

# Central Banking in the Commonwealth

by  
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## 1. Introduction.

It is fourteen years since Professor Plumtre finished his study (1) of the evolution of central banking, in the British Dominions. Now we are offered two new works (2) which though differing in scope and emphasis are yet both, in an important sense, complementary to Professor Plumtre's for they not only carry the story of commercial and central banking development in the « older Dominions » up to 1951, a task which, in its own right, was well worth undertaking in view of the close relationship between war finance and central banking development, but also embrace the experience of the newer Dominions, the colonial territories, and countries which though outside the British Commonwealth possess institutional and economic characteristics in common with some Commonwealth countries.

The emphasis of Dr. Sen's book differs from that of the more massive volume on Commonwealth banking. As his title implies, Dr. Sen is principally concerned with the techniques of central banking control which have been found to be fruitful in countries which do not possess highly developed money markets on the London model. His approach is therefore functional and not regional. Nevertheless, since much of his material originates within the British Commonwealth, his analysis, in itself very valuable, is closely related to that of the Commonwealth banking volume and supplies an extremely useful commentary upon it.

Though limited geographically to a survey of countries within the Commonwealth, the volume edited by Professor Sayers is, in the economic sense, far wider in scope than Dr. Sen's. It is not restricted to any single aspect of central banking operations or even to central banking as a whole, but discusses also the structure and operations of the commercial bank-

ing systems of the several territories which it surveys. This broad approach provides both gain and loss for the reader: the former because the discussions of the commercial banking structures of the several territories make it simpler to set the operations, aims, and achievements of their central banks in better perspective; the latter because of a certain diffuseness which renders it less easy to extract conclusions from the mass of material presented.

In a valuable introduction, which might with great advantage have been twice its present length, Professor Sayers indicates some of the themes on which his eight contributors (3) have presented their diverse territorial variations. In it, he points out that:

« the countries whose banking systems are examined in this book have two features in common. They are, or have until recently been, part of the British Commonwealth, and their banking systems have, or have had in their formative stage, close contact with London » (4).

British (5) influence has therefore been pervasive in both commercial and central banking.

From these introductory remarks, two themes emerge: first, the manner in which commercial banking, originally conceived in the British tradition, has adapted itself to the differing social and economic environments of the various Commonwealth territories; second, the extent to which British theories of central banking control and organisation have had to be modified in the light of local conditions. In practice, it is the second which receives the fuller attention from Professor Sayers' contributors and which is, moreover, discussed, from the technical aspects, by Dr. Sen.

A third theme, which is relevant to the development of both commercial and central banking within the Commonwealth, is that of the formulation and implementation of sterling area policy. Plainly, the

central banks of the Commonwealth (other than that of Canada) (6), have important roles to play in preserving the stability of sterling. Equally plainly this must lead to consultation and co-operation between the Commonwealth central banks and the Bank of England. In recent years, such Commonwealth monetary co-operation must have been of great significance. It is therefore somewhat disappointing to find it only accorded incidental treatment by Mr. Barea (7).

If we exclude India (8), the countries covered in Professor Sayers' volume possess a third common attribute beyond those mentioned above: they are all (though admittedly in differing degrees) dependent economies in the sense that the dominant influence on domestic money incomes in each, and hence on the level of activity and/or the domestic price level, is exerted by the balance of payments and, in particular, by the balance of trade. In this, the volatile element is the value of exports. For most of these countries, as for primary producers elsewhere, export prices are beyond domestic control and are determined by the state of world (and in particular British) demand; that is by the level of world economic activity. Since export supply elasticities are generally low, export proceeds (and hence export generated incomes) are largely price determined. This economic dependence is, of course, emphasised by several of Professor Sayers' contributors, notably Professors Duncan and Simkin, and Mr. Gunasakera. Dr. Sen also gives attention to the special problems of central banking technique raised by economic dependence. It is doubtful, however, whether, in either volume, this aspect of the economies is given quite the prominence it merits. From it a fourth theme emerges and one which, in practice, has some claim to be regarded as dominant: namely the place of and scope for central banking control in economically dependent territories (9). Before examining the experience of individual territories it is worth while to take a brief look at the general problem.

## 2. Central Banking in Dependent Economies.

The rise of central banking in the British Commonwealth (and elsewhere) after World War I was

probably, in the final analysis, an expression of the inter-war political and economic trends towards nationalism. Political arguments in favour of « financial independence » were, for example, certainly important in the cases of Australia and New Zealand (10). At the conclusion of World War II, three new Dominions were established in the Commonwealth; India, Pakistan and Ceylon. In India a central bank was already in existence (11). In the cases of Ceylon and Pakistan the establishment of central banks did not wait long upon the achievement of political independence.

Additional support is given to the view that a close relationship exists between central banking and the desire for political and economic autonomy by recent proposals to establish central banks in Nigeria, the Gold Coast, and Southern Rhodesia, since, of the « colonial territories », these three are probably nearest to full Dominion status (12).

It is not always a simple matter to discover precisely what the proponents of central banks hope to achieve through their establishment. As Professor Plumtre has shown, the arguments put forward in their support in the past have been diverse (13). It is, however, safe to say that one of the principal purposes has been to provide an institution capable of taking discretionary action with the object of stabilising domestic money incomes, output, and employment (14).

Unfortunately, however, the scope for attaining such objectives through central banking action, is, in dependent economies, necessarily rather restricted. The central reason for this is simple enough. Fluctuations in domestic incomes are not usually, in such economies, due to fluctuations in domestic investment expenditures but to cyclical changes in export demand and/or the inflow of capital. And neither of these determinants of income is readily susceptible to central banking control.

This difficulty is greatest in economies which are at once both dependent and financially undeveloped for, in such economies, the dichotomy between savings and investment decisions which is the fundamental postulate of most modern theorising may not exist. Those who save may either themselves invest

(1) « Central Banking in the British Dominions » by A.F.W. Plumtre. University of Toronto Press, pp. 462.

(2) « Banking in British Commonwealth » edited by R.S. Sayers, Oxford University Press, pp. 486. « Central Banking in Undeveloped Money Markets » by S.N. Sen; Bookland Ltd., Calcutta, pp. 242. Throughout this paper the former is quoted as « Sayers »; the latter as « Sen ».

(3) J.S.G. Wilson; G.S. Dorrance; G.A. Duncan; C.G.F. Simkin; A.C.L. Day; H.A. de S. Gunasakera; W.T. Newlyn; and Paul Barea.

(4) Sayers, p. vii.

(5) Ceylon is a partial exception to this generalisation as is South Africa.

(6) Canada is, of course, a dollar country.

(7) Sayers, Chapter 14.

(8) The share of exports in India's national income is about 7%. This argues on degree of « dependence » much below the average of the remaining territories.

(9) Cf. Plumtre, op. cit., particularly Chapters XV and XVI. Sen, pp. 50-51. H.C. Wallich « The Monetary Problems of an Export Economy », particularly Chapters XI, XII and XV, and R. Triffin, « Central Banking and Monetary Management in Latin America » in « Economic Problems of Latin America » edited by Seymour E. Harris.

(10) Cf. Plumtre, op. cit., Chapters VI and VII.

(11) The Reserve Bank of India. Established in 1935.

(12) Southern Rhodesia, is, of course, a « self-governing colony ». The Reports by British experts on the Nigerian and Southern Rhodesian Proposals have not yet been published. For a discussion of the Gold Coast Report see D. Rowan « Banking Adaptation in the Gold Coast: a critique of the Report by Sir Cecil Trevor. C.I.E. ». South African Journal of Economics. Dec. 1952.

(13) Plumtre, op. cit., Chapters VI and VII.

(14) Cf. The Ceylon Monetary Law Act. Section 5.

or find others wishing to do so without the assistance of financial intermediaries such as commercial banks. In such cases, investment expenditures will tend to be equal to savings at all levels of income. Say's law will hold; and the level of domestic money incomes will be determined by external receipts. It is quite probable that, among the colonial territories whose monetary and banking arrangements are discussed by Mr. Newlyn (15) there are some which approximate to this simple model; Ceylon may even provide an example among the Dominions.

The central lesson to be derived from this model is, of course, very obvious. It is, however, not always appreciated. Plainly, where financial intermediaries between savers and investors are not important, the scope for central banking control is very restricted. Where financial intermediaries are important, that is where banking systems are highly developed and capital markets are effective, then central banks may legitimately hope, by operating on the willingness of financial institutions to lend, to exercise some degree of control over domestic investment expenditures and thus to influence aggregate demand. Whether it would always be desirable for a central bank to attempt to stabilise incomes in the face of (say) an export boom by bringing about offsetting reductions in domestic investment expenditure is, of course, another question. So too is that of the techniques by which the central bank, in the absence of a highly developed money market, can best hope to exercise control. It is on this latter point, as we shall see, that Dr. Sen has so many valuable things to say.

In any dependent economy where booms are due to rising export proceeds and, perhaps, capital inflows, increasing levels of domestic incomes are associated with increasing liquidity. This is the converse of the situation in an economy such as the U.S.A. or even the United Kingdom where, in general, rising economic activity results from domestic causes and is likely to be accompanied by reduced liquidity due to an adverse balance of payments. The old rules of the gold standard game, appropriate enough perhaps, in (say) the U.S.A., would, in a dependent economy, merely intensify the cycle.

In a dependent economy experiencing an export boom, the money supply will undergo a direct « primary » increase. If a large part of the increase takes the form of commercial bank deposits, the banks will find themselves gaining reserves either in the form of domestic cash or short term claims abroad. There is thus always a possibility of a « secondary » banking expansion based upon these accumulating reserves and due, let us suppose, to the banks' desire to maintain conventional ratios. This is the element in a

(15) Sayers, Chapter 13.

dependent economy which may add an endogenous influence to exogenously generated income fluctuations. Looked at dynamically, there is, as Professor Simkin has pointed out (16), a possibility of a banking « accelerator » based upon a lagged response of bank lending to changes on the balance of payments. The likelihood of such an « accelerator » being important depends first upon the degree of banking development; and second upon banking policy (17).

