has been put forward by no less an authority than the *Economist*—that the fall in retail prices left the bulk of the population with increased purchasing power which was devoted to the purchase of houseroom. While this argument may have some force, it does not appear convincing as a major ex-

3. BUILDING SOCIETIES : SOME GENERAL ASPECTS

Certain general aspects of the financial technique employed by building societies deserve examination. The building society's method has two distinctive features. In the first place, every building society is borrowing short to lend considerably longer. In this building societies differ from other financial institutions in degree rather than in kind. Most financial agencies are borrowing short in order to lend longer ; the banks are a very good example, their disclaimers notwithstanding. But building societies put themselves into their position quite openly ; they do agree to let depositors and shareholders have their money back on relatively short notice, but they cannot call their loans from the house purchasers to whom they have advanced money.

Secondly, though their assets are completely illiquid, they are essentially self-liquidating. A building society cannot call its advances, but it does know that these advances are being paid off regularly, and it is free to refuse to make new advances, in contrast to banks, which, in fact, have a responsibility to continue to support their clients even when from choice they would prefer not to do so.

On the whole, building societies are in a strong position as far as solvency is concerned. Even if their valuers were to take too optimistic a view, the amounts outstanding are being regularly reduced so that, at any given moment of time, sums due on the bulk of the mortgages are well below the amount originally advanced. For this reason, building societies should be in a strong position to with-

planation : can it be maintained that a substantial portion of the population was better off—or considered itself better off—in 1931 and 1932 than in 1926 ? Even those who did gain through the fall in the cost of living could have hesitated to enter into new commitments. But undoubtedly purchasing power was maintained remarkably even in the depths of depression. See P. Sargent Florence, " An Index of Working-Class Purchasing Power for Great Britain, 1929-35 ", in *Journal of Political Economy*, Chicago, October 1936.

stand any gradual fall in property values. A large and sudden fall might leave them in difficulties, but the change would have to be so extreme that it would probably affect other financial institutions just as much. In anything approaching normal circumstances the societies are in a strong position as far as ultimate solvency is concerned.

But that does not mean that they could meet any sudden withdrawals of depositors' or shareholders' money. It may at first sight seem surprising that there are no arrangements by which they could protect themselves from such a position by arming themselves with marketable securities which they could sell to the public or to financial institutions. A remortgaging system, parallel to the rediscounting system in the money market, would quite easily import an element of liquidity into the structure of the building societies. It does not exist for the reason that so far it has not proved necessary. The real danger, therefore, is not that a fall in property values leaves house-purchasers with an inducement to leave partly bought houses, but that depositors or shareholders will start calling in their money. This might happen either because the public got frightened—for example, if the failure of one or two of the smaller and less judiciously run societies started a panic—or because much higher yields can be got safely by investing in securities. In the former case, the difficulties would be temporary, and banking assistance could be mobilized to tide over a difficult patch; in the latter case, there would only be a danger if the rise in the yield of gilt-edged were sudden and substantial. This is a possibility which has to be reckoned with: if Bank rate remained low, but Consols went to a 4 per cent basis, there might be a switch from building societies into Government securities which might prove embarrassing, even though the rates offered to depositors were also raised.

One final question may be considered. If the demand for new houses falls off, will the building societies turn to providing mortgages on industrial property? Can

the building society technique be applied to that sort of business ?

The difficulties are considerable. The value of a dwelling depends on what an alternative occupier would be prepared to pay if the original occupier defaulted. The value of a factory depends on the profits it could earn if it were put to an alternative use. The former is comparatively easy to determine ; the requirements of house occupiers follow more or less given lines. But the needs of users of factories are very diverse, and the risks involved in making advances on industrial property are much greater and require very specialized knowledge. If the building societies were to branch out into that type of business, they would have to change very much in character. In particular, they would need to finance themselves with a fairly high proportion of capital which could not be called on notice in the event of economic crisis. If there is room for more institutions lending on industrial mortgages and partly financing themselves on deposits from the public, they would look very different from building societies as we know them to-day, and they would need to raise a substantial proportion of capital as a basis for their operations.

4. THE FINANCING OF AGRICULTURE

The position of agriculture in Great Britain is very different from that in most other countries since less than half the land is worked directly by the owners. The landlord-tenant system still predominates, though to a less extent than before the War. It is estimated that in 1910 only 10 per cent of the cultivated land in England and Wales was worked by owner-occupiers ; by 1925 this percentage had increased to 25 per cent with the break-up of large agricultural properties ; in 1927—the last date for which figures are available—the percentage was 36.¹

¹ *Agricultural Statistics*, 1927, pp. 27-28, Part I.

In such conditions the provision of capital falls on both the parties involved ; the landlord provides fixed capital, the farmer working capital, the latter coming to something around £15 an acre. The result of such a position is that the landlord can borrow fairly easily on the strength of the land itself, but that the farmer has no satisfactory security to offer when he wants to raise money. In addition, while the landlord has the power to borrow should he want to do so, he may be unwilling to sink capital in improvements as he may have need of liquid assets which can be disposed of easily to pay Death Duties or for similar reasons. In consequence, British agriculture as a whole is short of capital. While certain important changes in 1928 have probably improved the position, it is far from satisfactory.

The most important agency providing the farmer with short-term capital is that of the banks. The amount advanced by the banks to agriculture is considerable, though there used to be complaints that the disappearance of the small local private bank has meant that the farmer and the bank manager have lost touch with each other. In 1923 the banks had advanced £46.5 million—£26 million for land purchase and £20 million for current trading purposes. At the beginning of 1926 the total had risen to £51 million, of which £21 million was for current trading. According to the Macmillan Committee, at the end of 1929 the total advances for agriculture and fishing were £68.6 million by the London Clearing banks (and £7.7 million by the Scottish banks). In October 1936 this was down to £57.7 million. These totals are not excessive, when it is remembered that the greater part of these advances are for land purchases. The *Report on Agricultural Credit*, 1926, points out as a basis of comparison that the gross value of farm output in 1922 was £261.3 million.

Co-operative credit societies are—in contrast to the position in many places abroad—of little importance in this country. Following the Agricultural Credits Act,

1923, attempts were made to develop co-operative credit, but these proved a failure.

Farmers also obtain a great deal of credit from people with whom they have business relations. Auctioneers and dealers are prepared to make advances ; sellers of farming requisites allow a long interval to elapse before accounts must be paid. Sometimes landlords allow the payment of rent to be deferred, in order to give the farmer more working capital. But the 1926 Report finds the giving of credit by dealers or by sellers of farming requisites an extremely unsatisfactory method of financing. The farmer is tied to the auctioneer or dealer who has advanced money to him ; he is almost certainly paying for the credit allowed him by his supplier in the shape of a higher price for the goods supplied.

The 1926 Report definitely takes the view that the facilities for short-term credit to the farmer are unsatisfactory, and that the farmer is by no means prepared to make the best use of such facilities as do exist. Farmers are often apathetic and unwilling to use credit for fear of "running into debt", but this does not prevent them from buying goods for deferred payment at excessive prices. The unwillingness of the farmer to use credit, or his inability to get it, is shown in price fluctuations for farm output ; these suggest that farmers tend to be in a hurry to sell at the first possible moment. Further evidence that the credit system is not working as well as it should is to be found in the criticism that bank advances to farmers tend to remain steady throughout the year¹ while, in fact, they should certainly vary, and rise to a peak just before the crop is sold. Inability to obtain credit is a significant feature ; the owner-farmer can obtain credit easily enough if his holding is free of charges or he can offer collateral. But a farmer who does not own his own land has nothing to offer as security except his

¹ "Under the present system there is at least some reason to think that the gross amount of short-term advances from banks to farmers does not vary considerably between winter and summer" (*Report on Agricultural Credit*, 1926, para. 77).

crops and stock, and these are difficult to charge legally. Such are the consequences of the divorce between ownership and working.

In an attempt to remedy this position, the Agricultural Credits Act, 1928, set up a new legal form of charge, an "agricultural charge" which can be used as security for a bank overdraft or a loan. There is a special register of all such charges which is open to inspection, though there are restrictions on the publication of such charges in trade papers; this is an attempt to protect the farmer's credit. Nevertheless, "it is now generally recognized that the Agricultural Credits Act, 1928, offers no sort of solution to the problem of short-term credit".¹ But it may well be that the shortcomings are not in the Act itself, but in the failure of the various parties to make use of it.

So much for the short-term credit position. In regard to the provision of long-term capital, the difficulties would appear to centre on the willingness of landlords to sink money in agriculture rather than on the facilities for enabling them to do so. Long-term capital should, in theory, come from the rich man who owns the land; in fact, rich men almost always have to be making provision for meeting Death Duties at some future date, and they will therefore want to keep a large proportion of their wealth in a form in which it can be readily turned into cash. Consequently a large proportion of their investments will be in marketable securities in preference to landed property, and they will hesitate to sink capital freely in agriculture.

There are two bodies which are, in fact, engaged in providing facilities for the development of farm land. The Lands Improvement Company—a body with limited interest on its capital—is of long standing. It finances projects for improvement, for example, land drainage, which have received the consent of the Minister of Agriculture, and this consent, which is only given after investigation, allows of a special prior charge to be created

¹ *Agricultural Register*, 1934-35, p. 334.

to the value of the improvements, this charge serving as security for loans made by the Company. The Company has a very small capital, but has borrowed over £1 million mainly from insurance companies on the secured improvement charges.

No special provision for land purchase was made before 1928. Money to buy land on the break-up of an estate had to be borrowed from banks or through solicitors, or from the seller if he was willing to lend on mortgage. As a result of the 1926 Report on Agricultural Credit, the Agricultural Mortgage Corporation was set up and commenced business in the earlier part of 1929. This institution can lend for periods up to sixty years, up to two-thirds of the value of the property mortgaged. The dividends on its share capital of £650,000 are restricted to 5 per cent. This share capital is held by the Bank of England and the joint-stock banks, excluding the Midland Bank, and an equivalent sum has been advanced, free of interest, by the Government, which in addition makes a contribution towards the running of the undertaking. On this foundation some £10 million has been raised through public issues of debentures.

The ownership and control of the Mortgage Corporation is thus in the hands of the joint-stock banks, and applications for loans come through local bank managers. In this way the Corporation is utilizing existing machinery, and so keeping the cost of administration at a minimum. The chief difficulty which has been encountered is outside the control of the Corporation itself. It raised a large part of its debenture capital before the fall in interest rates was effected. It is paying 5 per cent on £8½ million of debentures. As it cannot redeem these for a long time to come, it has been unable to reduce its charges to borrowers as much as might have been wished. Thus in the year ending March 1933 new loans totalled £1.4 million; in March 1934 they were under £0.4 million. The rate on new loans was reduced from 5½ per cent gross to 4½ per cent gross as from April 16th, 1934, and

as a result new loans during the year increased slightly. In addition to this, there have been efforts made by farmers to repay loans before they are due, and the Corporation has had to discourage premature repayment. The outlook for the Corporation is not too bright if during the next twenty or thirty years it has to clear its fixed charges and find a sufficient number of borrowers.

Thus the financing of agriculture has not been very successful, either in respect of short- or long-term capital. The difficult position shows itself especially where there is a divorce between ownership and working, so that the tenant has no fixed assets to offer as security for loans. The Agricultural Mortgage Corporation reflects an extremely interesting conception, but it suffers from the accident that it had to borrow its funds when rates of interest were far higher than they are at present. Paradoxically enough, if the conception had been more venturesome, and if the Corporation had had power to raise a large proportion of its funds by way of deposits from the general public, it would be in a much more happy state. It provides an interesting model for the consideration of those who would like to use the machinery of the banks as a vehicle for the provision of long-term capital without at the same time tying up any substantial proportion of the banks' resources.

But the real problem of financing agriculture on long term is that of making investment in agriculture liquid, in the sense of marketable. E. P. Weller has discussed the possibility of investment companies interesting themselves in farming.¹ His proposal is that "rural land should be owned and managed in large blocks by limited liability companies"; thus he would like to see experiments by which corporate land-owning bodies who had raised their money by selling securities on the capital market, let out land to farmers. He adduces evidence of capital shortage, and of capital being withdrawn from the land.

¹ E. P. Weller, "Investment Companies and Rural Lands", in the *Journal of the Chartered Surveyors' Institution*, March and April 1936.

The break-up of estates is not due to any disruptive forces peculiar to the land but to the prevailing method of financing it. If large industrial concerns were financed on the same individualistic basis, they would break up in the same way on the death of the owner or on a change in his circumstances or interests. Such concerns remain intact because they are financed on the joint-stock principle which permits a free interchange of capital without affecting the nominal ownership or the management of the business. If this could be done with landed estates it is not unlikely that some owners who now feel compelled to sell outright would leave part of their capital in the land, since it would be fluid and they would be relieved from the risks and obligations of sole personal ownership. Division of ownership (*e.g.* amongst members of a family) would be simplified and the transfer of the share of any individual would be independent of the title to the land. The issue of debentures is simpler than borrowing on mortgage and the loan is usually more stable in duration and rate of interest.

The securities of the bodies concerned in their turn would satisfy the strong public demand for securities which come somewhere between gilt-edged and industrial shares. From the point of view of the technique of financing, such experiments would be interesting, but behind them all—whether we envisage joint-stock ownership of land let out to farmers, or joint-stock direct farming—lies the problem, how far large-scale capitalized scientific farming can really be made to pay.

