The Special Account Procedure as a Technique of Central Bank Control

A Study of Fifteen Years of Australian Experience

The Special Account procedure, a variant of variable minimum reserve ratios, was devised during the Second World War. To my knowledge, it is a unique Australian contribution to the art of central banking. It has now been in operation for fifteen years, time enough for a provisional assessment of its merits as a method of central bank control of trading bank liquidity. It is the object of this paper to make such an assessment on the basis of a study of the Commonwealth Bank's use of the technique since 1941 (*).

1. War-Time Origins.

For some years before World War II, it was increasingly being recognised in Australia that the central bank, the Commonwealth Bank, could not exercise adequate control over trading bank liquidity and the volume of bank credit by the classical methods which the Bank of England had developed for the purpose. Scope for open market operations was limited in a narrow bond market. Bank rate was a useless weapon in the absence of a short-term money market. Large seasonal and cyclical fluctuations in the balance of payments required a high degree of flexibility in monetary management. And the young central bank could not place the same reliance on voluntary trading bank co-operation as the Bank of England was able to do.

The Royal Commission on the Australian Monetary and Banking System, which thoroughly ventilated the problem in 1936-37, recommended for emergency use in Australia the device which had recently been adopted in the United States and New Zealand but had not yet been tested by experience, variable legal minimum reserve ratios. The actual recommendation was for legislation empowering the Commonwealth Bank Board, with the consent of the Commonwealth Treasurer, to require every trading bank to keep with the Commonwealth Bank a deposit of an amount not less than a specified percentage of its deposits, the percentage to be variable from time to time at the discretion of the Board within limits fixed by the Treasurer, but the requisition to remain in force for not more than six month at a time and for not more than eighteen months in any two years.

The trading banks strongly opposed the recommendation in public and in private, fundamentally because they were opposed to any effective central bank control of their credit policy. The Commonwealth Bank Board itself shied away from the Royal Commission's recommendation as too drastic and contented itself with a request to the government for a reserve power to require minimum deposits of any figure up to 7½%, or to 10% with the approval of the Treasurer, to be used only if any bank was acting in opposition to central bank policy. Legislation on these lines was

(*) The author is greatly indebted to Mr. E. F. Herbert for generous permission to draw freely, especially for some processed statistics, on his able thesis on « The Operation of the Special Accounts Procedure 1945-54 » (unpublished, University of Western Australia, February 1955); but Mr. Herbert bears no responsibility for any of the opinions expressed in this paper. All banking and other statistics in the paper, where not otherwise indicated, are taken from official sources.

approved by Cabinet in April 1938, but was never brought down before the war intervened (1).

For the first two years of the war, domestic monetary policy continued to rely on voluntary co-operation between the central bank and the trading banks. But from the beginning of 1941, the effect of mounting government expenditure on trading bank liquidity made some additional means of control seem urgent, to prevent both « secondary inflation » through expansion of bank advances and undue expansion of trading bank profits. It was in the course of consideration of this problem by the Commonwealth Bank Board and its advisers in April-June 1941 that the special account procedure was conceived. The germ of the idea originated with Mr. M. B. Duffy, a member of the Bank Board (2). It was elaborated and given practical shape by the economist of the Bank (Mr. L. G. Melville) and his staff. By September, the Treasurer, Mr. (now Sir Arthur) Fadden, convinced of the need for « a thorough scheme to curb unnecessary monetary expansion » (3), adopted the special account proposal, despite some hesitation by the Chairman of the Board and the Governor of the Commonwealth Bank. By threatening to use compulsion, if necessary, he secured a voluntary agreement by the trading banks to accept the special account plan, together with other arrangements for the limitation of war-time profits. Before this agreement was given final form, however, the Government fell and was replaced by the Curtin Labour Government which, without further ado, embodied the substance of the voluntary agreement in National Security (Banking) Regulations issued on November 26, 1941 (4).

(1) L. F. Giblin, *The Growth of a Central Bank*, M.U.P., 1951, Chs. 8 and 9.

(2) The author is indebted to Mr. L. G. Melville for information on this and other points relating to the origins of the special account procedure.

(3) Giblin, *op. cit.*, p. 282.

(4) National Security (War-Time Banking Control) Regulations, *Commonwealth Gazette*, 26th November, 1941; reprinted in Giblin, *op. cit.*, App. C.

The clauses of the regulations relating to special accounts required every private trading bank to lodge in a special account with the Commonwealth Bank such part of its surplus investible funds as the Commonwealth Bank might direct, « surplus investible funds » being defined as the excess at any time of assets in Australia over their average amount in August 1939. Withdrawal from special accounts was to be subject to the consent of the Commonwealth Bank which was to pay interest on special accounts at such a rate (not exceeding a maximum to be fixed by the Treasurer) as to prevent bank profits rising above the average for each bank of the three pre-war years. The procedure adopted for calls to special accounts was for each trading bank to furnish to the Commonwealth Bank within a fortnight of the last Monday of each month a statement of its average assets for the Mondays (5) of that month and for the Commonwealth Bank to inform each bank as soon as possible of the amount which it was required to lodge by the end of the following month, i.e. the month in which the call was made.