This possibility of induced banking expansions adding a further domestic impetus to what are, at bottom, externally generated fluctuations, does not exhaust the conceivable banking influences on domestic incomes and prices. Some changes in banking policy which affect bank lending are autonomous, rather than induced by changes on the balance of payments. If bank policy undergoes this sort of radical change, fluctuations in domestic incomes may be brought about by the banks alone. This type of behaviour is probably more likely within the British Commonwealth than elsewhere since many banks are « supra-territorial » (to adopt Mr. Newlyn's phrase); that is they conduct business in a number of Commonwealth territories as well as maintaining head offices in London. It is thus always open to them to raise funds in one territory for lending in another. In the past, this type of activity has been a significant cause of fluctuations in some British dependencies. For example, Professor Simkin in his study of New Zealand's economic experience from 1860 to 1911 has recorded that (18):

« Banking policy was apparently responsible for no less than five downswings and four upswings... we have to recognise that banking policy played a very important part in determining short period changes in income and that it was a major factor in producing economic instability ».

Admittedly, recent examples of similar behaviour are harder to find. This is only to be expected in view of the development of central banking one of the principal purposes of which was to eliminate them. It is possible, however, that contemporary examples could be found in the colonies which, as Mr. Newlyn shows, possess no weapons of monetary control. The recent expansion of bank lending in Southern Rhodesia may be such a case.

Where commercial banking is fairly well developed, in the sense that bank money is an important component in the money supply, the commercial banking system may still be « passive » in the cycle

(16) C.G.S. Simkin: « The Instability of a Dependent Economy », p. 9.

(17) Cf. Plumpton, op. cit., pp. 356-366.

(18) Simkin, op. cit., p. 109 and pp. 203-204.

in the sense that it may acquiesce in sharp increases in liquid external assets in export generated booms and in analogous decreases in export generated recessions. Such behaviour is certainly not uncommon in the Commonwealth. It is particularly likely in those Colonies where the banking system consists mainly in British owned and managed banks and the territory in question is racially heterogeneous. For in such cases, the banks' portfolios of local advances are often both small and demand determined. Most of their assets consist either in Government securities, local Treasury Bills (where available), or investments in London. When their resources increase it is either their external assets or their cash holdings which rise, advances responding slowly if at all (19).

This brief discussion makes it plain that central banks in dependent economies may have very varying scope for stabilising incomes and prices through control of the commercial banks. Where banking is highly developed, as in Australia, Canada, New Zealand, and South Africa, the scope will be relatively large. Questions of technique may therefore assume great significance. Where banking is less developed, as in Ceylon and Pakistan, the scope for anti-cyclical monetary management will be correspondingly reduced.

It can, of course, be argued that even where the commercial banking system is wholly « passive », central banks can still influence the domestic level of incomes. They may, for example, advise Governments on the appropriate fiscal policy to be followed in order to reduce the incidence of the cycle. This may be of some value in checking booms. Unfortunately, the nature of dependent economies, in particular their high marginal propensities to import, imposes severe limitations on the use of deficit finance coupled with central bank credit creation as a stabilisation device in recessions. As New Zealand's experience in the late 30's makes plain, the repercussions of such a policy on the balance of payments are rapid. Thus, in so far as it is considered essential to avoid exchange control or devaluation, narrow limits are imposed on such policies by the availability of external reserves and the capacity to borrow abroad.

Apart from discretionary action aimed at cyclical stabilisation, a task which in many dependent economies would probably be more simply and effectively performed by export price stabilisation funds (20), a central bank may, particularly perhaps in the less developed economies, find many tasks worthy of its

(19) This seems to be the typical behaviour of expatriate banks in West Africa. In Ceylon too conditions appear to be similar, save that there has also been a considerable expansion in security holdings. Cf. Sayers, Chap. 12.

(20) Simkin, op. cit., pp. 203-4.

attention. These cannot be listed in full. A few of the more important may, however, be noted.

The qualitative control of credit is no less useful than its quantitative control. Considerable scope for influencing credit distribution exists in those economies in which large sectors, notably agriculture and small industry, find credit hard to obtain while other sectors, principally the import and export trades, are excessively easily financed (21). In some cases, qualitative control may be necessary to curb local speculation in equities or real estate.

The development of the domestic financial system should be an important objective of central banking endeavour. Where banking systems are young and exhibiting signs of too rapid expansion, the supervision of commercial banking operations is essential. India and Pakistan both provide examples of the significance of this type of central banking activity.

The development of banking depends upon the existence of assets acceptable by the banks as security or collateral for advances. As Professor Sayers puts it (22):

« Banking is... conditioned by the general economic structure, especially in the readiness with which property, in goods, land and other assets, lends itself to the creation of loans ».

In most underdeveloped economies, the improvement of existing assets and the development of new ones are of the first importance. Since both tasks frequently require legislation, a central bank which, presumably, can command the ear of Government, is an appropriate body to initiate action.

Other tasks could easily be listed. The establishment of special institutions to provide particular forms of finance is one obvious example. The development of security and capital markets is another. Our brief discussion of the role of central banking in dependent economies has, however, no pretensions to being comprehensive. Its purpose has been limited to making an obvious but frequently overlooked point which can be conveniently expressed in terms of a distinction between the complementary functions of commercial banks drawn by Professor Sayers.

Professor Sayers has pointed out that commercial banks are both « manufacturers » and « purveyors » of money (23). In the latter capacity they are financial intermediaries bringing together those who wish to borrow and those who wish to lend. In developed economies, central banks are likely to be concerned

(21) The Indian literature is full of evidence suggesting situations of this kind. Cf. also Report of the Ceylon Banking Commission. Ceylon Sessional Paper XXII of 1934.

(22) Sayers, p. ix.

(23) Sayers, p. viii and « Modern Banking », 3rd Edition, p. 1.

principally, but not, of course, exclusively, with commercial banks as « manufacturers » of money. In the less developed economies, the contrary is likely to be the case. It is one of the merits of Professor Sayers' new volume that the contributors to it present no less than eight accounts of central banking operations within the British Commonwealth, which show very plainly both aspects of central banking. Analogously Dr. Sen offers a full, informative and essentially complementary analysis of the techniques which have been applied by central banks to the management of diverse commercial banking systems both within and without the British Commonwealth.

### 3. The Central Banks of Ceylon and Pakistan.

Since the conclusion of World War II, two new central banks have been established in the Commonwealth. These are the Central Bank of Ceylon and the State Bank of Pakistan.

The Central Bank of Ceylon was established in 1949 (24) and began operations in 1950. The decision to set up such an institution was based on a Report (25) by Mr. John Exter, an official of the Federal Reserve Board who had already played a prominent part in drafting the central banking legislation of the Philippines.

Mr. Exter's Report was an optimistic document. Among the consequences of establishing a Central Bank of Ceylon it mentioned (26):

- (a) the ability of such a bank to influence the cost, availability, and supply of money;
- (b) its power to supervise the commercial banks and protect Ceylon's depositors from the consequences of unsound banking practices (27);
- (c) the stimulation of banks towards increasing loans, lending for longer periods and at cheaper rates;
- (d) the reduction of the profits of purely exchange banking and the consequent encouragement of existing banks to expand their domestic business;
- (e) the encouragement of indigenous banking through the existence of a local lender of last resort;
- (f) the development of the local securities market.

Some of these, as we shall see, were irrelevant while those that were relevant were hardly given sufficient weight in the Report.

The Bank established by the Monetary Law Act was plainly based upon U.S. experience. Its constitution, as Mr. Gunasakera points out (28), followed

(24) Monetary Law Act, No. 58 of 1949.

(25) Ceylon Sessional Paper, No. XIV of 1949.

(26) *Ibid.*, Section 6.

(27) On the relevance of this cf. Sayers, pp. 417-8.

(28) Sayers, p. 410, note 1.

closely upon that of the central bank of the Philippines. According to Section 5 of the Act the Bank is « charged with the duty of so regulating the supply, availability, cost, and international exchange of money as to secure... the following objects:

- (a) the stabilisation of domestic monetary values;
- (b) the preservation of the par value of the Ceylon rupee and the free use of the rupee for current international transactions;
- (c) the promotion and maintenance of a high level of production, employment and real income in Ceylon; and
- (d) the encouragement and promotion of the full development of the productive resources of Ceylon ».

To achieve these objectives, the new Bank has been given an impressive array of powers. These include, in addition to such orthodox devices as the publication of discount rates (29), and the power to conduct open market operations (30), powers to fix and vary reserve ratios (31), to require reserve ratios of up to 100% in respect of increments in deposits above a decreed figure (32), and to issue its own securities should its holdings of Government issues provide inadequate « ammunition » for open market sales (33). Beyond these it possesses supplementary powers to vary margins against letters of credit (34), to fix the maximum interest rates which can be paid or demanded by commercial banks (35), to prohibit commercial banks from increasing their loans and investments (36), and to lay down the maximum permissible maturities for commercial bank loans and investments (37).

Despite this impressive array of weapons and the detail with which the Act, following U.S. practice, attempts to lay down what the Central Bank shall do in most foreseeable circumstances, Mr. Gunasakera remains sceptical of its ability to « stabilise domestic monetary values ». His arguments, which I believe to be sound, rest upon the simple fact that Ceylon is a highly dependent economy in which exports exceed 40% of the national income. « In practice » he writes: « an export economy such as Ceylon cannot even with independent monetary institutions effectively pursue an independent monetary policy. Ceylon's level of prosperity is determined by the foreign demand for its staple exports — tea, rubber, and coconut products. Its level of incomes is determined by the prices that

(29) Monetary Law Act, No. 58 of 1949, Section 86.

(30) *Ibid.*, Sections 89-90.

(31) *Ibid.*, Sections 92-96.

(32) Monetary Law Act, No. 58 of 1949, Section 94.

(33) *Ibid.*, Section 91.

(34) *Ibid.*, Section 102.

(35) *Ibid.*, Section 103.

(36) *Ibid.*, Section 100.

(37) *Ibid.*, Section 99.

these fetch in foreign markets... A policy of "compensatory spending" or open market operations cannot stabilise incomes or prices in a country so utterly dependent of foreign trade as Ceylon... (38).