PART FOUR

**PRESENT PROBLEMS AND
FUTURE PROSPECTS**

XIV

ECONOMIC ACTIVITY AND THE CREDIT MACHINE

1. THE PROBLEM OF CONTROL

THE monetary history of the post-War period leaves two distinct impressions: that the actual financial management of the period was carried through with a high degree of skill and success, and that criticisms should be directed at high policy rather than at high finance. The policies adopted in 1920, in 1925, and again in 1932-33, when the country moved a surprising distance along the path of economic nationalism, may have proved unhappy in the light of subsequent experiences, but Parliament must take the major share of the responsibility. Given the policies laid down, the financial authorities did carry through the task of day-to-day monetary management as well as difficult circumstances allowed. They sought to ease the financial burdens of other nations; they tried to maintain the gold standard after 1925 without putting deflationary pressure on the domestic or the world economy; when the collapse came in 1931, they supported the City with such skill that the danger of panic was rapidly averted. Time has brought knowledge, and looking back we are entitled to be critical of some of the major decisions of the post-War period, but they were decisions for which the country as a whole was responsible.

The new issue boom of 1928, on the other hand, is something for which the financial authorities must take some measure of responsibility. It was symptomatic of a weakness in the investment machinery, which to some extent has been remedied, although something remains

to be done to reorganize risk-taking so as to enable the necessary processes of economic experiment and development to be more extensive and carried through with less waste. But no improvement in machinery can be a substitute for ability to handle the machine. The problems of day-to-day management always remain.

These problems are not, of course, necessarily of vital importance in controlling the force of economic development. The significant decisions—carrying major dangers or major benefits—are taken in the field of politics and not in the field of finance. Manipulation of interest rates may be less important in maintaining steady economic advance than is a carefully thought-out Government spending policy. But when all is said and done, financial policy does still retain a large measure of importance. It is the easiest to put into practice ; the availability or non-availability of funds does influence the rate of expansion ; at critical points the influence may tip the balance. It does not matter that at other moments the effects may be slight.

The problem of financial control is largely one of so handling the monetary machine as to avoid generating booms and slumps, and to minimize the effects of disturbance when it occurs. This task is one which takes different forms with changing circumstances ; the credit machine must always be considered in its context. By changing the conditions of borrowing and lending in a real world it forces people to change their minds and to act differently in their economic relationships. As a result of these decisions, groups of individuals lose old employments or gain new ones, see their incomes reduced or their incomes increased.

It will be remembered that the financial machine exerts such influence as it can by making the opportunities for short-term investment more or less profitable in comparison with long-term investment. Other things being equal, the flow of savings will be deflected towards the fringes of enterprise or away from them. With short-term invest-

ments giving attractive yields, new borrowers are able to obtain less long-term capital, and consequently have to exercise discretion in the way they enter into new commitments. A movement towards increased liquidity will tend to set in. In the opposite case investors on short-term receive less favourable terms ; new savings are driven further afield, new commitments are entered into with greater confidence owing to the large supplies of long-term capital obtainable. The low remuneration in the safer parts of the investment field exerts an outward pressure on the economic system, and the fringes of enterprise are pushed further into the unknown.

These tendencies, of course, may be overlaid or counteracted by other forces which exercise an influence on expectations and opportunities. In many ways they are feeble compared to these other forces. But it is by such effects, and their indirect consequences, that the financial machine must exercise what pressure it can to stabilize the pace of economic development, and maintain employment and increasing real income in a changing Britain, with changing tastes and opportunities, changing habits and hopes, and changing population trends—a Britain which is not an isolated entity but only a part of an inconstant world.

The problem of control is all the more difficult in that the machine cannot be handled accurately and exactly. If it is used to curb a boom, it may duly precipitate a succeeding slump. A limited measure of restriction may be ineffective ; an effective measure may only bring about subsequent reaction. There is no measure to show the exact degree of firmness to be applied to bring about the desired result without the undesirable consequences : it cannot even be taken for granted that there exists a degree of force which can always achieve the one without bringing about the other, given the volatile character of human expectations.

Upward or downward movements tend to gather increasing force. A slowing down of activity means that

profits are affected, and as profits fall expectations change for the worse, and the change in expectations slows down activity still more, and the spiral goes on. In the reverse case, increasing profits lead to increased activity, and in turn to profits which grow still further. It is this cumulative element which makes the task of monetary management so delicate, and which leads to such extensive complications.

2. THE PROBLEM IN ITS PRESENT SETTING

Such is the character of the problem with which the authorities are faced ; it must now be examined in its present-day setting, in relation to a number of specific factors, most of which have come into being in the last few years, and whose ultimate effect is obscure.

First, the absence of an international standard. This means much greater uncertainty concerning the significance of any rate movements which the authorities may induce. As we have seen, under an operative gold standard the criterion was well known : a rise in rates was intended to correct an adverse balance of payments, and the business world knew that a small rise would be the precursor of more drastic action if by itself it did not have the desired effect ; in consequence the influence of small-rate movements was magnified. Under present conditions there is no such certainty. The fact that we know in general terms what the authorities would like to do—*e.g.* prevent an unhealthy boom from developing—is no definition of the methods by which they will seek to achieve this end, and there is no agreed statistical measure of an unhealthy boom which is as striking as figures of gold imports or exports. Therefore, in present conditions a rise in rates will have none of the psychological reinforcement which existed previously. It is true that we are not entitled to assume that the effect will be less. It is conceivable that the effect of a rise in Bank rate after several years at 2 per cent would be very great, but if so it would be because

people were afraid of what might happen, and not because they knew what was going to happen, or even likely to happen, in the future. The rise would act by increasing uncertainty generally, a consequence very different in character from the precise gold standard effect. But in any case it is equally possible that a moderate increase in Bank rate from the present low level would have very little effect at all.

Second, Britain is now in a state of economic semi-insulation in relation to a large part of the world, and even countries in the sterling group are likely to be much less sensitive to movements of rates in London. This is the consequence not only of a breakdown of the international monetary standard, but also of economic policies and exchange restrictions in this country and elsewhere, and of the general fear of political developments abroad, all of which have tended to separate up economic systems from each other. Any changes of rates in Great Britain will then affect internal conditions rather than international conditions.¹ Here again there is a noteworthy difference compared with the period before the War or even before 1931.

Third, the low level of long-term rates in Great Britain means that a rise in short-term rates should influence long-term lending at a much lower level than was the case before the depression. Owing to the fall in long-term rates, a rise in bill rate will attract funds away from the long-term market much sooner than before. A 3 per cent bill rate was a low rate before 1930; such a rate now would be near the rate on gilt-edged and, therefore, a high rate on the assumption that the yield on gilt-edged does not increase to any appreciable extent. The extent to which it may increase is an important question yet to be discussed.

Fourth, the banks are very large holders of Government securities. They have doubled their investments since

¹ Though the flow of British funds for investment in New York may be affected.

the depression, and the total now stands at well over £600 million. The existence of these huge holdings raises a number of questions—To what extent will the banks dispose of them ? What the effects will be on gilt-edged ? What other consequences may result ?

Fifth, business is in a highly liquid condition.¹ The volume of bank deposits is very high, and of bank advances comparatively low. Hence the business world would be much less sensitive to any change in market conditions. A conscious attempt on the part of the authorities to stiffen rates might work itself out without having any restrictive influence on activity owing to the "cushions" of spare balances available. In addition, the banks would be unwilling to restrict further advances as long as the proportion of advances to other assets remains low.

Lastly, the rearmament expenditure of the Government. The consequences of this remain to be seen, but a rise in rates will not be allowed—it may be taken for granted—to restrict this, and the task of controlling developments in other directions will become harder, the greater the flow of money spent on rearmament.

In general, the flooding of the economic system with cash balances as a result of the purchase of securities by the Bank and the banks has resulted probably in reducing the sensitiveness of the banks to any action of the Bank, and certainly in making industry less sensitive to the banks. Other factors suggest that, should the necessity of restriction arise, it will be more difficult to make it effective than was the case in the past. This will especially be so if expenditure on rearmament is large.

Given the circumstances described above, what would be the effect if the Bank of England—fearing an incipient boom—were to try to raise rates ?

The Bank would presumably try to make higher rates effective by selling securities in the open market. The

¹ See, for example, "How Companies Finance Recovery", in *Economist*, January 9th, 1937.

purchasers would pay the Bank by cheques on their own balances at the joint-stock banks. The joint-stock banks would find their cash decreased and would, therefore, consider reducing their other assets by approximately nine times the amount of the cash reduction in order to preserve a 10 per cent cash ratio. This involves a choice between different assets which might be disposed of by the banks. They could reduce their call money, or their bills, or their advances, or their investments, or some or all of these combinations.

In present circumstances the banks would undoubtedly be inclined to reduce their investment holdings most. Call money might temporarily fall, but would tend to be restored to the old level. The banks would not cut down bills (except perhaps temporarily), especially if the rate rose. Advances are lower than they were in 1929, and are a highly remunerative asset. In contrast, the banks are overloaded with investments, and fear depreciation in these were the gilt-edged rate to move up. The banks' natural reaction would be to dispose of long-term Government securities. They might even do so more than was strictly called for by the contraction induced from above, for fear of their holdings depreciating.

In the event of the banks selling on any scale, other institutions—for example, insurance companies and investment trusts—might begin doing likewise. It is just conceivable that the banks might start a landslide. What would the effect be of any substantial unloading of gilt-edged on the long-term rate of interest? The long-term rate of interest will have to be examined in due course.

But in conditions such as obtain at present we must not take it as inevitable that the banks will behave in the manner postulated by the text-books, and try to preserve the cash ratio. A 10 per cent cash ratio is a completely arbitrary affair. It seems quite possible for the banks to work with considerably less as a basis.¹ They

¹ Especially as the increase in deposits has not been accompanied by a corresponding increase in the demands for accommodation.

might decide to do nothing at all, in spite of the inroads made on the cash reserve by the sale of securities by the Bank. They might even be encouraged by the Government not to dispose of their investments for political reasons. In that case action by the Bank might be comparatively ineffective—or, at least, much less effective than was hoped. This possibility must be reckoned with, since legally the banks are under no obligation to maintain a minimum cash ratio.

Consider the position. The banks have a considerable margin in hand. This margin could be made much more effective by inter-bank borrowing. The demand for cash has by now become very limited. It is used for wage payments and for personal purchases, but large payments are almost invariably made by cheque. Cheque payments are cleared by the banks between each other, and if they came to a mutual arrangement the balances necessary at the Bank of England could be kept very low, especially if they were prepared to transfer assets direct between each other. The fact is that the Bank of England's power largely rests on convention, and we cannot be certain that this convention may not be relaxed should circumstances make it convenient. Since the War the general tendency has been for the cash ratio to fall. It must be emphasized that there is no suggestion that the banks would adopt such a policy ; but this is a theoretical possibility to be taken into account.

In sum, a restrictive policy imposed by the Bank might encounter a number of unfamiliar possibilities. It might be difficult to force up short rates owing to an unexpected demand for assets of early maturity, since with rates in general rising, many holders would be tempted to switch from longs into shorts. Gilt-edged might fall owing to the sales of securities by the banks,¹ followed by other in-

¹ The writer is indebted to Herbert Tout for pointing out that this will depend largely on the character of the banks' holdings. If they are intermediate or short securities, this is a reason why the banks would not sell—since they would have to take losses if they did. If they are longs, they may have to sell to avoid losses.

stitutions. The banks, alternatively, might be prepared to see their cash ratio fall without taking any action in the matter, in which case the position remains more or less unchanged. Finally, even if the financial system does raise the short rate nearer to the long, the restrictive effect may be counterbalanced by the high profits coming from expenditure on rearmament, and the resulting purchasing power distributed through the community.

So much for the position on the assumption that the Bank of its own accord decides that a restrictive policy is necessary. This is a possibility which may come in the future, but at the beginning of 1937 it is as yet unrealistic. As yet the situation is dominated by the fact that the Government is likely to be in the market for substantial sums for rearmament purposes. Should the Bank intervene to keep rates as low as possible while this is going on, or should their borrowings be allowed to have their effect in a rise of rates? This is the salient question, which can best be approached through a consideration of the factors influencing the long-term rate of interest.

3. THE FUTURE OF THE LONG-TERM RATE OF INTEREST

The long-term rate of interest—using the term in relation to gilt-edged—varies but slightly over short periods of time, and tends to smooth itself out in accordance with changes in expectations. This is a natural tendency; if people expect the rate to be 3 per cent next year they will adjust the present rate to this expectation, and vice versa. Gilt-edged are valued in such a way that expected changes are discounted in advance. Short-term interest rates vary more because they only reflect such expectations as fall within the short period before the security matures.

But what is meant by expectations determining the yield of gilt-edged? The term "expectations" is a convenient word which covers a number of very different

points of view. The expectations of all buyers and sellers will not be identical, leaving aside altogether those individuals who may not bother to buy and sell, whatever they may expect. How is the price in fact determined ?

There are various classes of potential buyers and sellers. There are existing holders who will always tend to hold, and will remain unaffected by price movements except under very abnormal circumstances ; there are prospective purchasers, such as trustees, who will always tend to buy irrespective of price movements ; there are existing holders who would sell out if they thought the price was likely to fall ; there are purchasers who exercise discrimination, and only buy under conditions which they judge favourable ; lastly, there are speculators who will come into the market in the event of a fall which they judge to be temporary.