The principle of the new device was essentially the same as that of variable legal minimum reserve ratios. The central bank was given legal power to limit the liquidity of the trading banks by requiring them to deposit part of their cash in frozen accounts with itself. But there was a number of differences, some merely technical, others of substantial significance.

1. - In the first place, a minimum reserve ratio power would have enabled the central bank immediately to reduce trading bank liquidity from its initial level; the special account procedure merely enabled it to prevent trading bank liquidity from increasing above the base (pre-war) level. At the time of its adoption, this was regarded as an advantage, rather than a deficiency, of the special account device. One of the trading banks' arguments against the Royal Commission's recommendation for variable minimum reserve ratios had been that it would compel them to contract advances immediately. The new procedure deprived them of this debating point but did not handicap the central bank since, at this stage of the war, it was quite certain that trading bank assets, and with them the amount callable to special accounts, would greatly increase under the impetus of central bank finance of government war expenditure. At the same time, it is worth noting that, while the minimum reserve ratio system could be effectively used whatever the circumstances in which it was initially adopted, the special account procedure could be effective only because it was introduced at a time of impending substantial increase in the money supply.

(5) The weekly balancing date was changed in 1948 to Wednesday.

2. - Secondly, under the reserve ratio system, minimum reserves were expressed as a percentage of trading bank deposits. With a fixed minimum reserve ratio, therefore, only part of any increase in trading bank liquidity arising from an equal gain of deposits and cash (whether on account of an improvement in the balance of payment or an increase in central bank financed government expenditure) would be automatically offset by a rise in minimum reserves. Under the special account procedure in its original form, the whole of any such increase in trading bank liquidity (indeed, the whole of the increase in trading bank cash balances) became callable. Another way of putting the same point is to say that the reserve ratio power was related to the *average* change in trading bank liquidity, the special account power to the *marginal* change. This difference was, in a sense, purely technical. Provided the central bank had power to *vary* minimum reserve ratios freely, it would always have been able to raise its reserve ratio requirement to the extent necessary to immobilise 100% or more of any increase in trading bank cash balances. But during the war years, when the central bank wanted to freeze virtually all the additional cash accruing to the trading banks, it was convenient to be able to define the amount to be lodged simply as the amount legally callable, instead of having to make frequent and seemingly arbitrary changes in minimum reserve ratios. In the post-war period, when the amount called diverged widely from the amount legally callable, this advantage of the special account procedure ceased to be significant.

3. - Another aspect of the preceding point was that, in its original form, the special account procedure placed virtually no upper limit on the amount of pressure on trading bank liquidity which the central bank was legally free to impose, while under the reserve ratio technique the central bank's power to raise the ratios was usually limited by law (in the United States to twice the normal ratio, in the Royal Commission's recommendation in the manner quoted above; in New Zealand, on the other hand, the law laid down no limit). On the face of it, the special account power was quite narrow in its scope since the amount callable was limited to the excess of trading bank assets over the pre-war level. With the large war-time and post-war rise in the money supply and in trading bank assets, however, the limit became quite academic. From the point of view of the central bank, all that mattered was that it should be able to neutralise the whole of any sharp rise in trading bank liquidity and to reduce trading bank liquidity, when necessary, by a small percentage. Provided limits on its power to call did not interfere with this need, it had no interest in a completely free hand. The trading banks, however, as we shall see, later came to regard the virtually unlimited power of the central bank to reduce their loanable funds as a serious threat and secured the imposition of legal limits in 1953.

4. - A fourth and more important difference was that minimum reserve ratios were normally uniform for all trading banks, whereas under the special account procedure the Commonwealth Bank was free to vary its calls from bank to bank. In the pre-war discussions, the difficulties of central bank con-

trol arising from widely differing circumstances and policies of individual trading banks had frequently been emphasised. The flexibility of the special account procedure in this respect, therefore, promised to be an important advantage. We shall see later that the political need to find an « equitable » basis for calls has somewhat limited this advantage in practice.

5. - A minor technical difference between the special account procedure in its original form and the usual minimum reserve ratio power was that the latter related the amount callable to trading bank deposits while the former related it to the trading banks' Australian assets. The difference, which was later eliminated, had no great practical importance. It meant that the amount callable was increased by an increase in a trading bank's shareholders' funds (e.g. by a share issue or addition to its published reserves) which would not otherwise have been the case. On the other hand, an improvement in the balance of payments was not so quickly reflected in the amount callable since an increase in Australian export proceeds immediately increases the deposits and *overseas* assets of Australian trading banks but their Australian assets (and liquidity) only after a lag of some weeks.