Mr. Gunasakera might have added to this welcome realism by emphasising that control of commercial bank lending is likely to be of little avail for two reasons. First, the advances of the banking system only amount to about 5% of the gross national product; and second, the greater part of these finance the import and export trade. Commercial banking in Ceylon is therefore undeveloped. In fact there are only 26 bank offices on the island and of these ten are in Colombo.

Mr. Gunasakera is particularly sceptical of the possibilities of control through variations in interest rates. His argument here rests principally on the undeveloped state of banking in the economy. He might have added that since exports are 40% of the national product, Government expenditures some 20%, and private capital formation only around 2% the scope for restricting domestic expenditure by raising interest rates must inevitably be small unless it is assumed either that Government can be curbed in no other way or that the savings function is substantially interest elastic. The latter assumption would surely be a rash one in an undeveloped economy with a low per capita real income while the former seems implausible.

In his valuable little essay, Mr. Gunasakera strikes the right note very early by stating:

« Although the country's major credit problems are the development of the banking habit and the diffusion of agricultural credit, these questions have received scant attention from Mr. Exter. In fact no detailed inquiry into credit problems has been made by him in the Report. The Central Bank has been superimposed on the existing banking structure and little or no attempt has been made to remedy its deficiencies » (39).

Pursuing this argument, Mr. Gunasakera makes an all too brief appeal for the development of « mixed banking ».

If Mr. Gunasakera's analysis is heeded, the most useful department of the new Central Bank is likely to be that concerned with economic research. There may also be some scope for the use of its qualitative controls. It is a pity that Mr. Gunasakera was not able to expand his ideas regarding the development of « mixed banking ». The Report of the Ceylon Banking Commission of 1934 (40) made a number of proposals designed to

(38) Sayers, p. 411.

(39) Sayers, p. 409.

(40) Ceylon Sessional Paper XXII of 1934.

encourage the banking habit and to develop « mixed banking ». These proposals appeared in their day to be bold and unorthodox. As a result they proved unacceptable to the Committee of London Bankers appointed by the Secretary of State to advise him upon them and orthodoxy was imposed from London (41). Now in a new economic and political climate they might well be worth reexamination. Certainly, if the Central Bank of Ceylon realises the inadequacies of the country's present financial mechanism it should be able to find much to do of the first economic importance. Its concern, however, will be with the development of the financial system, the extension of the supply of bankable assets (42), and the nursing of the security and capital markets (43) rather than « influencing the supply, availability, cost, and international exchange of money so as to secure... the stabilisation of domestic monetary values »: the relevance of this latter objective will only appear later when both economic and financial development have proceeded much further than at present.

Pakistan, like Ceylon, is a country where the principal tasks facing the new central bank are likely to come less from the need to exercise monetary control than the need to develop the banking system and capital market as means for promoting thrift and the mobilisation of domestic capital for economic development. Unfortunately, as Mr. Wilson makes plain, the State Bank of Pakistan, which was established soon after partition (44), has been preoccupied by problems arising out of the creation of the new state and the devaluation of sterling.

One of the first consequences of partition was the sudden contraction of Pakistan's banking facilities. This was due to the fact that banking was predominantly in the hands of Hindus who departed for India. Writing of this Mr. Wilson records that (45):

« Economic life in Pakistan was almost paralysed and banking organisation suffered what then appeared to be irreparable damage... As against 365 offices of the scheduled banks operating before partition, only 62 remained open immediately afterwards ».

(41) Ceylon Sessional Paper I of 1937. Cf. also B.R. Shenoys « Ceylon Currency and Banking ». The London Committee objected to the proposed powers of the bank recommended in the Banking Commission's Report on the ground that « there should be a clear distinction between investment financing and deposit banking » and that there should be no power « to lend money on immovable property ».

(42) Cf. Ceylon Sessional Paper XXII of 1934.

(43) It cannot be too often emphasised that open market operations in countries like Ceylon and Pakistan have the objects of stabilising security prices and broadening and developing the market and are not primarily directed at influencing bank liquidity save perhaps seasonally.

(44) State Bank of Pakistan Order No. 13 of 1948.

(45) Sayers, p. 273.

The need for the development of commercial banking was, as a result, brought home in a particularly acute form. Both the State Bank of Pakistan and the Pakistan Government (46) have been active in promoting banking expansion, while the State Bank, through the powers granted to it under the Banking Companies (Control) Act, has taken steps to see that such banking expansion as does come about is on sound lines.

Of credit control designed to check inflation, Mr. Wilson makes little mention. The State Bank has powers to prescribe and vary the commercial banks reserve ratio. It has also conducted open market operations on the Karachi exchange (47). These, however, have been designed more to stabilise security prices and provide a measure of seasonal flexibility for the commercial banks than as an attempt at monetary control (48). Beyond this the emphasis has been mainly on qualitative control. And this very wisely has been based upon persuasion rather than compulsion.

If the short run difficulties arising out of partition are neglected, it can be seen that the problems facing the new central banks of Ceylon and Pakistan are broadly similar. The conduct of an «independent monetary policy», as customarily understood, is likely to be less important in both territories than the encouragement of financial adaptation and evolution. Admittedly monetary policy may be of more consequence in Pakistan than in Ceylon since the degree of external dependence is smaller in the former. Monetary policy is likely to be of even greater importance in India where, indeed, the Reserve Bank of India, has achieved some success in neutralising the effects of changes in the balance of payments (49). In the main, however, it is the problems of economic development which must predominate in these three territories and the principal concerns of their several central banks must be to encourage the expansion and integration of the banking system (50), to ensure that expansion takes place along worthwhile lines, and to develop special institutions which can provide finance for those sectors of the economy, notably agriculture (51) and small industry (52), for which facilities have, thus far, remained inadequate.

(46) By the Government sponsored formation of the National Bank of Pakistan the President of which is the Governor of the State Bank.

(47) Sayers, pp. 266-7.

(48) It is suggested (Sayers, p. 268) that the State Bank's discount rate may have some importance for monetary control though in the view of the dominant position of expatriate banks this seems unlikely.

(49) Sen, p. 64.

(50) Sayers, pp. 346-359.

(51) Sayers, pp. 225, 232-3, 235-6, 272.

(52) Sayers, pp. 286-289.

#### 4. Central Banking and the War.

Professor Plumtre's work (53) carried the story of the central banks in the «older» Dominions up to the end of the thirties. Professor Sayers' contributors have now presented accounts of events in Canada, Australia, South Africa, and New Zealand which carry the tale up to the end of 1951. This is important since the influence of the last war on central banking development was very great. Indeed, wars seem to have been the most significant single influence on central banking development in the Dominions. Discussing the origin of these (and other) central banks, Professor Plumtre referred to them, not without reason, as «war babies» (54). After reading the essays of Professor Sayers' contributors, and particularly those of Mr. Wilson (Australia) and Mr. Dorrance (Canada), it is impossible to avoid the conclusion that the necessities of war finance have been among the most powerful factors making for the maturity of the central banks of the «older» Dominions. Between 1939 and 1946, the «war babies» became «war adults». Thus though Mr. Day may well be right when he argues that a new central bank needs something like twenty years to establish its influence (55), this estimate would almost certainly need to be modified if world wars became either more or less frequent.

The central banks in the four «older» Dominions operate in economies which, despite diversities, have at least three common characteristics of great importance. First, they are highly dependent in the sense sketched in the second section of this review; second, in each Dominion, the financial system in general and the commercial banking system in particular is highly developed (56); and third, commercial banking is, in each case, in the hands of a small number of concerns. The table I gives some statistics relating to these attributes.

This table is, of course, rather a rough and ready affair. The share of exports in national income is not a precise measure of economic dependence since it excludes the influence of foreign investment expenditures. These, particularly in the cases of Canada and South Africa, are by no means negligible. In addition, it neglects the possibility of external influences operating on the economy through speculative movements of short terms funds — a phenomenon which has also been experienced in Canada (57) and South Africa. The table does suggest, however, not

(53) Op. cit.

(54) Ibid., p. 159.

(55) Sayers, p. 370.

(56) In the sense of Section 2 above.

(57) Sayers, pp. 144-147.

only the types of influence to which the economies are likely to be exposed, and hence the scope and limitations of central banking, but also the possibilities, in view of the small number of banks, of exercising qualitative as well as quantitative control over banking, behaviour and of supplementing impersonal methods by those of persuasion.

In a review article of this kind, it is neither possible nor desirable to discuss the origin of the four Dominions' central banks in any detail (58). Three (those of Canada, New Zealand, and, to a lesser degree, Australia) were either established under the advice of British experts or subjected to the influence of British views on central banking during their early years. Exceptionally, the Reserve Bank of South Africa (59) was based upon the Banks of Java and the Netherlands with an admixture of principles derived from the Federal Reserve System. Thus the Bank of Canada (60) and the Reserve Bank of New Zealand (61) are, following British theory, «bankers' banks», while the Reserve Bank of South Africa and the Commonwealth Banks of Australia (62) both operate also as commercial banks, the latter in greater measure than the former.

TABLE I

Dominion of:	Exports as %age of Net National Income	Bank Deposits as %age of Money Supply	No. of Trading Bank operating
	(1)	(2)	(3)
	%	%	
Australia . . .	23.9	81.7	7
Canada . . .	22.9	74.0	10
New Zealand . .	30.1	79.0	5
South Africa . .	34.5	81.7	7 (a)

(a) Over 90% of deposits are controlled by two banks.

Sources: Col. 1. Statistical Yearbook of the United Nations, 1951. Col. 2. Ditto. Col. 3. Banking in the British Commonwealth.

• Any generalisation regarding the pre-war development of these four institutions is unavoidably dangerous. It is, however, broadly correct to say that, prior to the outbreak of World War II, none had

(58) Cf. Plumtre, op. cit., Chapters I, II, III, IV and VII and Sayers, Chapters 2, 4, 9 and 11.

(59) Established by the Currency and Banking Act of 1920.

(60) Established by the Bank of Canada Act, 1934.

(61) Established by the Reserve Bank of New Zealand Act of 1933.