This rather arbitrary division into classes illustrates the variety of interests involved. The price will be made by a minority which is prepared either to buy or not to buy, to sell or not to sell, in response to small movements in the not very large volume of freely available gilt-edged in the market. Here, as in other things, marginal buying and selling—marginal in the economic, not stockbroking, sense—determines the price. But behind all this is a large mass of potential buyers or sellers who would come in if they saw what they thought was a big opportunity.

Against this background, let us examine the present position in the market for long-term Government securities. The pronounced fall in the rate of interest in the last five or six years was in part due to depression, and in part to the policies adopted by a number of financial institutions. As we know, the banks have more than doubled their investments in the last five years. In December 1931 the London Clearing banks' investments totalled £296·5 million ; in December 1936 the figures (for the same banks as before) stood at £630·4 million—a rise of £334 million, consisting almost entirely of British Government securities (and quite apart from Treasury Bills). But this is only a part of the special demand. The

Banking Department of the Bank of England accounts for another £30 million or thereabouts. The holdings of insurance companies in British Government securities have gone up by about £100 million in the same period. The assets of the Post Office Savings Bank and the Trustee Savings banks are up by £100 million. Savings Certificates are up by £20 million ; the Unemployment Fund has received some £30 million more than it has paid out during the same period. And there are the Government funds which have been increasing their assets.

There is thus a sum of well over £600 million which has been used either for the direct or the indirect holding of Government securities. During this same period the incomings and outgoings of the national accounts have never been seriously out of touch with each other. It is under this enormous impact that the rate on long-term Government securities has fallen.¹

But the future holds no prospect of a continuation of this process on anything approaching the same scale. The banks are at last beginning to find other ways of employing their funds, and in future will hardly be likely to add to their investments without official pressure. The needs of rearmament are likely to force the Government to increase the supply of debt. The expectation of a consequent fall in gilt-edged will tempt the authorities to unload. If there is a restrictive policy on the part of the Bank in order to prevent boom conditions from developing, the banks are likely to dispose of some of their investment holdings. Taking all these considerations into account it seems probable that—unless special measures are taken—gilt-edged values will fall and the long-term rate of interest rise.

The interesting question is whether they will continue falling, or whether at some specific point new purchasers will come in to sustain values. The latter seems the likelier possibility ; there are large potential purchasers

¹ See N. F. Hall, "Treasury Control and Cheap Money" (a paper read before the Manchester Statistical Society, February 10th, 1937).

both here and abroad who would be glad enough to get gilt-edged cheap on the assumption that the price would begin to swing back when rearmament ended or the next depression was under way. Those who in the past sold their holdings to the banks would probably be prepared to repurchase once prices had fallen sufficiently. Funds might be diverted from the market for new speculative issues as soon as it was felt that gilt-edged were falling below the probable long-run price. There would probably have to be a noticeable fall before such purchasers came into the market, but there seems little danger of a collapse. It is, of course, rash to prophesy, but it is not easy to imagine Consols beginning to give a yield of anything approaching 4 per cent. Possibly increasing funds would be attracted into the gilt-edged market for every point that $3\frac{1}{2}$ per cent War Loan fell below par.

The fundamental question arises, whether it would be wiser to take special steps to maintain the yield on long-term Government securities during the period of rearmament, or to allow the rate to rise until new purchasers came in to provide the necessary funds.

Special steps could be taken if the Bank bought more Government securities, and encouraged the banks to expand their deposits still further. This might be coupled with indirect pressure to persuade the banks to take up any part of the new loans not taken up by the public. No doubt this would enable any new loans to be placed, but it is by no means certain that gilt-edged would continue to maintain their value. The real danger is that the economic system would begin to get out of control. Credit expansion would encourage new industrial issues as well as providing support for Government stocks; there is no guarantee that the former effect would not outweigh the latter. Expansion could, of course, be coupled with a rigid control of the new issue market and of the purchase of foreign securities, but even then the prospect opened up is not a very tempting one.

On the whole it would appear that the wiser course

would be for the authorities to let the long-term rate rise till any new Government loans were placed without further expansion. The risk that purchasers would not come in till the rate had fallen a considerable way is not great (if there was any such real risk it would be impossible to keep Government securities at their present level), and the advantages would be that a proportion of these funds would be deflected from the purchase of new industrial issues. After all, the time when attempts should be made to force down the rate on Government securities and so to encourage industrial borrowers is when rearmament is coming to an end and not when it is well under way.

4. FINANCIAL POLICY AND FISCAL POLICY

The movement of economic activity in Great Britain has recently been influenced by two special types of demand—that for new houses and that for armaments. Rapid progress in these two industries may lead to expansion in other parts of the system, and there is a danger that this expansion will go too far under the stimulus of rising profits. In addition there is the possibility of relapse once the peak of armament and housing demands is passed.

The necessary remedies—it will be agreed—lie in the main outside the monetary field. The remedy for an uneven demand for new houses is so to arrange matters that the building programmes of Public Authorities are accelerated when the demand for private houses falls off. This cannot be secured by any manipulation with the terms on which housing finance is available, but is a task for local and national organization.

A similar line of argument applies in the case of armaments. The authorities should aim at controlling public works programmes so that they are slowed down when armaments demand is high and increase as that demand falls off. Again, there is much to be said for increasing taxation, and paying as far as possible for

armaments out of revenue. Such questions are in the main outside the scope of this study, but it is important to emphasize that financial control over economic development can and should be supported in other directions.

In one respect, however, rearmament raises issues which are strictly financial. Should any borrowing necessary to pay for armaments be accompanied by special measures to bring about an increase of the banks' holdings of securities, or should the present position be left unchanged and any tendency for long-term rates to rise be allowed to go unchecked? This question has already been discussed, and it has been urged that the most satisfactory course would be to allow some rise in rates, because that would have a tendency to keep other borrowers out of the capital market in a period of rapidly approaching full employment.¹ Attempts to expand credit further and to keep rates down may do far more to stimulate other forms of activity than to help the Government to carry through their borrowing successfully. There is no certainty that the process which has been going on since 1931 can be continued indefinitely, and it would seem safer to allow the long-term rate to rise somewhat and so to attract new elements to the gilt-edged market. Private purchasers of Government securities must have been largely eliminated if we compare the present position with the years before 1929; a rise in the long-term rate may attract new savings away from the industrial market and towards the gilt-edged market where they are needed. There would thus be some controlling influence on the industrial development which is gathering force so rapidly at the same time as, and partly as a result of, expenditure on arms.

¹ *I.e.* when such unemployment as persists will in the main be technological. There are many parts of the country where the suggestion of "full employment" in the broader sense is nothing but a bitter mockery, and everything should be done to develop industry there. The assumption behind the above argument is that the main impetus of new private investment would affect those areas, such as London and the Midlands, where employment is highest and further expansion undesirable.

At the least, if it is decided that credit expansion is necessary to enable the Government to place its loans on favourable terms, this should be accompanied by some measure of control of the new issue market in order to slow up activity there at the time when armaments expenditure is at its height. The outlook will be disquieting if we are to have an armaments boom, a building boom and a general industrial boom all developing simultaneously, and all losing their force about the same time. The slump may not be as unpleasant as the last if international trade revives in the meantime, but at least steps should be taken to minimize the unhappy consequences which may occur. If armaments are going to absorb the attention of an important fraction of the economic system now, other forms of activity should not be encouraged unduly.

In any case, further expansion of the credit base would weaken even more the links between different parts of the financial system. As we have seen, the tendency has been for the banks to become less dependent on the Bank, and industry on the banks. Industry's independence is due to the reserves which have been put back, and to the use which has been made of the long-term capital market. Both these tendencies have been stimulated by the relatively high level at which the banks have kept their advance rates to industrial and commercial borrowers;¹ it has paid potential borrowers to manage otherwise, although to some extent the rise in commodity prices is now increasing the demand for accommodation from the banks. Nevertheless, credit expansion has been so great that industry is likely to remain fairly independent of the banks for some time to come.

The problem of securing what might be described as increased integration of the financial system may therefore become an important issue. While it is dangerous

¹ The official minimum of $4\frac{1}{2}$ or 5 per cent has been relaxed in a large number of cases, but advance rates are still very high relatively to other rates.

to make suggestions based on hypothetical circumstances, a time may well come when a compulsory (but variable) cash ratio could usefully be imposed by law on the joint-stock banks. This would enable the Bank of England to influence banking policy without having to sell securities in the open market. Possibly informal methods might be a substitute for a compulsory minimum, but the principle remains. The danger is that the open market weapon may prove less effective in the future than it has in the past.

There is no parallel method which could be adopted to bring industry under the control of the banking system. At the most the banks may be able to reduce their holdings of securities, and so force the purchasers to come to them for greater assistance once their free balances are reduced. But here we are faced with a difficulty. Industrialists are unlikely to buy the banks' investments as long as the charge on advances remains as high as it is at present, and the return on gilt-edged as low. If the banks only charged 3 per cent on overdrafts there might be some chance of industrialists putting their reserves into Government securities and going to the banks for temporary demands. Otherwise the tendency for industry to remain independent of the banks will continue. A loosening of the financial system is one of the penalties of cheap money.

There are thus a number of serious difficulties ahead. One thing is certain, that the problem of financial control cannot be solved by rigid adherence to any theoretical criterion. Inevitably, we are forced back on observation, guesswork and rule-of-thumb methods in dealing with each problem of policy. There are always opposites to be reconciled and extra-economic considerations to be taken into account. There is no predetermined rule, however elaborate it be, which will automatically solve the difficulties which arise. But there is nothing alarming about this ; this has always been the case, and will continue to be the case, in an economic world dominated by an uncertain future.

XV

THE PRESENT POSITION OF NEW ENTERPRISE

1. THE NEED FOR ORGANIZED FINANCING

SINCE the War, the financing of home industry has been affected by a number of changes of varying importance.

In the first place, the fall in overseas investment has provided an increasing volume of funds for the development of home industrial businesses, which have been making use of the new issue market to obtain capital from the public. In this way established public companies have been able to fund outstanding obligations to banks and other creditors, and to obtain new money for expansion; at the same time existing private businesses have been transformed into public companies supported by money from the public. But the facilities thus made available have proved of little use to new businesses, or to businesses with no profit record behind them. In 1928, it is true, a number of concerns were floated with no history, but this experiment in speculative financing proved disastrous, and it is clear that the Stock Exchange is not the appropriate medium for providing capital for enterprises which cannot be valued on some basis of common knowledge and past experience. At present enterprises without a record of some sort are not, for the most part, admitted to dealings on the Stock Exchange, and this restriction is a necessary one. In short, the increased funds available for investment in industrial securities have been of benefit to established enterprises, but new enterprises have not shared in the benefits.

Secondly, a large proportion of the new saving of the

community has been conservative in character—that is, has been invested with an eye to safety rather than to a higher rate of return. This has made for a rapid growth in investment intermediaries such as building societies, insurance companies and investment trusts, latterly of the unit trust type. All these intermediaries cater for an investor who looks to being able to turn his savings into cash without great loss at short notice. Insurance companies and trusts together are in the market for large quantities of industrial securities, but here again the tendency is to provide valuable help for established industry and little or no help at all for new and experimental enterprise.

Third, since 1932 the investment field has broadened to cover established businesses needing capital for expansion in amounts too small to justify a public issue. Companies in the City have been formed to advance money for this purpose, sometimes taking a participating interest in the process. Insurance companies also advance money to some extent where the loan is reasonably secured. But this—it must be stressed—is an extension downwards in the size of investment available rather than in the type of investment ; it provides for small enterprises facilities similar to those provided for large enterprises by the new issue market ; it barely touches untried enterprises. An exception to this rule may be the Special Areas Reconstruction Association, but the purpose of this latter body is to start up new industries in the Special Areas and not to finance new industry generally. Its functions are therefore social and political rather than financial.

Fourth, new enterprise, though not benefiting directly from the extension of facilities for providing industrial capital, has gained indirectly through the extension of facilities for the economizing of capital. Both trading estates and the instalment purchase of machinery existed before the War, but the extension in recent years has been particularly rapid. Trading estates, including also under

this head other developments which have increased the supply of factory and workshop space which can be rented as opposed to purchased, enable new business to acquire premises without having to find large lump sums. The extension of instalment finance serves the same effect as far as machinery is concerned. These developments do not do away with the need for capital, but they do enable a limited amount of capital to go a great deal further.

Nevertheless, the importance of these facilities must not be exaggerated. Enterprises in the initial stages must have some capital, and such capital is difficult to find. They are dependent on the money put up by the promoters, and by such backers as they can interest. With any general tendency for money to seek the safer forms of investment, it seems not improbable that the funds available in the hands of such backers may fall off. At the least, while such funds may be plentiful in the more prosperous parts of the country, there may be a shortage of speculative capital elsewhere. Investment habits are tending to show a bias in favour of existing enterprise and against untried enterprise which the relative returns may not warrant, and there are possible dangers ahead if any such bias is not corrected.

The general conclusion emerges that the problem of financing new and growing enterprise which has no assets to pledge and no profit record to show is still a difficult one. The fundamental points at issue may perhaps be made clearer if the analysis is taken a stage further, and the position examined from three points of view: the mobility of capital; the significance of technical knowledge to investors; and the machinery for carrying risks.

First, mobility. It is the great achievement of the banks that they have given complete mobility within the country to the type of capital in which they deal. But they lend only for short periods and under specific conditions, so that their power to invest in one part of the country savings collected in another is only used to a

limited extent. After the banks there are institutions such as United Dominions Trust and Credit for Industry which are widely represented and which adopt an active policy in going out for business. Here also there is a high degree of mobility, but the type of business undertaken is again limited in character. The work of United Dominions Trust is very much akin to that of the banks, while Credit for Industry, though prepared to lend for long periods, expects businesses with which it has dealings to show a record going back for some time. The Charterhouse Industrial Development Company is not directly represented outside London, nor the Leadenhall Securities Corporation outside London and Birmingham; these companies also require a record going back some years, though they do invest with an eye on prospects rather than on collateral security. The London new issue market is open to all, like Justice and the Ritz Hotel, but only businesses with a record needing money on a large scale could appropriately make use of it. It is much too expensive a method by which to raise small amounts of capital and, with the memory of 1928 fairly strong, concerns with completely untried prospects are rightly discouraged. Finally, the insurance companies would be prepared to lend anywhere in the country where the security was good, but new and growing businesses are unlikely to be in that fortunate position.

The conclusion emerges that the mobility of capital is relatively high except in the case, and the exception is a vital one, of speculative capital prepared to take risks outside the confines of the Stock Exchanges. In the past, difficulties were to some extent avoided because new enterprises could obtain this type of capital within their own locality, so that the problem of mobility did not arise. With the concentration of capital in London in the post-War period, the difficulties are more acute. While the prosperous parts of the Midlands can still hold their own, the depressed areas illustrate what can happen when a particular locality is denuded of risk-taking

capital, and is unable to start new ventures on its own account. Therefore, any new developments in the technique of capital supply should seek to import mobility into capital of speculative character able to bear risks.

The second approach is from the standpoint of technical knowledge. O. W. Roskill has stressed "the very serious lack of technical knowledge characteristic of the City".¹ He points out

that sound "vetting" must concern itself not only with the technical soundness of a process, but also with its commercial prospects. There are a large number of inventions which are technically sound, and which represent a slight, but not revolutionary advance on existing methods or products. If the sales organization of the established interest in the field is good the chances of successfully introducing the new product are small, it being often forgotten that an efficient sales organization may be a more important, if less tangible, asset than an efficient works. To be a success a new invention must be so much better than earlier products as to sweep the latter off the board. The process of "vetting" often consists not so much in verifying technical claims as in determining the extent of demand for the new products and the forces which govern it, the output of rival products, the location of the plants in which they are made, the areas or industries in which they are sold, the costs and selling prices in the two cases, and a host of other economic facts with a technical background.

It is therefore clear that the financing of new business involves expert knowledge in a large number of fields, and the overhead cost of maintaining a staff with such knowledge is likely to prove high unless a large volume of business is being done.

Lastly, risk-taking. On this there is little that need be added. The carrying of risks must involve not lending alone, but also to an important extent participation in business, so that capital appreciation on the successes compensates for losses. In addition the financing must be of a strong character, so that businesses can be nursed not only through their own special difficulties but also

¹ "The Finance of New Inventions", *Financial News*, October 25th, 1935.

through periods of depression when economic conditions generally may be unfavourable.

The requirements which emerge may therefore be summed up as contacts throughout the country, large capital resources in order to spread risks and nurse growing concerns, and a high degree of expert knowledge. These criteria point very clearly in certain specific directions. Any institutions to meet the needs of new enterprise must be represented throughout the country, either through the banks or in some other way. They must have large resources, a high proportion of which should be capital not repayable on demand. Good technical and economic advice would be essential, and the expense of such overhead costs provides an additional reason why operations should be on a large scale. Only through the existence of institutions fulfilling these requirements could a proper flow of industrial capital be secured throughout Great Britain.

2. AN EXAMINATION OF SOME CRITICISMS

The argument so far is not much more than a statement of a need. It is a plea for some form of industrial banking, or, more accurately, for some institutional interest in speculative aspects of new economic development. It has gone to suggest that the burden may be becoming too much for the enterprising private financier. The case for such industrial banking, however, rests not only on the importance of the investment system adjusting itself to changed conditions, but also on the proposition that in some ways institutions are better fitted for the task than private individuals.

Nevertheless, it must be admitted that authoritative opinion—both in the City and elsewhere—is very hesitant about accepting such a view. The arguments urged against industrial banking are probably familiar to all who have concerned themselves with the subject, and are of very varying importance. But no good can come from ignoring them, and they will be considered one by one.

(a) *That a business cannot speculate with its shareholders' money.*—It is common ground that the financing of new enterprise on the lines suggested must involve a process of making up on the roundabouts what is lost on the swings. If the business is properly run, it must be so experimental as to encounter some failures, even though the successful enterprises should more than compensate the losses. The objection implies that so hazardous a process is best carried out by private individuals with money to burn.

It can be answered that the technique involved is not new and has already proved successful. There are many finance houses interested in commodity production overseas which are carrying on risk-spreading activities of an exactly similar type. They have to bear the expense of exploration work which in part must be a dead loss, and many of their efforts come to nothing. Nevertheless they succeed. The moral would appear to be that any industrial banking business engaged in the task of spreading risks by backing a number of new enterprises should have adequate resources so that it is not overwhelmed if it has to face a sequence of failures or a period of slump. As far as the shareholders are concerned, they can have no ground for complaint as long as they know the type of business they are supporting. Any business which takes risks in return for the possibility of larger gain is, of course, "speculating" with its shareholders' money. Economic development would come to a standstill if this were not so.

(b) *That effective spreading of risks is impossible because of the vast outlay required to start any one new business.*—The expenses of advertising are such that any new business may require a vast outlay, so that even a large finance house would not be able to cover any substantial number of concerns. There would thus be a very real danger that a short run of failures would land it in difficulties.

This argument need not be treated very seriously. If the cost of starting a new business is such that it would

imperil a finance house with a substantial amount of capital, it is difficult to see how any new business ever gets started at all since private individuals—however rich—are more vulnerable than financial institutions. The fact is that advertising has been allowed to steal the picture. In the main, it only applies to certain classes of goods being sold to the public. Most of these have no doubt started on a small scale, and extensive advertising has only followed when the demand for the products seemed likely to respond. There are many new enterprises which could be tried out without involving the investing body in a vast outlay before it saw how things were shaping.

(c) *That new inventions never pay owing to the cost of investigation.*—A firm starting business on the lines suggested would be overwhelmed by a mass of suggestions covering new inventions and new processes. While a large proportion of them could be weeded out quite easily, many of them would require careful and expensive investigation before the possibilities could begin to be assessed. The cost of carrying through such investigations would be prohibitive.

Then how do new processes or inventions ever get financed? Many of them come within the sphere of existing companies, but there are plenty of others which do not do so, and yet which prove extremely profitable to their backers. Except on the unconvincing hypothesis that private backers do not investigate properly propositions put up to them, it is difficult to see why a company should not be able to deal with propositions in a reasonably economic manner. Exploration work in connection with mineral wealth, for example, would *prima facie* seem to be much more expensive than investigating processes and inventions. And an institution should be able to organize technical and expert assistance in such a way as to get the investigation done more cheaply than anyone else.

(d) *That the financing of new enterprise is impossible*

without personal knowledge of those responsible for the management.—The existence of a profit record enables people to judge of the quality of the management. Someone providing capital for a concern with a past record knows at least something of the capacity of those in charge. This does not apply in the case of a new proposition. The prospective lenders are completely in the dark.

This is true. The answer is that any financing institution must, in these circumstances, be prepared if necessary to take an active part in the management. With the technical advice and expert knowledge at its command, this should be beneficial rather than the reverse. Quite clearly the position is impossible if the institution proposes to ignore all the responsibilities of management.

Three separate arguments are used when the proposal is put forward that ordinary banks should in any way tie up funds in new enterprise.

(e) *That banks should not provide long-term capital.*—This is a familiar argument which is constantly being urged on behalf of the banks. The banks, it is said, are custodians of other people's money ; they must therefore be very careful in what they do, and in particular must not tie it up in such a way that it is not available should their clients want it.

Given the assumption, this is all too true. But without arguing whether banks could or could not lock up a substantial proportion of their funds in long-term industrial investments without imperilling their depositors' money, there is an obvious answer : it is always open to the banks to increase their capital should it be desirable for them to invest in industry. The question of depositors' money then will not arise.

(f) *That by financing new enterprises the banks will take a direct interest in business which will be competing with their existing clients.*—At present the banks make advances either against security or on personal knowledge. They are lending on short-term only, and consider each

case on its merits. They are therefore able to take a detached view. If they were financing new enterprise or providing equity capital they would have an interest in seeing that the firms in which they had invested made the maximum profit, whereas before they were satisfied as long as the loan was covered and the interest paid regularly. Under the new conditions they would thus have an inducement to favour some businesses at the expense of others.

There is some force behind this criticism, but it is exaggerated. It will be not a new experience for banks to have a direct interest in industry ; in fact, they are in that position every time a loan gets frozen and they have got to work to get their money out again. As regards new businesses competing with existing clients, it is quite as probable that the banks would discourage new directly competing enterprises as the other way about. On balance it will probably make for more rational development, as the banks would not encourage new businesses unless they felt there was room for them. But the criticism must be borne in mind with a view to exploring the possibility of preserving a clear-cut distinction between advance and investment business. This point will be dealt with subsequently.

(g) *That in other countries where banks have mixed up industrial and ordinary banking, the banks have found themselves in difficulties.*—The examples usually quoted are those of Germany and the United States.

Alleged parallels of this sort are not very helpful. It is very questionable whether the banking difficulties of Germany and the United States can be ascribed to their industrial banking policy. In any case the moral would seem to be to avoid the mistakes made in those countries ; the fact that industrial banking may have been conducted badly in certain circumstances is no argument in itself against an increased interest of the banks in industry.

Most of the arguments quoted above have this in common : they apply to private individuals more strongly

than they do to institutions. In this way they have a curious twist ; so far from being arguments against organized investment in new enterprise, they become even stronger arguments against private investment of that type. How can the private investor effectively carry the risks of supporting new enterprise if an institution cannot do so ? How can the private investor finance new businesses at all if the outlay required is a vast one ? How can the private investor afford to investigate new processes and inventions if an institution cannot afford to do so ? How can the private investor keep touch with the management and supervise policy if an institution with its experts cannot do so ?

The chief difficulty is that, in this country at any rate, the field is an unexplored one. Investment institutions have been able to keep going by spreading their interests over a number of undertakings most of which are fairly safe, some of which are fairly profitable, and few of which involve substantial loss. When the balance has been struck this may be a safe proceeding, but not a very remunerative proceeding when present-day investment values are taken into account. An institution which ventured into unknown territory—where it would have the pick of the new possibilities—might find that it was exploiting a very profitable field.

3. METHODS OF APPROACH

The objections to organized investment have been set out and answered ; the advantages—technical knowledge, risk-spreading and better financial supervision to prevent waste—remain ; above all, there is the need at the least for an increased mobility—within this country—of capital able to carry risks, and possibly even for a greater volume of such capital, quite apart from its geographical distribution.

What is the significance of these defects in financing ? What has been happening would appear to be this. Owing

to the early industrial development of Great Britain the technique of joint-stock financing was not carried to its logical extreme. Those engaged in business tended to have money of their own to invest, and the separation between ownership and management was not pushed as far as it might. In other countries capital was much less freely available. Those in charge of enterprises had fewer resources on which they could call personally, and the banks had to step into the breach. In this country the old position holds good no longer in the face of changed saving and investment habits, and a shift in the balance of industrial power within the country. Less money is available privately for direct participation in enterprise. We need institutions to bridge the gap, and as long as such institutions are lacking the pace of new development will be slowed down, and those with money to invest will complain of a lack of suitable opportunities, while those with businesses to develop will find no money forthcoming.

What then is to be done ? Suggestions for a " National Investment Board " have been fairly frequent, but they have not been very explicit and the interpretation has varied widely. The more modest proposals for such a Board have looked on it as a machine for controlling the development programmes of public and semi-public bodies. Thus Keynes : ¹

Now is the time to appoint a board of public investment to prepare sound schemes against the time that they are needed. . . . The railway companies, the port and river authorities, the water, gas, and electricity undertakings, the building contractors, the local authorities, above all, perhaps, the London County Council and the other great Corporations with congested population, should be asked to investigate what projects could be usefully undertaken if capital were available at certain rates of interest—3½ per cent, 3 per cent, 2½ per cent, 2 per cent.

In this way there would be projects planned in advance which could be set in motion in the event of depression.

¹ *The Times*, January 14th, 1937.

Such preparation should be extremely valuable, but an investment board on this basis does not touch the problem of new enterprise in the sense discussed here.

Socialist proposals for an investment board go further (though they still have a strong public works flavour), but they refer to conditions in at least a semi-socialized state.¹ In such circumstances an investment authority of some such type would be essential, but such proposals would not be relevant unless political developments had gone a great deal further than they have now. The real problem is to find some machinery which is related to the present situation, and which has a reasonable chance of acceptance. Therefore, any proposal that new industrial developments in general should be financed by Government will, for the moment, be excluded by hypothesis, without prejudice to the merits of the issues involved.