(62) Established by the Commonwealth Bank Act of 1911. The first effective step towards central banking was taken by the Act of 1924.

succeeded in consolidating its unquestioned leadership and control over the local financial system though each had made some progress since its establishment. Here again, much of the impetus towards development was provided by the pressure of events during the depression. The emergence of the Commonwealth Bank as leader of the exchange market in Australia provides a useful illustration. Only the Reserve Bank of New Zealand, however, had any experience of sustained attempt to combine central bank credit and deficit finance into a technique of domestic income stabilisation.

Despite this relative immaturity, all four central banks had enjoyed periods of operation of varying lengths during which they were able to make their first attempts at open market operations (63), establish sound relationships with commercial bankers, discover ways in which the domestic banking system could most readily be influenced, and in general, find their feet. It was as well that this was so for the advent of World War II brought these relatively young institutions many problems.

Considerations of space make it impossible to examine the war experience of all four banks. We shall therefore concentrate on that of the Commonwealth Bank of Australia. This choice implies no criticism of the studies of the experience of South Africa (Mr. Day), New Zealand (Professor Simkin), or Canada (Mr. Dorrance).

The effect of war needs in speeding the development of the Commonwealth Bank can be demonstrated very succinctly. In 1936, this Bank, in its evidence to the Australian Royal Commission on Monetary and Banking systems (64), had implied that it considered its existing powers to be inadequate and had asked for:

(a) The right to call upon the overseas funds of the Australian banking system;

and (b) An obligation on the trading banks to maintain with the central bank not less than a fixed percentage of its liabilities to the public.

It felt the need for these powers owing to the limitations imposed by Australian conditions on the «traditional» weapons of discount rate and open market operations.

In practice, the Royal Commission recommended rather wider powers. The political and administrative lags, however, were such that nothing was done before the outbreak of war. The Bank remained, therefore, in what Professor Plumtre called «a state

(63) In general the purpose of these seems to have been the short period of stabilisation of bond prices.

(64) Quoted by Plumtre, op. cit., p. 99.

arrested development» (65). Contrast this position with that prevailing in 1945 — only six years later. By the latter date, because of the exigencies of war, «the Commonwealth Bank» (to quote Mr. Wilson) «had acquired all the legal powers necessary to control the trading banks» (66). These far exceeded the modest requests of 1936. Moreover, during the war years, the Commonwealth Bank had instituted and developed systems of quantitative and qualitative control over commercial banking operations which appear, on Mr. Wilson's account, admirably adapted to Australian requirements. Thus the war had put an end to the state of «arrested development» and brought the Commonwealth Bank to central banking maturity. In addition, the war seems (if I read correctly between Mr. Wilson's lines) to have contributed indirectly by healing old quarrels so that today the Australian trading banks have come to regard the Commonwealth Bank, if not with affection, at least with equanimity.

The wartime tasks of the Commonwealth Bank were by no means simple. The first, and most important of these was, of course, to provide Government with whatever finance it was unable to raise by taxation. Since it was also desired to do this at low interest rates this had to be done while simultaneously reducing the rate structure. The third main task was to exercise quantitative control over credit so as to prevent inflation being brought about by commercial banking expansion. The fourth was to make use of qualitative credit controls so as to assist in the redeployment of productive resources for war needs. The fifth was to erect and operate an effective system of exchange control. And the sixth, though this was probably of lesser urgency, was to control bank profits. The incidence of these tasks naturally varied from year to year. At first, exchange control was the most pressing for Australia, like Canada, entered the war with unemployed resources and thus could afford, at least until the end of 1940, to regard the growth of short term borrowing by Government with a tolerant eye (67). Later, however, as resources became fully employed, quantitative and qualitative credit controls assumed greater significance.

Mr. Wilson's account of the way in which the Commonwealth Bank performed these tasks is of great interest. The Bank's loan policy was, apparently, broadly successful in its main objects of providing Government with the necessary finance and lowering the rate structure. It is particularly noteworthy that it attained its objectives in the latter field less by compulsion than by exercising persuasion since this sug-

gests what can be achieved by a central bank where commercial banks are willing to co-operate fully.

In the field of quantitative and qualitative credit control, the Commonwealth Bank broke new ground. In the former, at least, it devised and made effective use of an entirely novel technique. In both it achieved great success and appears to have done so while maintaining, and even strengthening, friendly relations with the trading banks.

The powers on which its wartime control rested were provided by the National Security (War Time Banking Control) Regulations made by the Curtin Government in 1941. These evolved out of, and in some respects strengthened, the voluntary agreement which had already been reached with the trading banks by the Fadden Government (68).

The principal powers introduced by these Regulations gave the Commonwealth Bank full control over the investment policy of the trading banks. Under them the trading banks were required, when making advances, to «comply with the policy laid down by the Commonwealth Bank from time to time» (69) and to obtain the consent of the Commonwealth Bank «to purchase or subscribe to government, semi-government or municipal loans, or any stock exchange securities» (70). Additional powers established the now well known «special account system» under which the «surplus investible funds» (71) of the trading banks, defined as «the amount by which each trading bank's total assets exceeded the average of its total assets in Australia at the weekly balancing days in the month of August 1939», were to be deposited in Special Accounts with the Commonwealth Bank. These deposits could not be drawn upon save with the consent of the Commonwealth Bank. They carried interest at the rate of  $\frac{3}{4}\%$  per annum.

From certain points of view, the Special Account system is similar to that of the Treasury Deposit Receipt introduced in the United Kingdom (72). In practice, however, the Australian system places even greater restrictions on the commercial banks and gives the central bank a correspondingly greater control. Mr. Wilson's essay leaves no doubt that the system was effective. He makes it clear, a point which is emphasised by Dr. Sen (73), that the system not only provided an effective method of quantitative control in an environment in which, due to the narrowness

(68) It is an interesting if fruitless speculation as to whether similar results would have been achieved with the voluntary system proposed by the Fadden Government.

(69) Sayers, p. 61.

(70) Ibid.

(71) Ibid., p. 62.

(72) Ibid., p. XV.

(73) Sen., Chapter 6.

(65) Ibid., p. 101.

(66) Sayers, p. 52.

(67) Cf. Sayers, p. 63 and pp. 138-139.

of the market, open market operations were inappropriate, but also provided for flexibility of administration not only between one period and another but also between banks. In view of the touchiness of commercial bankers (quite understandably), in regard to discriminatory controls, the Commonwealth Bank must have operated the scheme with great good sense and tact. Without this, not only would flexibility have been difficult to achieve but the subsequent extension of the system into the postwar period would almost inevitably have provoked strong opposition, — particularly in Australia where the history of banking legislation has been anything but calm.

In the field of qualitative control of advances, the Commonwealth Bank seems to have laid down fairly detailed sets of rules to be followed by the commercial banks. These were amended and supplemented from time to time as conditions changed. At all times, the Commonwealth Bank stood ready to give advice on particular problems. And in this sphere also, it seems to have been successful in achieving flexibility and in attaining its objectives with the minimum of friction.

The powers granted to the Commonwealth Bank in war, and its successful use of them, led to its emerging from hostilities as a fully fledged and effective central bank. As a result of legislation introduced in 1945 (74), many of the wartime powers were made permanent and, in some cases, new powers were added. There can be no doubt that the Bank is now a mature and experienced central bank equipped with powers proved by the hardest of tests to be well adapted to Australia's special needs.

In addition to being Australia's central bank, the Commonwealth Bank also engages in commercial operations. Mr. Wilson does not, in his essay, go into this aspect of its war experience in any great detail. He does, however, express some doubt as to the Bank's ability to be wholly objective (75) in determining the advances policies of its trading departments and remarks on the strangeness of the direction, contained in the 1945 legislation, that the Bank «develop and expand its general banking business» (76). The question of whether or not central banks should engage in commercial banking operations is discussed very fully by Dr. Sen (77). Three points, none of them new, are, however, worth recalling.

First, central banking powers of control are notoriously asymmetrical. The capacity to check a boom is always greater than the capacity to check a recession or reflate after a slump if only for the reason that

(74) The Banking Act of 1945.

(75) Sayers, p. 85.

(76) Ibid.

(77) Sen, Chapter 7. The reader is referred to Dr. Sen's discussion for a more comprehensive treatment of this question.

commercial banks cannot be forced to lend. In the task of stimulating an expansion, direct contact between the central bank and the public may well be useful. This is a point mentioned by Mr. Wilson.

Second, where commercial banking is highly concentrated, it may lack flexibility. A competing central bank may promote a more enterprising outlook on the part of the commercial bankers or, failing this it may, itself, enter any particular field to supplement the existing financial organisation (78).

Third, and most important, whether any central bank which is also a commercial bank will allow its trading activities to prejudice its main purpose depends, ultimately, upon its own good sense. On this point, nothing of the slightest consequence can be said *a priori* for it is as much a matter of personalities as anything else and in these, judging by Mr. Wilson's account of its wartime achievements, the Commonwealth Bank must be well endowed.

## 5. Central Banking Techniques.

The central banks established in the older Dominions during the inter-war period suffered from the tendency to legislate for essentially «orthodox» institutions based, in general, upon the Bank of England and relying, for their control of the commercial banks, on the traditional techniques of Bank Rate and open market operations (79). For the detached observer it was frequently difficult to see what use could be made of these techniques of control in the absence of developed money and security markets (80). Two questions therefore arose: first, in such conditions, are the «traditional» devices fruitful or not? Second, if they are not, what techniques are likely to be fruitful? Dr. Sen's little book is a careful, detailed, and valuable attempt to provide answers to these two questions (81). To do so, he considers not only the experience of central banks within the Commonwealth but also that of the central banks of certain Latin American countries. He defines his subject, as his title implies, with reference to the stage of evolution reached by the money market. His study therefore begins with a definition of a money market and a discussion of the characteristics of both developed and undeveloped markets. Then, assuming the latter, he

(78) Cf. R.S. Sayers, «Modern Banking», 1st Edition, pp. 299-302.

(79) Cf. Sayers, p. vii, where he refers to «reform plans from time to time (which) have borne the stamp of standardised products designed for standardised markets» and Plumtre, op. cit. especially, pp. 256-261.

(80) Cf. R.S. Sayers, «Modern Banking», 2nd Edition, pp. 288-304 and Plumtre, op. cit., pp. 183-192.