The question, what is to be done, remains. The first point which suggests itself in answer is that any organization for investing in new enterprise must work in close contact with the banks. This does not necessarily mean that the banks should be the sole or even the main source of its funds. What the banks can contribute is their contact with industry and commerce throughout the country. If the proposed organization is to work effectively it must have very wide contacts; to build a network of its own would be an extremely expensive undertaking; in any case the banks have special knowledge of those with whom they deal, and special opportunities of assessing the prospects of new developments. The banking system could be an invaluable medium for diffusing capital throughout the country; its machinery would appear to be both cheaper and more efficient than any alternative machinery which could be devised. The special part the banks have played in regard to the Agricultural Mortgage Corporation, for example, shows the type of work which could be done.

¹ See, for example, E. A. Radice, "The State and Investment", in *Studies in Capital and Investment*, pp. 307-319.

In the second place, a considerable proportion of the capital could be raised from the public. It is important that the organization, while employing bank funds where the banks are prepared to make them available, should be reasonably independent of any bank policies dictated by considerations of preserving bank liquidity. If the banks felt prepared to tie up a certain proportion of their funds in such an organization for medium or long periods, well and good. But if there were a danger that at times the banks try to call in loans at short notice, it would be better that the bulk of the capital should be raised from the public.

In the third place, the organization would seek to develop a technique for managing new enterprise. It is doubtful whether new enterprise as such is efficiently managed—though admittedly a generalization of this sort can be neither proved nor disproved. Relevant technical knowledge may exist which is unused ; this applies not only to scientific but also to economic knowledge, in the sense of information on trend of tastes or market capacity. Since the organization would have to play a big part in the actual management, it would need not only an experienced staff but also expert advisory services.

Fourth, it would have some contact with the new issue market since it would float off successful matured concerns, taking the capital appreciation on successful investments as compensation for losses in other directions.

The existence of such an organization, feeding the new issue market, might serve to raise standards in that market. There is a noticeable tendency in the case of industrial issues for the promoters to overvalue assets, while the cost of issuing is definitely high where the smaller issues are concerned. If one institution adopted a more careful line and did not exact the maximum which a boom psychology had to offer, purchasers in general would show better judgment, while the rising reputation of that institution would compensate it for the opportunities of overvaluing assets which it had forgone.

Lastly, it would be important to ensure that the motives behind this institution were not muddled. It would be serving an economic and not a social function, and would not be a machine for the relief of social and political distress through the granting of concealed subsidies to certain types of industry. If it makes investments on social grounds, the book-keeping of these investments should be kept separate.

Some further observations on the relationship between the proposed organization and the banks may be added. The valuable contribution which the banks can make is their network of contacts throughout the country. Their knowledge of the capacities and credit standing of those with whom they deal, their experience of local conditions and problems, the easy access which they provide, should all prove invaluable. To what extent they want to interest themselves financially in the organization is, however, another matter. The organization could manage perfectly well without any substantial financial assistance from the banks ; the question is whether the banks would not feel it very much worth their while to support the organization as far as possible. The banks are rapidly losing touch with industry. Through the intermediary of such an organization they might once more get a substantial return from industry.

It would be in keeping with the general line of developments if the banks were to begin to "switch" from Government securities (which they could pass on to a public making savings which it wants invested safely) into more remunerative indirect holdings in industry requiring special management. But this decision is clearly one for the banks themselves, who presumably have ideas of their own as to what their future will be with industrial borrowings barely rising, even in a time of increasing economic activity. It is their organization which would be so valuable, whether they interest themselves financially or not.

An approach on the lines suggested above would have

the merit of providing an easy and practical starting point. The initial expenditure need not be great. If the experiment proves unsuccessful, it could be slowed down without great difficulty and without involving extensive and uncertain commitments for the future. If it proves successful, it could be rapidly enlarged. It should be an important agency in smoothing out the flow of economic development, and combating depression.

XVI

ECONOMIC DEVELOPMENT AND SOCIAL PROGRESS

1. THE PROBLEMS OF ECONOMIC DEVELOPMENT

THE present study has examined the post-War capital market in relation to industry and commerce and in relation to the banking system.

But it is not enough to deal with the capital market—however wide an interpretation be given to the term—without reference to some of the wider issues involved. The capital market is a means to an end, and not an end in itself. Most, if not all, of our interest in it finds its ultimate justification in the social benefits which an efficiently working capital market is presumed to confer. It is quite impossible to deal adequately with such issues in the scope of a single chapter, but the recognition of their existence should justify itself on the ground that it puts the capital market into perspective. The discussion must be speculative and controversial, but none the less worth attempting.

We may all agree that the capital market is important because it facilitates economic progress. What is meant by economic progress? A phrase like this may cover a number of divergent meanings. It implies, in the first place, a rapid rate of material advance: that the total wealth of the community is increasing as fast as technical progress will allow. Secondly, it suggests an even rate of development; the fact that progress in the long run is making for a rapid increase in wealth, is not enough if at the same time it moves in such a way that at one moment a large part of the community is unemployed, and at

another overworking. Thus there is the question of smoothing out the swings of the trade cycle. Thirdly, there is implied a greater equalization of incomes. Although material progress be rapid and business fluctuations small, it is not enough if the benefits which accrue to the community go to only one part of it. All three objectives—and in part they are inconsistent—must be harmonized before economic progress can be considered satisfactory. These three objectives may be examined one by one.

First, the rapid rate of material advance. Our wealth-producing capacity has increased spectacularly and is still increasing fast. Of the three objectives, it is the one which has been most nearly fulfilled. In fact, public opinion in all countries has shown itself prepared partly to sacrifice this objective in order to advance the others. Tariffs, quotas, restrictions of various kinds, are all devices which admittedly slow down the rate of material advance in the hope that thereby development will be more smooth and welfare distributed more evenly throughout the community.

Second, the even rate of development. We are all agreed in wanting to minimize business fluctuations, and we are also agreed that so far we have failed lamentably in this task. But when we come to analyse the real problem of the trade cycle, its most characteristic feature in the case of this country is not so much that total wealth diminishes, but that such diminution as does take place hits some sections of the community very much more than others. The rentier gains something of what the industrialist loses; the man in employment is often even positively better off because money wages fall less than the cost of living. It is the man who is out of employment who suffers. Taken as a whole, Britain was not very much worse off during the years of depression, but certain sections of the community were much worse off even though others had gained. The real trouble about the trade cycle is that its incidence is so uneven. But for that it would arouse much less concern.

Lastly, equalization of income. This is mainly—though not entirely—a question of taxing the rich and extending social services which benefit the poorer sections of the community. The matter is complicated, however, by the possibility that this taxation of the rich may slow down the general rate of material advance. The distribution of wealth is still very uneven, in spite of taxation, though some progress has been made in extending social services since the War. But it must not be forgotten that the process of levelling incomes between rich and poor is only a part of the problem. There are large inequalities between the depressed and the prosperous sections of the working class, and between different localities. From this point of view artificial measures to divert industry from the outskirts of London to the depressed areas are also measures for promoting a greater equality of income.

In general, the success achieved in the promotion of the first objective has thrown all the emphasis on the second and the third. We look to securing more social services, a shorter working week, holidays with pay, special measures for the depressed areas. We are now more concerned that advance should be equitable than that it should be rapid. We are quite prepared to see the national income growing more slowly provided that its benefits are better distributed. In particular, we want the swings of the trade cycle to be smoothed out even though it means a slower, if steadier, rate of advance. It is this problem of the trade cycle which must be considered in more detail.

2. SOME RECENT DEVELOPMENTS IN TRADE CYCLE THEORY

The most significant contributions to trade cycle theory in recent years are those made by Keynes in his *Treatise on Money* and his *General Theory of Employment, Interest and Money*. R. F. Harrod's *Trade Cycle* is in many important features a development and systemization of ideas first put forward in the latter book.

Keynes, in his *Treatise*, took as a starting point the effects of discontinuity in the demand for investment goods when this was accompanied by a relatively stable savings habit on the part of the community. He argued that, since investment had always to be equal to savings,¹ this equality could only be brought about through wide fluctuations in profits, which account for the most variable part of savings. Fluctuations in profits lead to fluctuations in prospects, and thus to the down-swings and up-swings of the trade cycle.

Any falling-off in the demand for investment goods unbalanced by a compensating increase in consumption would mean a reduction in profits. This in turn would discourage the demand for investment goods still further, and the decline would go from bad to worse. In the converse case, an increase in the demand for investment goods would bring a further demand as profits rose and prospects improved with increased buying. What Keynes achieved in the *Treatise* was a clarification of the cumulative process. He showed how, once there was an upward or a downward movement, this tended to gather force. But he did not provide a satisfactory explanation of the turn—why an upward or a downward movement came to an end and went into reverse.

He attacks this problem in the second book, where he finds an explanation in terms of saving habits. People do not save constant proportions of their incomes ; after a point they save a larger and larger proportion when incomes are increasing, while with decreasing incomes there will come a stage where a smaller and smaller proportion is saved. "Changes in the rate of consumption are, in general, *in the same direction* (though smaller in amount) than changes in the rate of income." ²

As real income increases, both the pressure of present needs

¹ The definition of investment and savings as being equal is taken from the latter book. In the *Treatise* Keynes defines savings in a special manner, and brings in a special item of windfall gains or losses to balance the equation.

² *General Theory*, p. 248.

diminishes and the margin over the established standard of life is increased ; and as real income diminishes the opposite is true. Thus it is natural—at any rate on the average of the community—that current consumption should be expanded when employment increases, but by less than the full increment of real income ; and that it should be diminished when employment diminished, but by less than the full decrement of real income. Moreover, what is true of the average of individuals is likely to be also true of governments, especially in an age when a progressive increase of unemployment will usually force the State to provide reliefs out of borrowed funds.¹

This general tendency has important consequences from the point of view of the investor. If as total income rises, the proportion saved also rises, this means that funds available for investment are increasing more rapidly than is consumption. Therefore if the volume of new investment is to keep pace with savings, the minimum rate of return on such opportunities must fall, which need not have been the case had the increase in consumption not been outstripped by the increase in savings. However, even with a lower minimum rate of return a balance could still be kept—provided those with savings to invest are prepared to accept this lower return. But this, Keynes suggests, they may not be willing to do. This would lead either to hoarding or to investment on a mistaken basis of expectation ; in either case the upward movement of activity is sooner or later checked.

The acuteness and the peculiarity of our contemporary problem arises, therefore, out of the possibility that the average rate of interest which will allow a reasonable average level of employment is one so unacceptable to wealth-owners that it cannot be readily established merely by manipulating the quantity of money.²

Thus the remedy for the boom is not a higher rate of interest but a lower rate of interest ! For that may enable the so-called boom to last. The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us

¹ *Ibid.* p. 251.

² *Ibid.* pp. 308-309.

permanently in a semi-slump ; but in abolishing slumps and thus keeping us permanently in a quasi-boom.

The boom which is destined to end in a slump is caused, therefore, by the combination of a rate of interest, which in a correct state of expectation would be too high for full employment, with a misguided state of expectation which, so long as it lasts, prevents this rate of interest from being in fact deterrent.¹

In the converse case of a downward movement of activity, savings will tend to be cut faster than consumption, and the maintenance of demand will in time show itself in new investment opportunities.

R. F. Harrod follows similar lines, though he is more doubtful about the possibility of variations in interest rates.

We cannot expect that in the calm atmosphere of an advance, successfully maintained, long-term rates of interest would be continually popping up and down in the way required.²

It seems improbable that banking policy, however inspired and well informed, could secure sufficient fluctuation in long-term interest rates to ensure a steady advance.³

Such would seem to be the central features of the explanation of the trade cycle as elaborated by Keynes and Harrod. There are three lines of comment which suggest themselves.

First, while it may be true that, in the long run, an increasing proportion of any increment of income will be saved, it is not necessarily true in the short run. An increase of income *coupled with expectation of further increases* may well bring a more than proportionate increase in consumption. Individuals may enter on commitments which involve very considerable expenditure—new cars, new furniture, better houses—and they are likely to do so at a time when income is expected to go on rising. Again, they may overestimate the actual increase in

¹ *General Theory*, p. 322.

² R. F. Harrod, *The Trade Cycle*, p. 124.

³ *Op. cit.* p. 125.

income and budget accordingly ; for example, stock exchange profits may stimulate the flow of consumption expenditure. It is true that, on the other side of the picture, these individuals may also be entering into savings commitments—new insurances, for example—as well as into consumption commitments. Nevertheless, it does seem probable that in dealing with cyclical phenomena the first effects of a rise in income will be that consumption expenditure will increase in proportion to savings, and that only at a much later stage will the proportion of any increment saved go up. There is no certainty that this will happen before a state of reasonably full employment is reached.

In the converse case the first reaction to a decrease in income, *coupled with the expectation of a further decrease*, will be increased saving and greater provision for the future. Only at a much later point will people cut down saving and draw on existing savings. Broadly speaking, it is probably true to say that the proportion saved will increase when incomes are expected to decrease in the future, and will decrease when incomes are expected to increase in the future. Saving through inertia and dis-saving through necessity only come into play at a very advanced stage.

These considerations may be weakened by the fact that one of the main saving agencies is that of business undertakings putting money to reserve. Here it seems almost certain that the proportion of profits put to reserve will increase as total profits increase, and vice versa. Harrod especially lays stress on the “shift to profits” as total incomes increase. On the other hand, the needs of the business will also increase and there is no presumption that the increased profits will take the form of idle balances ; in fact it is probable that they will be used to purchase goods and services, and this probability is strengthened by the observed fact that businesses have most free capital in the depths of depression and are most in need of capital when business is increasing. It is quite

arguable that it is the need for capital that causes businesses to retain the increased proportion of profits in the business. At any rate the case for an increased proportion of saving to spending with increasing total incomes seems unproven as regards the short run, and in the long run would seem to depend on the rate at which total incomes are increasing.

Secondly, much of the argument of Keynes and Harrod appears to assume that the rate of interest remains stable or rises in a boom, and falls in depression. If "rate of interest" be confined to the terms on which the best classes of borrowers can obtain capital on fixed interest terms, this is no doubt true, but the most sensitive type of borrower—and surely the one who matters in connection with the trade cycle—is in a very different position; from his point of view he is faced with the exact opposite, with the phenomenon of a falling rate of interest in a boom and a rising rate in depression, owing to the behaviour of the risk premium. In a boom the marginal borrower can raise capital easily and cheaply; in a slump he probably cannot raise it at all; the movements of the gilt-edged rate of interest are more than outweighed by the investors' valuation of relative risks. It can be argued that the rate of interest with which the industrial borrower is concerned falls too much during a boom, and that a restrictive policy on the part of the banking system might make for more even development.¹

Lastly, both Keynes and Harrod are concerned with the theory of the trade cycle; they bring no evidence to bear on the problem of its amplitude, and failing such evidence we are not entitled to identify their "trade cycle" with the large-scale business fluctuations which we know. The

¹ "A sufficient fluctuation in long-term interest rates" (Harrod's phrase) is misleading; what we should be concerned with is a sufficient fluctuation in the volume of ordinary industrial shares being floated on to the market, which may be much more easily controllable. Similarly when Keynes talks of the remedy for the boom as being a lower rate of interest, and not a higher, he is failing to allow for the fact that the falling risk premium (and increasing flotations of share capital) is in effect a lower rate of interest for the industrial borrower.

type of oscillation with which they deal might well be of minor importance ; for the very good reason that if we saved an increasing proportion of income as income grew and a decreasing proportion as it fell, this would be a powerful stabilizing factor which would tend to reduce the amplitude of any fluctuations round a norm tending slowly towards a higher and higher level of employment as the trend of consumption habits moved upward. Even if the trade cycle were to conform to their pattern, the distress and difficulties associated with it must be explained otherwise. It will be suggested that institutional factors magnify the oscillation with which they deal, and so give it those characteristics which we associate with the " trade cycle ". Further, exceptional changes in the structure of economic society due to war, technical change or population trends would seem to be far more important in introducing irregularity into the course of economic advance than are savings habits.

What is important in the recent work of Keynes and Harrod—and this is certainly a major contribution to our knowledge of business fluctuations—is that they have brought out very clearly the significance of the real limits to the cumulative process. It is true that the cumulative process cannot go on downwards till we are all unemployed just because, at some point or other, people will begin dis-saving in order to maintain their standard of life. It is true that we cannot go on with increasing boom conditions because at some point or other—perhaps before full employment is reached, but more probably after—people will begin to save an increasing proportion of their income. But this is in no sense a theory of the trade cycle ; it merely tells us that a slump or a boom must come to an end if either process goes on long enough. But we are not even entitled to assume that it is this factor which does account for the turn—others might intervene before it becomes operative.

3. THE AMPLITUDE OF BUSINESS FLUCTUATION

We are left with an account of the cumulative process and of the changes in saving habits which act as a stabilizing factor, and this provides an admirable starting point for an examination of what makes for large business fluctuations, and how they can be counteracted.

One may begin with the down-swing. Let us assume that the demand for investment goods has fallen off and a downward cumulative process is gathering momentum. In time such a process will be checked because savings will fall off more rapidly than consumption, and the maintenance of consumption will increase profits and prospects. What are the factors which tend to maintain savings at the earlier stages of the downward movement? And what can be done to eliminate these factors and so to reduce the fall?

When a downward cumulative process is beginning, a large number of individuals are increasing their savings for the sake of liquidity. They anticipate a further fall in income, and are making preparations to meet it. They have entered into certain savings commitments—insurance policies, for example—which they wish to keep up in preference to maintaining consumption. They are paying off past debts, fearing that they may be unable to pay in the future. They find debts called in. All these liquidity factors, and they apply to institutions as well as individuals, are making for a cut in consumption and against a cut in savings. These factors not only make for a maintenance of savings at the old level but possibly, for a short time at any rate, for an increase in the attempt to meet past obligations. Only after a time do consumption needs reassert themselves at the expense of savings.

There is a further point which does not apply with such force in a country like Great Britain. There may be what might be described as involuntary saving owing to

the collapse of financial institutions. If banks have to close their doors people must cut down their expenditure just because they cannot touch their cash balances, and the whole system becomes frozen in an orgy of involuntary saving. Any instability in the financial system will, for this reason, greatly increase the depth of depression, and fear of collapse will have nearly as forceful a restrictive influence as collapse itself. The greatest measure taken to reduce the incidence of depression in this country was the gradual concentration of the British banking system, coupled with the certainty that the Bank of England would act as an automatic support in time of crisis. Our difficulties would have been tremendously increased in the period after 1929 had there been doubts about the abilities of the banks to stand a run. The problem of eliminating the trade cycle is, above all, a problem of reducing the amplitude of fluctuation, and by far the greatest step that can be taken in this direction in any country is implanting the certainty in the public mind that no part of the financial system will be allowed to collapse.

This principle is capable of expansion. Just as the banking system gains its strength because people believe that the Bank of England is always prepared to give support in providing it with liquidity, so the necessity of reducing consumption in a recession could be diminished if every individual and business concern could feel that the banking system in its turn would be prepared to give support where necessary by lending against security to the uttermost when clients are in difficulties.

To some extent the banks, of course, are prepared to do so, but their standard of caution is higher during depression than during boom. In so far as they press for liquidation, they are, of course, increasing saving and so deepening depression ; it should be their function to provide that element of liquidity which is in especial demand on the downward movement of the trade cycle, while the time for exercising caution is on the upward movement. In any case there is less danger of lending

against inflated values during slump than boom. Since there are no objective tests, it is impossible to tell how far in fact the banks do become more cautious, but part, at least, of the large fall in advances since 1929 should probably be assigned to this factor.

The time when the banks should exact a restraining influence is on the up-swing. By doing so they may slow down the rate of revival, but the upward movement will be prolonged and the increase in consumption habits—a long-term and not a cyclical tendency—will have more chance of keeping pace with the increase of income. Inadequate attention is paid to the rate at which revival takes place, yet it is important because the saving factor discussed by Keynes enters in. If revival is rapid, after a certain point the public will tend to save rather more just because there are no pressing consumption needs on which the money can be spent. But if the rate of advance is slower, tastes and consumption habits will have time to adjust themselves to the larger incomes.

In general, the problem of business fluctuation would appear to be less a trade cycle problem than a problem of adjustment to changing circumstances. The trade cycle may or may not continue, but other things being equal, its amplitude could be reduced given rather better liquidity facilities on the down-swing and control facilities on the up-swing. Even without new developments in this direction, a country such as Great Britain should not meet with periods of great hardship, except in so far as they are due to environmental changes. If we look back on the past ten years, depression would not have been very terrible if the experience of London or Birmingham had been typical of the rest of the country. Far more important than the trade cycle is the problem of adjustment to changing conditions, national and international.

How great this task or readjustment may be, is illustrated by the distribution of unemployment throughout different parts of the country :

AVERAGE PERCENTAGE UNEMPLOYED BY AREAS
1929 AND 1936*

	1929 %	1936 %
London	5·6	7·2
South-East	5·6	7·3
South-West	8·1	9·4
Midlands	9·3	9·2
North-East	13·7	16·8
North-West	13·3	17·1
Scotland	12·1	18·7
Wales	19·3	29·4
Northern Ireland	14·8	22·7
Great Britain and Northern Ireland	10·4	13·2

* Source : *Ministry of Labour Gazette*.

These figures should be compared with the figures of the location of new factories (p. 230).

There is nothing "cyclical" about these figures, but they are extremely disquieting nevertheless. Owing to major structural changes—and partly as a result of tariff policy—some parts of the country have gained while others have lost. Unemployment is much more unevenly distributed than it was before the depression, even though the average is not much higher. Unemployment is low in the South; the Midlands have benefited both from tariffs on foreign manufactures and from expenditure on arms; the price is being paid in the North, in Scotland, in Wales, in Northern Ireland. The maldistribution of employment opens up dangers which may prove far more terrifying than that cyclical unemployment which has been attracting so much attention. The structural changes will not yield easily to treatment by the manipulation of interest rates, or even budget deficits and public works.

The reduction of cyclical fluctuation is by far the smaller part of the task. Unemployment insurance,

thought out Government expenditure and public works policy, and a financial system which could be depended upon to provide support in time of difficulty, should go a long way to meeting the needs of a country like Great Britain in that direction. The real source of anxiety must be the major changes—the international redistribution of industry which undermines the position of Lancashire, the technical changes which reduce the demand for coal, the slowing-down of population growth which in time will reduce the demand for investment goods. In the future the most important of these changes—the possibility of war apart—would appear to be the change in population growth, and this may be considered separately.

4. THE EFFECTS OF COMING POPULATION CHANGES

The argument so far has stressed the importance of major changes in the economic structure of the community. The most important of such changes in the future would appear to be connected with population. All the experts are agreed that the population of this country has about reached its maximum, and after a few years will begin to decline.

The economic system at present is organized to meet the needs of a country with a rising population, for up to now population has been increasing rapidly. A substantial portion of the national income is put back to finance not only improvements but also extensions. We need more houses, more transport facilities, more schools, more gas and water and electricity services, more shops and more factories, simply because the number of people in the British Isles has been getting larger. This is our experience up to the present, but all the evidence goes to show that it will not continue much longer, and that the population will first stabilize itself and then begin to fall. One source of demand for investment goods will be cut out ; we shall continue to need such goods for maintenance and improvements and the adoption of more highly

capitalized methods, as well as for the extension of productive capacity made necessary by a rising standard of living, but that type of extension called for by an increase in population will no longer exist, and at present it is a preponderating type.

Now it is quite possible to conceive of a community which is more or less stationary, or even has a falling population, and which does enjoy an extremely high degree of economic prosperity. Such a community on balance would save a much smaller proportion of its income (since it would be freed from the overriding necessity of providing for an increase in its number), and its investment expenditure would be much less than it is now. Its consumption expenditure on goods and services would be large ; its working hours short ; its standard of living very high indeed.

The difficulty comes in, not in conceiving such a new state of affairs, but in seeing the road by which the transition takes place. At the present time we are a community organized to undertake a large volume of expansionary expenditure. We foresee in the future a community which may be making little, and that will depend on the skill with which it is applied to the greater capitalization of existing processes. How is the change going to come ?

One may take savings as the starting point. Is it easy to see how the habits of the community will be so changed that it no longer puts by a sixth of its income ? As yet there is no sign of any such change in savings habits. People go on saving with undamped ardour in spite of the fall in interest rates. In part, such saving is for the purpose of securing an income, but on the whole it would appear that this is become relatively a less important motive. The more important reason for saving seems to be the desire to build up reserves which can be called upon in the event of a foreseen or unforeseen contingency. In so far as such reserves are dissipated when the contingencies arise, the problem solves itself ; but in

so far as people seek to build up excessive reserves, difficulties may come because such savings will continue, however low interest rates fall, while in the case of savings due to the income motive, diminishing returns would automatically reduce the propensity to save. Savings habits may thus persist even when the demand for investment goods falls off because population has ceased to grow. Keynes' case against excessive saving seems much more terrifying in relation to long-term changes than in relation to cyclical changes.

But the problem must also be looked at from the investment side. Here the opportunity for using savings will depend partly on technical changes and partly on the point to which the effective rate of interest can be made to fall. The lower this rate, the greater the opportunity for employing a greater volume of capital to produce a given output. But the effective rate of interest in this context must include also a margin to cover risks, as well as the costs of making the investment. Therefore, the greater the efficiency with which saver and capital-user are brought together, the smaller this margin, and the greater the volume of savings which can be employed to increase the income of the community. The problem of organizing the supply of risk-bearing capital will increase and not diminish in importance in the future.

We are thus faced with a major problem of change which may call for special action. The extension of social services, and various other social ameliorative measures, may do something to reduce the need for building up a store of assets which can be called on in certain circumstances. If we all had adequate retiring pensions from the State, we should no doubt save less when we were young. But the change from a growing economic society to a stationary one is not an easy change to contemplate, and the task of easing this change will put added responsibilities on the State. It will have to seek to stimulate enterprise, to reduce uncertainty, and so to reduce the stimulus to precautionary saving, also possibly

to diminishing saving directly through its own expenditure policy and the use of the tax machine. That, at least, would seem to be where the path of development is leading us, and it is going to prove a strangely unfamiliar path.