(81) Dr. Sen also considers other questions.

examines the efficacy of various techniques of central banking control.

In general, Dr. Sen is sceptical of the effectiveness of the two «traditional» weapons. He points out that, in the absence of continuous rediscounting at the central bank, Bank Rate is not likely to achieve its primary object of bringing about changes in other short term rates. The absence of rediscounting he explains by three factors: first, the historical fact that, prior to the advent of central banks, commercial banks, in many cases, became habituated to holding their own secondary reserves and thus to accepting considerable fluctuations in their cash ratios; second, the pursuit of cheap money policies during the thirties which kept the commercial banks highly liquid; and third the lack of demand for bank advances. Since two, at least, of these are now absent, Dr. Sen has some hope that rediscounting will grow in the future sufficiently to make Bank Rate effective. But, even if Dr. Sen's optimism in this respect is justified, is Bank Rate likely to be an effective weapon in the wider economic sense?

The primary effect of raising Bank Rate is to encourage an inflow of short term capital. This, however, is only true of countries whose money markets are international centres. And today it is probably of limited validity even in the case of London since currency stability is far from assured. As a device for protecting the balance of payments of the type of economy Dr. Sen has in mind it can hardly be of much consequence. Its effect therefore depends upon the sensitivity of domestic investment to changes in interest rates. This is not a question which Dr. Sen discusses at any length (82). But both Professor Simkin (83) and Mr. Gunasakera (84), writing of the type of economy Dr. Sen must be considering, expressed scepticism on this score.

It should, of course, be obvious that, for a dependent economy experiencing an export boom, the greater the primary effect of raising Bank Rate, the worse the position since there is no need to protect the balance of payments, and an inflow of short term capital merely adds further to bank liquidity. Moreover, as Dr. Sen notes, in such a boom bank liquidity will be increasing anyway and in consequence there will be less need to rely on central bank discounting. The conclusion must be that Bank Rate is unlikely

(82) It is a possible criticism of Dr. Sen's work that he unduly neglects the wider economic implications of central banking control. Thus there is no discussion of the sort of fluctuation in money incomes which economics of the type he has in mind are likely to experience and, in particular, whether fluctuations are likely to be domestic or external in origin. In this respect, his book might have been improved by expansion.

(83) Sayers, pp. 349-350.

(84) *Ibid.*, pp. 415-416.

to be a useful device. One wonders, too, just how domestic booms are likely to arise in the economies Dr. Sen has in mind? In my view, the most likely cause is to be found in excessive Government expenditure. Bank Rate is surely an unnecessarily clumsy way of dealing with this even if effective.

As regards the second of the traditional weapons, open market operations, Dr. Sen is also sceptical. His chapter on this subject, together with an Appendix on the special security sales undertaken by the Central Bank of Argentina, repays careful study. His conclusion, however, is that less orthodox weapons are necessary for effective central banking control. The first of these which he examines is that of variable reserve ratios.

Dr. Sen's discussion of the device of variable reserve ratios is not always easy to follow. Professor Plumptre's scepticism with regard to such devices is, of course, well known (85). Dr. Sen, puts a not dissimilar view as follows:

«If the central bank is to control the lending policies of banks by asking them to maintain different cash ratios at different periods, this presupposes two things; first, banks should determine their lending policy on the basis of their cash reserves; and secondly, banks are in the habit of maintaining reasonably fixed ratios between deposits and cash balances» (86).

In my view, Dr. Sen is here in error. It is precisely the merit of legally imposed reserve ratios (not necessarily cash ratios alone) that they *compel* banks to maintain a defined reserve position. Plainly, if with a given volume of bank cash reserves, a legal ratio is imposed, this defines a maximum of deposits. This is so quite independently of the attention the banks would otherwise have paid to their cash ratio (87). Admittedly, if the banks hold overseas assets which can be sold to the central bank, they can increase their cash reserve though at same cost. This makes expansion possible as far as the legal ratio is concerned. But expansive tendencies could easily be checked by adjustment of the ratio or even perhaps, insistence that the commercial banks should maintain an internationally balanced position. Another possibility would be the imposition of legal «liquid asset» ratios. This would prevent the substitution of foreign claims for local cash.

Apart from this minor error and a tendency to fail to distinguish clearly between a change in bank cash

(85) Plumptre, pp. 269-278.

(86) Sen, p. 92.

(87) Cf. Sen, pp. 93-4. If this were not the case, some of the objections made by commercial bankers to compulsory reserve ratios would be quite inexplicable. It is, of course, true that variable reserve ratios are asymmetrical: that is they are more effective in bringing about contraction than expansion. This point, however, is so familiar as to be trivial.

reserves and a change in bank reserve ratios, Dr. Sen's discussion of the variable ratio devices is very useful. It seems possible, however, that he may be attaching too great significance to the risk that, if the central bank is able to vary ratios between banks, the commercial banks will object vigorously on the grounds of discrimination. The fact that variable reserve ratios are usually nondiscriminatory in this sense is Dr. Sen's main reason for preferring them to the Australian Special Account system. To this latter system, he devotes a most stimulating chapter which, significantly enough, concludes as follows:

«That the (Special Account) system is more effective in establishing the control of the Central Bank over each bank than the latter method (variable reserves) cannot be doubted. So far this system has worked fairly smoothly. Much of the success of this system in Australia is due to the small number of banks existing in that country, and to the high sense of co-operation shown by them. But there is a danger that the very sharpening of this instrument may tend to make it more difficult in operation. Its discriminatory consequences are bound, in the long run, to create much heart burning among banks.

The method of variable reserve ratios, with the power of fixing different ratios for particular groups of banks *on special occasions*, will prove effective in achieving all the objects secured by the working of this system» (88).

With this conclusion I am not entirely in sympathy. In the first place, it is not a simple matter to say what form of control the banks will characterise as discriminatory. Since the business of different banks is far from identical, a control which imposed identical ratios on each might generate far more friction than one which, being discriminatory in Dr. Sen's sense of the term, imposed dissimilar ratios. Second, the Special Account system is, on Dr. Sen's own analysis, «highly flexible» (89). Flexibility in central banking controls is always desirable. Hence, the Special Account system is almost certainly superior. The choice between the two techniques should therefore rest upon the circumstances of each particular case, with a general presumption in favour of the Special Account technique. Admittedly, where the number of banks is very great, variable reserve ratios may have to be employed. And Dr. Sen's point here is certainly valid. But commercial banking systems based upon large numbers of commercial banks constitute exceptions rather than the rule (90).

(88) Sen, p. 138. Italics in original.

(89) *Ibid.*, pp. 130-135.

(90) Dr. Sen's emphasis on the importance of the number of banks both in this connection and in relation to qualitative control (pp. 185-186) suggests that he may have had Indian conditions prominently in mind.

Considerations of space make it impossible to discuss Dr. Sen's chapters on the vexed question of whether or not central banks should undertake commercial banking (91), the methods of qualitative control of bank advances (92), and the role of central banks in promoting economic development (93). On each of these, Dr. Sen has interesting and important things to say not all of which, it is perhaps unnecessary to mention, are free from controversy but all of which are worth careful consideration.

## 6. Conclusions.

This review has done less than justice to a number of Professor Sayers' contributors whose essays have hardly been mentioned while, at the same time, its discussion of Dr. Sen's analysis of central banking techniques has been all too brief. In view of this, it is perhaps, advisable to repeat that this implies neither adverse criticism of the essays which have been neglected nor of Dr. Sen's work. Rather it reflects the impossibility of dealing adequately with some seven hundred detailed pages within the scope of a single review.

Because of this, only one of the several themes implicit in the two works has been at all fully discussed: that of the place of central banking in dependent economies. This emphasis is, of course, deliberate. There is, as I believe the Ceylon material suggests, a danger that Central Banks, when they come to be established in economies which are both highly dependent and undeveloped, will be expected to produce results in the field of income stabilisation which are beyond their compass. This may not only lead to the disappointed expectations of their proponents but also to the neglect of those tasks, principally in the field of banking and financial development, which central banks may usefully perform in territories in which both the need for and the means of monetary control are absent. Since the danger is a real one, both the limitations and scope of central banking in such territories seemed worthy of emphasis.

As we have seen, where there is scope for monetary control, questions of technique demand examination. By and large, those countries within the Commonwealth in which discretionary action by a central bank

(91) Sen, pp. 147-157. In this chapters the writer might have mentioned the evidence available from Uruguay where the central bank (Banco de la Republica Oriental del Uruguay) which is also the dominant commercial bank, was notably successful in stabilising both the money supply and the price level in the face of a favourable balance of payments during the war.

(92) Sen, pp. 158-186.

(93) *Ibid.*, pp. 205-232.

is likely to be effective appear to be well equipped and the institutions which were established in the twenties and thirties seem to have developed rapidly under the stress of war. There are, however, some dangers in a comparative study of techniques such as Dr. Sen provides — however ably it is carried out. This is so because the implicit assumption of such studies is that techniques which have been found effective in one country are likely to prove fruitful in others in which economic and financial conditions are approximately similar. This may not always be the case. Central banking when all is said and done remains an art the exercise of which must depend, in large matter, upon the attitudes of commercial bankers. These may differ very significantly. Thus, for example, the Australian «special account» technique, which has suited Australia, might cause endless friction if applied elsewhere. Conversely, the variable reserve ratio device, which Dr. Sen advocates, might have caused friction in Australia. There is, in fact, a danger that comparative studies of technique may lead to a more sophisticated form of the type of error which was made in respect of some of the older

Dominions' central banks. In their cases, it was all too often assumed that the techniques employed by the Bank of England would suffice. In the absence of developed money and security markets this was a rash assumption even on narrowly technical grounds. Equally, even if greater consideration is given to the economic and financial attributes of territories, it will be unwise to assume too easily that techniques which are effective in A will necessarily prove effective in B. They may; but it would be rash to be over sanguine.

Both books contain minor errors and some omissions; of the latter, perhaps the most important is the failure to consider at any length exchange manipulation as a device at the disposal of central banks for achieving the objective of income stabilisation (94). Neither errors nor omissions however, make any important inroads on the undoubted interest both studies have for all serious students of banking. From this point of view, both books are to be strongly recommended.

(94) Cf. Plumptre, op. cit., pp. 382-393 and H.C. Wallich, op. cit., pp. 217-253.

## STATISTICAL APPENDIX

Table A

DEPOSITS AND CURRENT ACCOUNTS IN ITALIAN BANKING SYSTEM AND POSTAL SAVINGS BANKS  
(index numbers, 1938=1)

End of period	Banking System (a)						Postal Savings Banks						Percent ratio to deposits and c/a of banking system
	Deposits		Current Accounts (b)		Total		Deposits		Current Accounts		Total		
	Mil-liards of lire	Index numbers	Mil-liards of lire	Index numbers	Mil-liards of lire	Index numbers	Mil-liards of lire	Index numbers	Mil-liards of lire	Index numbers	Mil-liards of lire	Index numbers	
1948 . . . . .	805	21	715	41	1,520	27	342	12	51	46	393	13	25.8
1949 . . . . .	1,016	27	933	55	1,949	35	522	18	135	122	657	22	33.7
1950 . . . . .	1,172	31	1,063	62	2,235	41	689	24	128	116	816	27	36.5
1951 . . . . .	1,364	36	1,324	78	2,688	49	796	27	160	145	956	32	35.5
1952 - March . . . . .	1,420	37	1,355	80	2,775	50	834	29	149	135	983	33	35.4
June . . . . .	1,455	38	1,435	84	2,890	52	855	29	172	156	1,027	34	35.5
September . . . . .	1,567	41	1,510	88	3,077	56	890	31	190	173	1,080	36	35.1
December . . . . .	1,688	44	1,647	96	3,335	60	963	33	197	179	1,160	38	34.7
1953 - January . . . . .	1,703	45	1,626	95	3,329	60	990	34	193	175	1,183	39	35.5
February . . . . .	1,714	45	1,613	94	3,327	60	1,003	34	192	174	1,195	39	35.9
March . . . . .	1,730	45	1,662	98	3,392	62	1,012	35	189	171	1,200	40	35.3
April . . . . .	1,743	45	1,660	98	3,403	62	1,024	35	202	183	1,226	41	36.0
May . . . . .	1,759	46	1,681	99	3,440	62	1,036	36	200	182	1,236	41	35.9
June . . . . .	1,785	47	1,699	100	3,484	63	1,052	36	197	179	1,249	42	35.8

(a) The data refer to 365 banks (commercial and saving banks) which hold about 99% of the total deposits collected by all Italian banks.

(b) Inter-bank current accounts are excluded.

Source: *Bollettino* of the Bank of Italy.

DEPOSITS, CURRENT ACCOUNTS AND ASSETS OF ITALIAN BANKS (a)  
(millions of lire)

Table B

Items	31.12.50	31.12.51	31.3.52	30.6.52	31.12.52	31.3.53	30.6.53
Amount outstanding							
Deposits and current accounts . . . . .	2,234,906	2,686,037	2,776,883	2,893,738	3,335,350	3,391,847	3,484,279
Cash and sums available at sight . . . . .	221,621	294,938	224,778	219,283	345,027	268,243	277,966
Fixed deposits with the Treasury and other Institutions . . . . .	280,417	342,529	392,791	399,324	423,403	423,486	432,139
Government Securities (b) . . . . .	516,469	610,698	682,513	694,284	674,086	718,526	735,383
Credits to clients (c) . . . . .	1,801,656	2,135,381	2,165,849	2,230,372	2,649,294	2,696,513	2,793,070
Index Numbers: 31-12-1948=100							
Deposits and current accounts . . . . .	147.0	176.8	182.6	191.6	210.3	223.1	229.1
Cash and sums available at sight . . . . .	131.0	174.5	133.0	129.7	204.1	158.6	164.4
Fixed deposits with the Treasury and other Institutions . . . . .	157.7	192.7	221.0	224.6	238.2	238.2	243.1
Government Securities (b) . . . . .	129.9	153.6	171.7	174.6	169.7	180.7	185.-
Credits to clients (c) . . . . .	157.2	186.3	189.0	194.6	231.1	235.3	243.7
% of deposits and current a/cs							
Cash and sums available at sight . . . . .	9.0	10.9	8.0	7.6	10.3	7.9	7.9
Fixed deposits with the Treasury and other Institutions . . . . .	12.5	12.7	14.1	13.8	12.6	12.4	12.4
Government Securities (b) . . . . .	23.1	22.7	24.5	23.9	20.2	21.1	21.1
Credits to clients (c) . . . . .	80.6	79.4	77.9	77.0	79.4	79.4	80.1

(a) The data refer to 365 banks (commercial and savings banks) which hold about 99% of the total deposits collected by all Italian banks.

(b) Treasury bills and other Government securities. Nominal value.

(c) Includes: bills on hand, rediscount at the Bank of Italy, contingents, advances, current accounts, credits abroad, loans recoverable on salaries, credits on note of hand, mortgage loans, current accounts with sections for special credits, non-Government securities, participations.

Source: *Bollettino* of the Bank of Italy.

ADVANCES OF THE BANKING SYSTEM AND MEDIUM AND LONG-TERM CREDIT INSTITUTES  
(amounts outstanding - end of period data)

Table C

Categories of credit institutes	1938		1951		1952			
	millions of lire	%	milliards of lire	%	milliards of lire	%	Index numbers	
							1938=1	1951=100
Banking system (a) . . . . .	35,536	66.1	1,940.6	71.0	2,404.0	71.2	67.6	123.0
Institutes for industrial credit . . . . .	8,779	16.3	566.2	20.7	696.9	20.7	79.3	123.0
Institutes for mortgage real estate credit . . . . .	6,091	11.3	74.3	2.7	99.0	2.9	16.3	133.2
Institutes for agrarian credit:								
— Commodity pools . . . . .	2,113	3.9	128.1	4.7	144.2	4.3	68.2	112.6
— Land improvement credit . . . . .	1,260	2.4	23.9	0.9	31.0	0.9	24.6	129.7
<b>Total . . . . .</b>	<b>53,779</b>	<b>100.00</b>	<b>2,733.0</b>	<b>100.00</b>	<b>3,375.1</b>	<b>100.00</b>	<b>62.8</b>	<b>123.5</b>

(a) Includes commercial and savings banks. The figures for « credits to clients » given for the banking system in this Table differ from the data reported on Table B owing to a different recording system (see on this matter, this Review No. 8, January-March 1949, Explanatory Notes, pag. 70).

Source: Report of the Governor of the Bank of Italy for 1952.

ADVANCES OF THE BANKING SYSTEM, BY BUSINESS BRANCHES (a)  
(amounts outstanding)

Table D

Business branches	December 31, 1938		December 31, 1951		December 31, 1952			
	millions of lire	% of total	milliards of lire	% of total	milliards of lire	% of total	Index numbers	
							1938=1	1951=100
1. Personal (professional consumer, etc.) . . . . .	4,139	11.65	136.5	7.1	158.3	6.6	38.6	115
2. Public Institutions (Institutions for specialized activities excluded) . . . . .	5,163	14.53	102.4	5.3	106.6	4.5	20.5	104
3. Banks, exchanges, fin. and insurance Cos. . . . .	3,398	9.56	88.5	4.5	100.7	4.2	29.6	113
4. Transport and communications . . . . .	547	1.53	50.1	2.6	63.9	2.6	127.8	127
5. Electric power, gas, water . . . . .	319	0.89	31.3	1.6	49.2	2.0	164.1	157
6. Hotels, entertainments . . . . .	286	0.80	22.7	1.2	27.8	1.2	92.6	122
7. Building and real estate, public works, land reclamation . . . . .	4,211	11.84	132.0	6.8	167.1	7.0	39.7	126
8. Agriculture and agricultural equipment and supply trades . . . . .	3,451	9.71	125.7	6.5	138.8	5.8	40.2	110
9. Cereals, foodstuffs, drink . . . . .	4,315	12.15	412.1	21.2	527.8	21.9	122.3	128
10. Wood and related products . . . . .	510	1.44	47.1	2.4	60.4	2.5	118.4	128
11. Non-metallic ores . . . . .	909	2.56	104.8	5.4	134.4	5.6	147.8	128
12. Steel, metal and engineering products . . . . .	3,184	8.96	219.9	11.3	302.7	12.6	95.1	137
13. Chemical products . . . . .	588	1.66	62.4	3.2	74.4	3.1	126.5	119
14. Paper and printing . . . . .	351	0.99	28.3	1.5	31.7	1.3	90.3	112
15. Hide and skins . . . . .	576	1.63	43.1	2.2	51.2	2.1	88.8	118
16. Textile products and clothing . . . . .	2,238	6.29	222.3	11.5	270.9	11.3	121.0	121
17. Other trades and industries . . . . .	172	0.49	27.3	1.4	32.2	1.3	187.2	117
18. Retail trade and miscellaneous services . . . . .	1,179	3.32	84.1	4.3	105.9	4.4	89.8	125
<b>Total . . . . .</b>	<b>35,027</b>	<b>100</b>	<b>1,940.6</b>	<b>100</b>	<b>2,404.0</b>	<b>100</b>	<b>67.6</b>	<b>123</b>
<i>Index numbers: 1938=1 . . . . .</i>	<i>1</i>		<i>54.6</i>		<i>67.6</i>			

(a) Commercial and savings banks.

Source: *Bollettino* of the Bank of Italy.