5. ECONOMIC DEVELOPMENT AND THE STATE

It is an accepted axiom that whenever the economic system as we know it to-day shows any signs of breaking down, the State is called in to lend its support. The achievements of private economic enterprise in Great Britain do not always receive their due ; we are liable to forget that free enterprise was responsible for one of the most rapid periods of economic advance that the world has ever known, and that it achieved this by a process of trial and error alone, for there were no signposts to point the road which progress was to follow. But the exceptional environment which provided the conditions of nineteenth-century development is rapidly disappearing ; we are less concerned with finding new ways of doing things than with making better use of those possibilities with which we are familiar ; the desire for equity and stability is ousting the demand for the maximum rate of material advance. And with this change we are becoming more conscious of the weaknesses of private economic initiative, and less confident of its benefits. Inevitably the State is being called in to redress the balance.

This tendency is quite independent of political opinions or party programmes. It shows itself equally in the demand for protectionist measures and for social policies which an earlier age would have branded as socialistic. Tariffs, quotas and subsidies ; Government-guaranteed loans for transport and public utilities, beet sugar and housing ; health and nutrition and unemployment policies ; special measures for starting up industries in the Special Areas ; all are symptomatic of a line of development which seems to be becoming more and more pronounced. If the economic system is going to be in

difficulties in adjusting itself to the major currents of change, the rôle of the State in the economic life of the country is bound to grow.

Is there anyone who will confidently assert that in fifty years from now private enterprise will still be the dominant force in the economic life of this country, even though Conservative Governments remain in force throughout the period? The main incentive force, the necessity—and consequent profitability—of discovering fresh economic worlds to conquer in order to minister to the needs of a rapidly increasing population will have disappeared; in its place we shall have the primary task of adjusting what we have to the needs of a population which no longer has to make provision for increasing numbers. In so far as we fail to make an orderly and automatic adjustment, the State will be called in to control and promote the process.

In such an environment the capital market, it would appear, will also be transformed. Its size will have diminished with falling savings. The private investor will have become less important, and the intermediaries, with the State at their head, more so. Just as the private financing of industry has tended to give way to financing through the security markets, so the more speculative forms of security-buying may give way to increased purchases of safe securities yielding little in the way of interest but easily realizable in case of need. (Though this may not happen till we have learned the lessons of a period of speculative orgy, in which investors have been seeking possibilities of rapid capital appreciation since they can no longer get safe yields which they consider adequate.) After all, if we do go on saving in order to build up reserves and not to build up incomes, the State is bound to become a channel for investment to an increasing extent. If our main objectives, as citizens and as private individuals, are to be security and stability, only the State can minister to our wants.

And only the State—though in its present form it is ill-fitted for the task—will be financially strong enough to

undertake many of those essays in economic experiment which have been carried through by private initiative up to the present. We are, of course, very much in the field of opinion and conjecture, but the observed tendency of savings to follow more conservative channels (witness the growth of the assets of building societies, of insurance companies, of unit trusts, of savings bank deposit) does suggest that the investor will be less prepared to support new economic experiments, more inclined to look for safety first. (He may, of course, gamble on the Stock Exchange, just as he may gamble in other ways, but that is not financing new enterprise. His real savings are elsewhere.) The problem of financing new enterprise will thus grow, and not diminish in importance in a world in which savings are invested with an eye to safety, while markets have ceased to expand.

BIBLIOGRAPHY

(Note.—Articles in the *Economic Journal*, the *Journal of the Royal Statistical Society*, and similar publications are listed under their authors' names. In addition to items listed below, reference should also be made to Reports, Statements, etc., of Companies ; to the official Stock Exchange publications ; and to more general descriptive accounts—e.g. those of Hartley Withers and F. W. Hirst—of the working of the Stock Exchange.)

I—PERIODICALS AND SERIAL PUBLICATIONS

(a) Governmental

Board of Trade Journal. Weekly.

BOARD OF TRADE: *Annual Report on Companies.*

Survey of Industrial Development. Annual.

MINISTRY OF AGRICULTURE: *Agricultural Statistics.* Annual.

MINISTRY OF LABOUR: *Abstract of Labour Statistics.* Annual.

Ministry of Labour Gazette. Monthly.

National Debt Return. Annual.

Statistical Abstract for the United Kingdom. Annual.

(b) Other

Agricultural Register. Annual.

BANK OF ENGLAND: *Statistical Summary.* Monthly.

Bankers' Magazine. Monthly.

BUILDING INDUSTRIES NATIONAL COUNCIL: *The Building Industries Survey.* Monthly.

Building Societies' Year Book. Annual.

The Economist. Weekly.

Financial News. Daily.

Financial Times. Daily.

Investors' Chronicle. Weekly.

Issuing House Year Book. Annual.

Jordan's Statistics of Company Registrations. Circulated to the financial press ; annual figures appear about the middle of January.

LEAGUE OF NATIONS: *Monthly Bulletin of Statistics.*

Midland Bank Monthly Review.

Planning (a broadsheet issued by P.E.P.). Fortnightly.

The Statist. Weekly.

The Times. Daily.

Times Prospectuses of Public Companies. Volumes published twice yearly, containing all prospectuses, etc., advertised in *The Times*.

II—GOVERNMENT REPORTS

COMMITTEE ON AGRICULTURAL CREDIT: *Report.* Cmd. 1810 of 1923.

MINISTRY OF AGRICULTURE: *Report on Agricultural Credit.* (Economic Series No. 8.) 1926.

COMMITTEE ON COMMERCIAL AND INDUSTRIAL POLICY AFTER THE WAR: *Final Report.* Cmd. 9035 of 1918.

COMMITTEE ON CURRENCY AND BANK OF ENGLAND NOTE ISSUES: *Report.* Cmd. 2393 of 1925.

COMMITTEE ON CURRENCY AND FOREIGN EXCHANGES AFTER THE WAR (Cunliffe Committee): *Interim Report.* Cmd. 9182 of 1918. *Final Report.* Cmd. 464 of 1919.

COMMITTEE ON FINANCE AND INDUSTRY (Macmillan Committee): *Report.* Cmd. 3897 of 1931. *Evidence.*

COMMITTEE ON FINANCIAL FACILITIES (Vassar-Smith Committee): *Report.* Cmd. 9227 of 1918.

DEPARTMENTAL COMMITTEE ON FIXED TRUSTS: *Report.* Cmd. 5259 of 1936.

COMMITTEE ON INDUSTRY AND TRADE (Balfour Committee): *Factors in Industrial and Commercial Efficiency.* 1927. *Final Report.* Cmd. 3282 of 1929.

COMMITTEE ON NATIONAL DEBT AND TAXATION (Colwyn Committee): *Report.* Cmd. 2800 of 1927. *Appendices to the Report. Evidence.*

III—BOOKS AND ARTICLES

BELLMAN (Sir HAROLD): "Building Societies—Some Economic Aspects", *Economic Journal.* March 1933.

BOWLEY (A. L.): *Some Economic Consequences of the Great War.* 1930.

BROWN (W. A.): *England and the New Gold Standard, 1919–1926.* 1929.

CLARK (COLIN): *National Income and Outlay.* 1937.

CLAY (HENRY): "The Financing of Industrial Enterprise", *Transactions of the Manchester Statistical Society.* 1931–32. *The Post-War Unemployment Problem.* 1929.

COHEN (JOSEPH L.): *The Mortgage Bank.* 1931.

COLE (G. D. H.) ed.: *Studies in Capital and Investment.* 1935.

- CONNOR (L. R.): "Urban Housing in England and Wales", *Journal of the Royal Statistical Society*, vol. xcix. 1936.
(With this Paper is a useful short bibliography.)
- DANIELS (G. W.) and CAMPION (H.): *The Distribution of National Capital*. 1936.
- DURBIN (E. F. M.): *The Problem of Credit Policy*. 1935.
- FINNIE (DAVID): *Finding Capital for Business*. 1931.
- FLORENCE (P. SARGANT): "An Index of Working-Class Purchasing Power for Great Britain, 1929-35", *Journal of Political Economy*, Chicago. October 1936.
- FOXWELL (H. S.): *Papers on Current Finance*. 1919.
- GREGORY (T. E.): *The First Year of the Gold Standard*. 1926.
- HALL (N. F.): *The Exchange Equalization Account*. 1935.
"Treasury Control and Cheap Money", *Transactions of the Manchester Statistical Society*. 1936-37.
- HARGREAVES (E. L.): *The National Debt*. 1930.
- HARRIS (R. A.): "A Re-Analysis of the 1928 New Issue Boom", *Economic Journal*. 1933.
- HARRIS (S. E.): *Monetary Problems of the British Empire*. New York, 1931. (Contains a detailed Bibliography.)
- HARROD (R. F.): *The Trade Cycle*. 1936.
- HAWTREY (R. G.): *The Art of Central Banking*. 1932.
Trade Depression and the Way Out. 1933.
- HAYEK (F. A.): "The Maintenance of Capital", *Economica*. August 1935.
Prices and Production. Revised 1935.
- HICKS (J. R.): "A Suggestion for Simplifying the Theory of Money", *Economica*. February 1935.
- KEYNES (J. M.): *The General Theory of Employment, Interest and Money*. 1936.
A Tract on Monetary Reform. 1924.
A Treatise on Money. (2 vols.) 1930.
- KIRKALDY (A. W.) ed.: *British Finance During and After the War*. 1921. (A number of official documents are reprinted as appendices.)
- KOCK (KARIN): *A Study of Interest Rates*. 1929.
- LAVINGTON (F.): *The English Capital Market*. 1921.
- MACHLUP (F.): "The Liquidity of Short-Term Capital", *Economica*. August 1932.
- McMASTER (D. R.): "The Financing of Agriculture", *Journal of the Institute of Bankers*. November 1936.
- MACROSTY (H. W.): "Inflation and Deflation in the United States and the United Kingdom, 1919-23", *Journal of the Royal Statistical Society*, vol. xc. 1927.
"Some Current Financial Problems", *Journal of the Royal Statistical Society*, vol. lxxxv. 1922.

PARKINSON (HARGREAVES): *Scientific Investment*. 1932.

PEAKE (E. G.): *An Academic Study of Some Money Market and Other Statistics*. Revised 1926.

ROSENSTEIN-RODAN (P. N.): "The Co-ordination of the General Theories of Money and Price", *Economica*. August 1936.

ROSKILL (O. W.): "The Finance of New Inventions", *Financial News*. October 25th, 1935.

SAMUEL (H. B.): *Shareholders' Money*. 1933.

SAYERS (R. S.): *Bank of England Operations, 1890-1914*. 1936.

SMITH (D. H.): *The Industries of Greater London*. 1933.

STAFFORD (JACK): *Essays on Monetary Management*. 1933.

SUVIRANTA (BR.): "'The Shiftability Theory' of Bank Liquidity", *Economic Essays in Honour of Gustav Cassel*. 1933.

THOMAS (S. EVELYN): *British Banks and the Finance of Industry*. 1931.

TRUPTIL (R. J.): *British Banks and the London Money Market*. 1936.

WELLER (E. P.): "Investment Companies and Rural Land", *Journal of the Chartered Surveyors' Institution*. 1936.

INDEX

- Advances (*see* Bank advances, Ways and Means Advances)
- Agricultural Credits Act, 1923, 250, 251
- Agricultural Credits Act, 1928, 252
- Agricultural land, ownership of, 249
- Agricultural Mortgage Corporation, 253, 254
- Agricultural Register*, 252
- Agriculture: financing of, 249-255; and organized investment in farming, 254, 255; and trade credit, 251
- Bank advances: analysed, for 1929-30 and 1936, 187; character of, 185-187; cost of, 273; and credit contraction, 30; restricted in 1920, 82
- Bank of England: and control over clearing banks, 264-266; figures of issues for home industry, 1928-36, 149; policy in 1925-31, 108-113; security purchases in 1932, 66; and Ways and Means Advances, 72-80, 88
- Bank rate: annual averages, 1913 and 1920-36, 64; and bill market, 24-32; effect of rise, 5-13, 23, 24, 32; under gold standard, 6, 10, 11, 51, 262, 263; movements of, 75, 82, 99, 103, 142, 145, 147; relationship of other rates to, 23, 24, 45, 65; and Treasury Bill problem, 83
- Bankers' Industrial Development Co., 212, 213
- Bankers' Magazine*, 135, 136, 143, 178
- Banking system: as collector of savings, 120, 121; and industry, in Great Britain, 173, 174, 184-189, 226; and industry, in Germany and elsewhere, 174, 175; power to control economic activity, 20, 32-36, 45-52, 259-262, 302
- Banks, London Clearing: agreement to raise rates in 1924, 103, 104; and agriculture, 250, 253; Balances at Bank and Money at Short Notice in 1919, 78; cash ratio of, 265, 266, 274; Deposits, 1925-30, 110; growth of investments in 1932, 66; and housing, 238, 239, 241, 242; investments of, 263, 265, 268; and new enterprise, 283-285, 287-289; possible reactions to future restrictive policy, 264-267; and Treasury Bills, 81, 89
- Bellman, Sir Harold, 237, 238
- Bill market, effect of Bank rate rise on, 24-26, 30-32
- Bill rate: annual averages, 1913 and 1920-36, 64; comparison of, in London and New York, 1922-25, 104
- Birmingham position of new enterprise in, 225, 226
- Boom: in 1919-20, 56-58, 85, 136-141; in 1928-29, 59, 97, 142-146, 177, 178, 259, 260
- Boot trade, 176
- Bowley, A. L., 58 *n.*
- Bowmaker, Messrs., 214
- Bradbury, Lord, 95 *n.*
- Bristol, position of new enterprise in, 228, 229
- British Wagon Co., 214
- Building Societies: as channel of savings, 121; general position of, 247-249; new mortgage advances, 1928-35, 236; and "pool" system, 245, 246; rates charged on mortgages and paid on shares and deposits, 1925-35, 242, 243

Business fluctuations: problems involved, 302-304; scale of, 300-304

Campion, H., 181 n.