FUNDS RAISED IN THE CREDIT AND CAPITAL MARKET, IN 1952,  
BY SOURCE AND ECONOMIC BRANCHES  
(annual increases - in milliards of lire)

Table E

Business branches	Banking system loans (a)	Loans of institutes for industrial credit	Loans of institutes for agrarian and real estate credit	Share	Debentures	Total	%
1. Personal (professional, consumer, etc.) . . . . .	21.8	—	—	—	—	21.8	2.9
2. Public Institutions (Institutions for specialized activities excluded) . . . . .	4.2	—	—	—	—	4.2	0.6
3. Banks, exchanges, financial and insurance Cos. . . . .	12.2	5.7	—	4.9	—	22.8	3.0
4. Transport and communications . . . . .	13.8	18.0	—	1.1	0.1	33.0	4.3
5. Electric power, gas, water . . . . .	17.9	48.5	—	24.5	7.3	98.2	12.9
6. Hotel, entertainments . . . . .	5.1	3.3	—	1.6	—	10.0	1.3
7. Building and real estate, public works, land-reclamation . . . . .	35.1	7.9	30.1	1.5	—	74.6	9.8
8. Agriculture and agricultural equipment and supply trades . . . . .	13.1	—	7.1	2.5	—	22.7	3.0
9. Cereals, foodstuffs, drink . . . . .	115.7	2.9	10.7	3.4	—	132.7	17.4
10. Wood and related products . . . . .	13.3	0.5	—	0.1	—	13.9	1.8
11. Non-metallic ores . . . . .	29.6	4.4	—	2.0	0.8	36.8	4.8
12. Steel, metal and engineering products . . . . .	82.8	17.7	—	46.0	4.0	150.5	19.8
13. Chemical products . . . . .	12.0	18.3	—	14.3	—	44.6	5.9
14. Paper and printing . . . . .	3.4	1.1	—	0.9	0.2	5.6	0.7
15. Hides and skins . . . . .	8.1	0.5	—	0.1	—	8.7	1.1
16. Textile products and clothing . . . . .	48.6	4.3	—	2.2	—	55.1	7.2
17. Other trades and industries . . . . .	4.9	2.1	—	1.5	0.1	4.4	0.6
18. Retail trade and miscellaneous services . . . . .	21.8	0.3	—	0.4	—	21.9	2.9
<b>Total 1952 . . . . .</b>	<b>463.4</b>	<b>130.7</b>	<b>47.9</b>	<b>107.0</b>	<b>12.5</b>	<b>761.5</b>	<b>100.0</b>
<b>% . . . . .</b>	<b>60.9</b>	<b>17.2</b>	<b>6.3</b>	<b>14.1</b>	<b>1.5</b>	<b>100.0</b>	
<b>Total 1951 . . . . .</b>	<b>269.9</b>	<b>143.0</b>	<b>34.8</b>	<b>79.7</b>	<b>7.4</b>	<b>534.8</b>	
<b>% . . . . .</b>	<b>50.4</b>	<b>26.7</b>	<b>6.6</b>	<b>14.9</b>	<b>1.4</b>	<b>100.0</b>	
<b>Total 1950 . . . . .</b>	<b>323.2</b>	<b>90.8</b>	<b>30.0</b>	<b>89.6</b>	<b>107.6</b>	<b>641.2</b>	
<b>% . . . . .</b>	<b>50.4</b>	<b>14.2</b>	<b>4.7</b>	<b>13.9</b>	<b>16.8</b>	<b>100.0</b>	
<b>Total 1938 (million lire) . . . . .</b>	<b>2,192</b>	<b>1,974</b>	<b>0,340</b>	<b>1,697</b>	<b>1,32</b>	<b>5,235</b>	
<b>% . . . . .</b>	<b>41.87</b>	<b>18.61</b>	<b>6.49</b>	<b>32.42</b>	<b>6.11</b>	<b>100.0</b>	

(a) Commercial and savings banks.

Source: Report of the Governor of the Bank of Italy for 1952.

NEW ISSUES OF INDUSTRIAL SECURITIES AND MORTGAGE BONDS

Table F

Period	Stock Companies				Debentures of Institutes for medium and long-term credit		Total	
	Share		Debentures		Current lire	1938 lire (a)	Current lire	1938 lire (a)
	Current lire	1938 lire (a)	Current lire	1938 lire (a)				
1938	1,697	1,697	32	32	348	348	2,077	2,077
1945	498	24	341	17	2,484	120	3,323	161
1946	9,493	329	595	21	12,059	418	22,147	768
1947	62,146	1,205	2,176	42	14,728	285	79,050	1,532
1948	86,104	1,582	24,358	447	36,614	673	147,076	2,702
1949	89,580	1,733	107,587	2,081	46,926	908	244,093	4,722
1950	65,520	1,336	32,678	666	47,885	976	146,083	2,978
1951	81,385	1,458	7,402	133	53,471	958	142,258	2,549
1952	107,039	2,031	12,462	237	136,507	2,590	256,008	4,858

(a) The conversion of current lire in 1938 lire has been made on the basis of wholesale price index as calculated by the Central Institute of Statistics.

Source: Report of the Governor of the Bank of Italy for 1952.

## NOTE CIRCULATION, PRICES, WAGES AND SHARE QUOTATIONS IN ITALY

(Index Numbers, 1938=100)

Table G

Year or month	Note Circulation (a)		Wholesale prices (c)		Cost of Living (c)	Wage rates in industry (c)	Share quotations (b)	Fine gold	
	Amount (b) (milliards of lire)	Index	All commodities	Foodstuffs				Price of one gram (lire) (d)	Index
1950 - December	1,176.1	5,228	5,406	5,567	5,009	5,962	1,589.1	919	3,535
1951 - December	1,304.2	5,796	5,454	5,355	5,416	6,685	1,714.9	885	3,403
1952 - March	1,216.3	5,408	5,323	5,149	5,475	6,732	1,930.4	859	3,304
June	1,224.5	5,422	5,133	5,491	5,559	7,055	1,872.3	795	3,058
September	1,307.3	5,819	5,265	5,511	5,615	7,380	2,036.9	794	3,054
December	1,411.1	6,271	5,288	5,624	5,612	7,426	2,316.6	770	2,961
1953 - January	1,329.4	5,909	5,264	5,614	5,603	7,426	2,492.1	789	3,035
February	1,307.1	5,809	5,243	5,579	5,614	7,525	2,452.5	778	2,992
March	1,310.3	5,823	5,264	5,656	5,613	7,525	2,344.8	765	2,942
April	1,298.1	5,769	5,234	5,677	5,668	7,525	2,219.4	754	2,900
May	1,257.0	5,586	5,253	5,717	5,702	7,525	2,267.7	757	2,911
June	1,288.6	5,727	5,259	5,704	5,718	7,525	2,244.2	755	2,903

(a) End of year or month. Includes: Bank of Italy notes and Treasury notes; (b) *Bollettino* of the Bank of Italy; (c) *Bollettino Mensile di Statistica* issued by the Central Institute of Statistics; (d) Business Statistics Centre of Florence.

PRICES AND YIELDS OF ITALIAN SECURITIES BY MAIN CATEGORIES  
(annual or monthly averages)

Table H

Year or month	Government Securities								Share Securities	
	Bonds				Treasury Bonds					
	Consolidated		Redeemable		Average		Average		Price (index number '38=100)	Yield (per cent per annum)
	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)		
1950 - a. av.	105.4	5.13	93.4	6.06	93.6	5.68	93.6	5.83	1,528.2	5.44
1951 - » »	101.9	5.30	88.2	6.42	97.3	6.06	89.1	6.12	1,676.2	6.56
1952 - » »	101.5	5.32	87.3	6.48	87.1	6.07	88.6	6.15	1,618.3	7.12
1952 - March	99.6	5.42	87.3	6.48	86.4	6.12	88.2	6.18	1,930.4	6.13
June	100.9	5.35	90.6	6.25	92.0	5.75	93.3	5.84	1,872.3	6.57
September	102.3	5.28	94.5	5.99	93.1	5.68	95.1	5.73	2,036.9	6.18
December	102.5	5.27	91.0	6.22	87.9	6.02	90.4	6.03	2,316.6	5.54
1953 - January	101.5	5.32	90.6	6.25	86.4	6.12	89.3	6.10	2,492.1	5.25
February	100.7	5.36	90.1	6.28	85.7	6.17	88.6	6.15	2,452.5	5.46
March	100.4	5.38	88.9	6.37	86.3	6.13	88.8	6.14	2,344.8	5.31
April	100.2	5.39	87.8	6.45	88.0	6.01	89.8	6.07	2,219.4	5.83
May	100.2	5.39	88.0	6.43	87.1	6.07	89.2	6.11	2,267.7	6.08
June	99.6	5.42	87.5	6.47	86.0	6.15	88.3	6.17	2,244.2	6.37

Source: *Bollettino* of the Bank of Italy.

WHOLESALE PRICES BY GROUPS OF COMMODITIES  
(Index Numbers, 1938=100)

Table I

Year or month	All Commodities	Foodstuffs		Textiles	Hides, Skins and Footwear	Raw materials, metal and engineering products	Fuels and lubricants	Chemical raw materials and products	Lumber	Paper goods	Bricks, Lime and Cement	Glass
		Vegetable	Animal									
1950 - a. av.	4,905	4,746	6,401	6,015	4,191	5,228	3,784	5,302	5,677	4,778	6,106	4,928
1951 - » »	5,581	4,821	7,289	7,621	5,213	6,689	4,666	6,008	7,250	8,318	6,603	4,878
1952 - » »	5,270	4,869	6,696	6,343	4,245	6,767	4,440	5,717	8,344	6,246	7,216	4,707
1952 - March	5,323	4,709	6,969	6,604	4,406	7,060	4,597	5,866	8,599	7,340	7,150	4,707
June	5,133	4,668	6,295	6,241	3,945	6,777	4,386	5,718	8,419	6,168	7,220	4,707
Sept.	5,265	4,987	6,675	6,194	4,292	6,686	4,343	5,588	8,133	5,362	7,357	4,707
Dec.	5,288	5,141	6,757	6,014	4,230	6,396	4,310	5,530	8,372	5,320	7,240	4,707
1953 - Jan.	5,264	5,180	6,620	6,009	4,311	6,200	4,277	5,491	8,404	5,281	7,238	4,707
Febr.	5,243	5,212	6,415	6,016	4,270	6,079	4,218	5,425	8,404	5,286	7,246	4,644
March	5,264	5,283	6,502	6,030	4,243	5,959	4,154	5,411	8,404	5,302	7,231	4,644
April	5,234	5,344	6,426	5,997	4,127	5,739	4,061	5,364	8,411	5,302	7,205	4,644
May	5,253	5,507	6,174	6,030	4,061	5,653	4,006	5,331	8,452	5,290	7,169	4,644
June	5,259	..	..	6,039	4,036	5,642	4,006	5,286	8,387	5,214	7,163	4,644

Source: *Bollettino Mensile di Statistica*.

## NATIONAL INDEX OF LIVING COST

(1938=100)

Table L

Year or month	All Items	Foodstuffs	Clothing	Heating and lighting	Housing	Miscellaneous
1950 - a. av.	4,849	5,877	5,742	3,480	730	4,610
1951 - » »	5,320	6,279	6,975	3,746	1,232	5,248
1952 - » »	5,546	6,541	6,415	4,031	1,565	5,501
1952 - March	5,475	6,419	6,596	3,997	1,539	5,532
June	5,559	6,566	6,410	3,991	1,576	5,436
September	5,615	6,651	6,261	4,077	1,618	5,491
December	5,612	6,633	6,218	4,100	1,656	5,516
1953 - January	5,603	6,617	6,212	4,118	1,656	5,523
February	5,614	6,621	6,198	4,122	1,705	5,540
March	5,613	6,619	6,203	4,105	1,705	5,546
April	5,668	6,705	6,196	4,099	1,705	5,557
May	5,702	6,759	6,193	4,081	1,709	5,557
June	5,718	6,788	6,185	4,077	1,713	5,549

Source: *Bollettino Mensile di Statistica*.

## WAGES AND SALARIES IN ITALY

(gross retributions - inclusive of family allowances)  
(Index Numbers, 1938=100)

Table M

Categories	1952	1953					
	a. av.	January	February	March	April	May	June
<b>Industry:</b>							
Specialized workers	6,199	6,469	6,542	6,542	6,542	6,542	6,542
Skilled workers	6,846	7,165	7,237	7,237	7,237	7,237	7,237
Ordinary workers and semi-skilled labourers	7,268	7,617	7,718	7,718	7,718	7,718	7,718
Labourers	7,836	8,224	8,371	8,371	8,371	8,371	8,371
<b>General index of Industry</b>	7,090	7,426	7,525	7,525	7,525	7,525	7,525
<b>Agriculture</b>	7,464	7,999	7,999	7,999	7,999	7,999	7,999
<b>Government Civil Employees:</b>							
Group A (a)	3,766	3,962	3,962	3,962	3,962	3,962	3,962
Group B (b)	3,759	3,927	3,927	3,927	3,927	3,927	3,927
Group C (c)	4,536	4,693	4,693	4,693	4,693	4,693	4,693
Subordinate staff	5,174	5,297	5,297	5,297	5,297	5,297	5,297
<b>General Index of Government Civil Employees</b>	4,262	4,425	4,425	4,425	4,425	4,425	4,425

(a) Administrative grade; (b) Executive grade; (c) Clerical grade.  
Source: *Bollettino Mensile di Statistica*.

ITALIAN INDUSTRIAL PRODUCTION INDEXES (a)  
(unadjusted, 1938=100)

Table N

Year or month	General Index	Mining	Manufactures										Electric Power
			Total	Food	Textiles	Lumber	Paper	Metal-lurgy	Engineering	Non metallic ores	Chemicals	Rubber	
1950 - a. av.	121	101	116	134	104	59	106	105	122	119	127	132	160
1951 - » »	137	119	131	139	109	62	114	135	130	128	171	152	186
1952 - » »	143	145	136	146	105	62	113	150	142	136	172	142	183
1952 - June	139	132	131	139	96	62	106	149	142	133	166	131	200
December	149	157	142	169	112	55	120	141	143	139	183	150	200
1953 - January	149	180	141	151	110	53	126	138	151	141	184	149	205
February	140	166	133	140	109	56	121	125	147	137	167	146	185
March	155	179	149	151	117	61	130	135	164	173	195	160	192
April	151	170	146	143	116	62	125	133	160	177	195	162	185
May	156	177	149	142	113	61	134	147	159	171	210	156	203
June	152	165	146	142	109	56	124	150	153	154	210	148	199

(a) On the problem of index numbers on Italian industrial production, see this Review, No. 16, January-March 1951: *A Note on the Index Numbers of Italian Industrial Production*, by E. D'ELIA, pag. 34.

Source: *Bollettino Mensile di Statistica*.

Table O

MINIMUM AND MAXIMUM QUOTATIONS OF SOME ITALIAN COMPANIES QUOTED ON STOCK EXCHANGE  
(Lire)

Companies	1952						1953			
	II Quarter		III Quarter		IV Quarter		I Quarter		II Quarter	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
<i>Financial and Insurance</i>										
Strade Ferrate Meridionali (Bastogi) . . . . .	1,489	1,344	1,572	1,359	1,920	1,578	2,160	1,785	1,780	1,543
S.T.E.T. - Soc. Torinese Eserc. Telefonici . . . . .	2,950	2,563	3,050	2,850	3,760	2,940	3,270	2,710	2,990	2,650
La Centrale . . . . .	...	...	...	...	...	...	11,910	9,850	10,540	9,300
Pirelli & C. . . . .	7,010	6,180	8,230	6,990	10,630	8,025	11,910	9,850	1,510	1,349
Assicurazioni Generali . . . . .	8,300	7,450	9,525	8,295	13,020	9,080	14,950	12,000	12,730	10,500
Riunione Adriatica di Sicurtà . . . . .	4,000	2,540	5,600	4,000	6,300	4,700	6,950	5,250	5,625	4,920
<i>Textiles</i>										
Snia Viscosa . . . . .	2,492	1,875	1,935	1,495	1,752	1,475	1,675	1,400	1,400	1,110
Chatillon - Soc. Ital. Fibre Tessili Art. . . . .	2,890	2,470	2,730	2,185	2,765	2,320	2,620	2,250	2,360	1,725
Linificio e Canapificio Nazionale . . . . .	976	1,148	1,035	1,169	1,105	1,298	1,244	927	935	870
Cotonificio Vittorio Olcese . . . . .	2,650	3,780	2,750	3,080	2,790	3,670	3,500	2,405	2,495	2,080
Cucirini Cantoni Coats . . . . .	8,460	5,810	7,350	6,610	9,750	7,000	10,040	8,125	8,890	7,390
Cotonificio Cantoni . . . . .	19,500	17,425	25,800	18,700	13,050	11,600	13,520	11,500	11,400	10,000
Lanificio Rossi . . . . .	13,850	11,150	14,000	13,100	16,590	13,150	16,050	14,250	15,600	14,000
<i>Minerals, Metals and Engineering</i>										
Monte Amiata . . . . .	2,620	2,220	2,960	2,395	3,805	2,850	3,970	3,600	3,800	2,905
Finsider A e B . . . . .	743	639	770	583	710	614	724	515	...	...
Ilva Alti Forni e Acciaierie d'Italia . . . . .	314	265	364	287	370	343	371	284	300	238
Dalmine . . . . .	3,564	3,080	2,845	2,225	2,730	2,420	2,715	2,150	2,055	1,758
Terni . . . . .	265	234	264	230	286	259	290	247	257	196
F.I.A.T. . . . .	510	436	529	461	618	522	664	601	617	553
Ansaldo . . . . .	...	...	...	...	...	...	230	145	170	105
Bianchi Edoardo . . . . .	...	...	...	...	...	...	146	132	456	119
<i>Public Utilities</i>										
Società Edison . . . . .	2,047	1,900	2,193	1,998	2,470	2,107	2,780	2,402	2,508	1,803
C.I.E.L.I. . . . .	2,060	2,340	2,280	2,565	2,465	2,970	3,040	2,720	2,840	2,450
Soc. Adriatica di Elettricità . . . . .	1,075	990	1,084	1,017	1,191	1,040	1,385	1,210	1,265	1,150
S.I.P. - Soc. Idroelettrica Piemonte . . . . .	1,223	1,120	1,273	1,159	1,445	1,272	1,623	1,380	1,403	1,097
Soc. Meridionale di Elettricità . . . . .	1,039	957	1,090	1,027	1,258	1,057	1,408	1,219	1,234	960
Soc. Elettrica Selt - Valdarno . . . . .	3,538	3,345	3,950	3,485	4,425	3,815	4,775	3,850	4,200	3,728
Soc. Romana di Elettricità . . . . .	...	...	...	...	...	...	4,710	3,980	4,220	3,800
Soc. Telefonica Tirrena - Serie A . . . . .	...	...	...	...	...	...	4,710	3,980	...	...
Soc. Telefonica Tirrena - Serie B . . . . .	2,675	2,490	2,920	2,595	3,630	2,800	4,255	3,480	3,460	3,050
Italcable . . . . .	2,960	3,370	3,070	3,950	3,960	4,680	4,950	4,150	4,165	3,700
<i>Foodstuffs</i>										
Eridania - Zuccherifici Nazionali . . . . .	16,900	13,940	20,025	16,830	22,870	19,450	25,700	21,450	24,650	15,550
Soc. Italiana Industria Zuccheri . . . . .	6,490	8,200	8,500	9,525	9,400	10,650	11,700	10,175	12,125	9,875
<i>Chemicals</i>										
Montecatini . . . . .	931	870	1,091	922	1,205	1,081	1,353	1,190	1,138	1,080
A.N.I.C. - Azienda Naz. Idr. Combustibili . . . . .	182	153	170	157	180	155	166	133	153	119
Società Italiana per il Gas . . . . .	24	23	24	21	...	...	...	...	1,288	1,077
<i>Sundry</i>										
Soc. Gen. Immobiliare . . . . .	358	313	454	350	550	435	567	458	479	307
Istituto Romano dei Beni Stabili . . . . .	5,570	4,605	7,450	5,430	8,800	6,980	10,030	7,875	8,890	6,500
Pirelli Soc. per Azioni . . . . .	987	910	1,225	925	1,395	1,205	1,512	1,327	1,425	1,330
Italcementi . . . . .	7,545	6,720	9,770	7,460	10,900	8,970	12,200	10,100	11,525	9,730
Cartiere Burgo . . . . .	6,400	5,640	7,500	6,320	8,970	6,640	10,000	8,530	9,750	8,490

Source: Bollettino Mensile di Statistica.