Capital: mobility of, 180, 229-231, 277-279, 285; supply of, 229, 230, 275

Capital market (*see also* New issues): effect of stabilization upon, 107, 108, 115, 142; in future, 308; post-War history of, 133-153; scope of, 119, 120

Charterhouse Industrial Development Co., 216, 278

Clark, Colin, 122, 125, 198

Clay, Henry, 201, 205, 206

Coates, Dr. W. H., 122, 210, 211

Cohen, Joseph L., 241

Colwyn Committee, 81 n., 87, 89, 94, 95

Commercial bills: N. F. Hall on significance of, 93, 94; reduction in volume of, 91-93

Company registrations, 122 n.

Connor, L. R., 233

Consols: annual average yield, 1913 and 1920-36, 64; effect of large floating debt upon price of, 96; yield compared with Debentures, 66, 67

Conversion operations, 90, 114, 148, 150, 151

Cotton industry, 139, 140, 175, 176

Coventry, 207, 208

Credit for Industry, 215, 278

Cunliffe Committee, 79, 101

Currency Notes Account, 82, 89, 99

Daniels, G. W., 181 n.

Dawes Plan, 105

Debentures: annual average rate on new industrial, 1913 and 1920-36, 64, 168; yield compared with Consols, 67

Demand, and changing public tastes, 210

Depression: in 1921-22, 58, 59, 141; in 1930-32, 60, 146, 147, 178

Economic activity: influence of banking system upon, 20, 32-36, 45-52, 260, 261; influence of changing prospects upon, 37-40, 45-47, 262; influence of Government expenditure upon, 48, 49, 271

Economic development: implications of, 291-293; responsibility of State for, 307-309

Economist, The, 64, 77, 83, 84, 103, 133, 138, 139, 142-144, 151, 157, 158, 160, 162, 167, 168, 188, 191, 192, 242, 243, 247, 264

Exchange Equalization Account, 69, 100, 114

Expectations: as determining long-term rate of interest, 33-35, 49; effects of changes in, 37-40, 46, 47, 67; and movements of Bank rate, 10-12

Factors in Commercial and Industrial Efficiency, 157, 158, 210

Factory development, 230

Finance companies, 195, 196, 215-218, 224

Financial Facilities, Committee on, 204

Financial News, 158, 208, 279

Financial policy: and influence of exchange considerations, 101-115; and influence of Government finances, 70-100, 111, 268-273, 304; objectives of, 55, 56, 60-63, 68, 69, 259; problems involved, 259-274

Financial Times, 159

Finnie, David, 221, 222

Fixed trusts (*see* Unit trusts)

Floating Debt: consequences of post-War increase in, 91-96; possible effects of reduction in, 97, 98

Florence, P. Sargent, 247 n.

Flux, Sir A. W., 125

Foreign balances, 76-79, 81, 91, 97, 106, 107, 112-114

Foxwell, F. H., 203, 204

Gaitskell, H. T. N., 48 n.

"Gibson Paradox", 42-44

- Gloucestershire, Lavington's enquiry into firms in, 177
- Gold, held by Exchange Equalization Account, 114
- Gold and Silver (Export Control, etc.) Act, 105
- Gold movements, 109-111
- Gold Standard: abandoned in 1931, 113; Bank rate under, 6, 10, 11, 51, 262, 263; restoration of, 105-107; working of post-War, 108-115
- Gold Standard Act, 105
- Goldschmidt, Dr., 174
- Gregory, T. E., 107, 112
- Hall, N. F., 58 *n.*, 93, 94, 113, 114, 269 *n.*
- Harris, R. A., 146, 178
- Harris, S. E., 72 *n.*, 82 *n.*
- Harrod, R. F., on trade cycle, 293-299
- Harvey, Sir Ernest, 95 *n.*
- Hawtrey, R. G., 7, 9, 11, 26-29
- Horne, Sir Edgar, 191
- Housing: and advances for house purchase by Local Authorities, 239; and building societies, 236-238, 242-249; and Government subsidy, 239; increased finance available for, 236-242, 244, 245; and Local Authorities, 232-234, 239; new houses in England and Wales provided each year, 1920-36, 233; provided by private enterprise, estimated cost, 1928-35, 234-236
- Indebtedness, structure of, 16-20, 123
- Industrial banking, 203-205, 280-290
- Industrial Finance and Investment Corporation, 217, 218
- Industry: less dependent on banks, 187, 188, 264; shifts in location of, 180, 230
- Instalment finance, 213-215, 276
- Insurance companies: assets of, 190; as channel of savings, 121, 189-191; and housing, 240; investment policy of, 189-191
- Interest rates: and business fluctuations, 39, 40, 44, 47-52, 298; effect of fall since 1932, 148, 152, 153, 182; effect of large floating debt upon, 95, 96; effects on activity of changes in, 5-13, 32, 33, 45, 49-52, 67, 68, 260, 261; and existing financial situation, 263; factor governing relative movements of, 32-35, 38-40, 45, 46, 48-52, 67, 267, 268; future of long-term, 267-271; and "Gibson Paradox", 42-44; and housing, 242-245; problems involved in discussion of, 13-15; relative movements of (1919-1936), 64-67, 168; unitary conception of, 21-23; and working capital, 26-30
- International lending (*see* Lending, international)
- Inventions, 208, 209, 229, 279
- Investment: effect of cheap money upon, 148, 152, 153; funds available for, 124, 125; post-War, characteristics of, 177-182, 202, 203; pre-War, characteristics of, 172-177
- Investment intermediaries, 120-122, 158, 172, 183-200, 276
- Investment trusts, 191-196
- Investors' Chronicle*, 169
- Iron and steel industries, 176
- Issuing House Year Book*, 155
- Issuing houses, 154-156
- Jobbers, 129
- Jordan and Sons, Messrs., 122 *n.*
- Kemmerer-Vissering Report, 105
- Keynes, J. M.: on floating debt, 95; on "fringe of unsatisfied borrowers", 15; on "Gibson Paradox", 42, 43; on public investment board, 286; on trade cycle, 293-299
- Lands Improvement Company, 252
- Lavington, C., 175, 177
- Law Society's Gazette*, 241
- Leadenhall Securities Corporation, 216-217, 278

- Lending, international, 107, 108, 112, 113, 141, 152, 171, 179, 263
- Linen industry, 176
- Liquidity : of bank advances, 185, 186 ; of commercial bills, 29 ; as influencing business decisions, 19, 20, 23, 33, 38, 39, 45, 46, 67, 123
- Liverpool, position of new enterprise in, 227, 228
- Lonsdale Investment Trust, 218
- Macmillan Committee : assets of Clearing Banks in 1919, 78 ; on financing of industry, 173-175, 204, 205 ; on interest rates and economic activity, 7-11 ; on London's position on international account, 112, 113 ; Treasury Bills held by banks, 1919-21, 81
- Macrosty, H. W., 82, 139, 140
- Manchester, position of new enterprise in, 226
- May Report, 60
- Mercantile Credit Co., 214
- Midland Bank Review*, 64, 133, 134, 144, 146, 147, 152, 165, 166, 171
- Mining issues, 152
- Ministry of Labour Gazette*, 64, 303
- Monetary policy (*see under* Financial policy)
- Morgan, Messrs. J. P., 101
- Mortgages, 240-243
- National Debt (*see also under* separate headings : *e.g.* Consols, Treasury Bills, etc.) : changes in structure of, 86-91, 98-100 ; consequences of post-War increase in, 91, 92 ; and conversion operation of 1932, 114, 148 ; influence on financial policy, 70-72
- National Investment Board, 286, 287
- New enterprise : controversial aspects of financing of, 280-285 ; facilities outside London, 223-231 ; growth of, 206-209 ; importance of, 201 ; methods of financing, 126, 127, 173-178, 201-231, 276, 277 ; need of organized financing for, 280-290 ; proposed organization for financing, 287-290 ; risks involved, 209-212, 279-280
- New issues : Bank of England figures of issues for home industry, 1928-36, 149 ; control of, 108, 136-137, 148 ; cost of, 167-169 ; *Economist* figures of certain classes, 1920 and 1921-1923, 138 ; in 1928 boom, 144-146 ; institutions handling, 154-156 ; methods of flotation, 161-165 ; Midland Bank figures, 1920-36, 134 ; Midland Bank figures of Miscellaneous, Commercial and Industrial, 1928-1933, 147 ; minimum size of, 223 ; nursing of companies in anticipation of, 219 ; pre-War and post-War compared, 170-172 ; proportion of "Debt" to "Capital", 165-167 ; for "reconstruction" abroad, 141 ; significance of, 130-132 ; Stock Exchange regulations governing, 163-165 ; uses of proceeds, 159-161
- New Trading Co., 217
- New York : collapse on Wall Street in 1929, 99, 145, 146 ; flow of British funds to, 179, 263 ; money rates in, 103, 104, 107
- Niemeyer, Sir Otto, 82 *n.*, 89
- Norman, Montagu, 7, 9-11
- Northern Territories Trust, 218, 226
- Nuffield Trust, 221
- Offer for Sale, 161, 162
- Ordinary shares : in 1928-29, 144, 145 ; running yield on, 1926-28, 143 ; values of, 1921-36, 136
- Peake, E. G., 106 *n.*
- Planning*, 206, 207
- Population, effects of future changes in, 304-307
- Pound (*see* Sterling)
- Preference shares, annual average rate on new, 1913 and 1920-36, 64, 168

- Private investment, 122, 126-128, 173-177, 202, 277, 286
- Profits : changes in distribution, 210, 211 ; retained in business, 122
- Property companies, 150, 240
- Prospects (*see also* Expectations), 35, 37-40, 44-48, 51, 52
- Prudential Assurance Co., and industrial finance, 218, 219
- Public funds : holdings of Treasury Bills, 82 ; purchases of securities by, 66, 269
- Radice, E. A., 287 *n.*
- Railway financing, 171
- Rand Power Company, 204
- Rearmament, 100, 264, 267, 272, 273
- Report on Agricultural Credit*, 1926, 250, 251, 253
- Risk premium, 41, 42
- Risks : and investor, 17 ; and new enterprise, 209-212, 279, 280
- Rosenstein-Rodan, P. N., 11 *n.*, 22 *n.*
- Roskill, O. W., 208, 279
- Savings : alternative uses open to, 16-19, 31-33 ; changes in habits, 181, 305, 306 ; channels of, 120-123 ; and financial crises, 301 ; forms taken in different income groups, 156-157 ; and trade cycle, 294-299 ; volume of, 123, 124, 181, 182
- Savings banks, 121
- Sayers, R. S., 6 *n.*
- Securities : average size of individual holdings, 157, 158 ; Bankers' Magazine index of values, 1921-36, 136 ; marketability of, 131
- Securities Management Trust, 213
- Security, significance of collateral, 127
- Security holdings of companies, 196, 197
- Share capital, annual totals of new, 1920-36, 64, 166
- Shares (*see* Securities, Ordinary shares, Preference shares, etc.)
- Shipbuilding, 176
- Shipping, 139, 140
- Solicitors, and mortgages, 240, 241
- Special Areas : financial facilities for, 220, 221 ; and supply of capital, 229, 230
- Special Areas Reconstruction Association, 220, 276
- Speculation, 139, 140, 144-146
- Spreading of risks, 211, 212
- Stabilization (*see under* Gold Standard)
- Statist, The*, 133, 170
- Sterling : fluctuations of, 101, 102, 104 ; stabilization of, 104, 105
- Stock Exchange : increased importance for home industry, 179, 180, 275 ; regulations governing new issues, 163-165 ; significance of, 128-130
- Stock Exchange introductions, 161-164
- Studies in Capital and Investment*, 159, 189
- Survey of Industrial Development*, 230, 231
- Taxation : and financing of agriculture, 250, 255 ; influence on distribution of wealth, 181
- Times, The*, 163, 169, 203, 217, 219, 220, 241, 286
- Tout, Herbert, 266 *n.*
- Trade credit, 177
- Trade cycle, 293-304
- Trading estates, 224, 225, 276, 277
- Treasury : and control of bill rates, 83, 84 ; and cost of National Debt, 71, 94-96, 99
- Treasury Bills, 74, 75, 80-85, 89, 90, 95, 96, 111
- Tuke, W. F., 185, 241, 242
- Uncertainty : in absence of defined standard, 12, 262, 263 ; and new enterprise, 211, 212
- Underwriters, 145, 156
- Unemployment, 59, 62, 63, 64, 103, 142, 145, 272, 303
- Unit trusts, 194, 195, 202
- United Dominions Trust, 213, 214, 278

Victory Loan, 74, 75	partments, 80, 82, 88, 89, 99
War Loan, converted in 1932, 114	Weller, E. P., 254, 255
Ward, Messrs. Thos. W., 219	Williams, Francis, 189
Wardington, Lord, 186	Woollen and worsted industries, 176
Ways and Means Advances : Bank, 72-80, 82, 86, 88 ; De-	Working capital, and money rates, 26-28

THE END