6. - Another minor difference was that, under the minimum reserve ratio system, the trading banks' minimum balances were held in their ordinary « bankers' » or « clearing » accounts with the central bank and did not earn any interest. The Australian procedure provided for the opening of « special accounts », distinct from the trading banks' current accounts with the central bank, and for the payment of a small rate of interest on special account balances. This was not a difference inherent in the two techniques since there is nothing to stop a central bank paying interest on minimum balances under the reserve ratio system (6). In Australia, the payment of interest provided the Commonwealth Bank with a convenient instrument for the control of trading bank profits, while yielding to the trading banks a not insignificant income — at the peak in 1951 the Commonwealth Bank paid the trading banks about £ 2.5 million in special account interest. On the other hand, the payment of interest had the disadvantage that it lent some specious support to the popular misconception that the central bank was « borrowing » the amounts held on special accounts from the trading banks, an absurd notion which was later to assume some political significance.

7. - An advantage of the special account procedure over variable minimum reserve ratios to which some importance was attached at the time of its adoption by the Commonwealth Bank Board was that calls on the trading banks could be made quietly by direct notification, while changes in prescribed minimum reserve ratios would require public announcements with all the attending publicity. This again was not an essential difference; for, though the U.S. Federal Reserve system could hardly dispense with a public announcement of a change in the minimum reserve requirement to its thousands of member banks, there was no obvious reason why the few Australian trading banks could not have been notified of such a change as quietly as of calls to special accounts (7). Public announcement might even have been regarded as a positive merit for its psychological effects, on the principle of the Bank of England's use of changes in bank rate.

8. - A point in favour of the special account procedure which, according to Giblin, was stressed at the time of its adoption was its availability as an instrument of credit expansion after the war. « The central bank would release these deposits to the trading banks at its discretion so far as they were genuinely needed for bank advances. This arrangement once working might be continued into peacetime without disturbance. It would not involve unpopular and provocative action by the Bank, which would act only as the beneficent releaser of credit as it was required in postwar reconstruction. There seemed therefore a good prospect of such an arrangement being allowed to continue indefinitely into peacetime and so establish for the first time effective central bank control under normal conditions » (8). It is hard to see why this should have been regarded as an advantage of special accounts over variable minimum reserve ratios, even when allowance is made for the fact that the Second World War was then generally expected to be followed, like the First, by a serious depression. It would presumably have been no more difficult for the central bank to reduce minimum reserve requirements from their war-time peak than to release funds frum special accounts. Giblin's account is interesting nonetheless for showing that right from the beginning the inventors of the special account procedure thought of it, not merely as a war-time device, but as a permanent technique of central bank control.

9. - Finally it should be mentioned that the special account power applied only to the private trading banks. The exemption of the small State banks which was necessitated by the Commonwealth Constitution was not a serious matter. The exemption of the general banking division of the Commonwealth Bank, which was not then separated from the central bank, was presumably justified on the simple ground that there was no need for the Commonwealth Bank to impose this form of control on itself, but this was another matter which was to cause political trouble.

It is not suggested that all the differences between the special account procedure and variable minimum reserve ratios, which have been listed, were consciously in the minds of those who opted for the former rather than the latter in 1941. The authors of the device favoured it mainly as a highly flexible and effective instrument of war-time central bank control of trading bank liquidity which had the added merits that it met some of the trading banks' banks' objections to variable reserve ratios, that it could be operated without fuss and publicity, and that it might be capable of permanent peace-time use.

The initial lodgments in special accounts required of the trading banks when the regulations came into force in November 1941 were less than the accumulated increase in their assets over the pre-war level. Since August 1939, trading bank deposits had risen by £ 55 million, but the Commonwealth Bank required them to lodge only £ 20 million to allow for their low liquidity at the outbreak of the war. Thereafter, however, until the end of the war, virtually the whole increase in trading bank assets was called to special account from month to month, while the decline in their advances was offset by a corresponding rise in their holdings of government securities. By June 1945, the deposits of the private trading banks had increased by £ 265 million over their pre-war level of £ 318 million and their balances in special accounts stood at £ 234 million (9).

In these conditions, the procedure worked extremely simply. The trading banks knew they were required to lodge each month the full amount callable, unless the central bank notified them otherwise. Withdrawals in small amounts were permitted on a few occasions to enable banks to meet temporary cash requirements of depositors, but in each case on condition that the amount withdrawn was restored by an agreed date. Interest was paid on the daily balance on special account at the rate of 3/4 %. Although the rate had originally been fixed as part of the official policy of stabilising trading bank profits, it was not altered until 1947, nor was any attempt made

(6) Cf. the recommendation by the recent New Zealand Royal Commission on Monetary, Banking and Credit Systems, *Report*, Government Printer, Wellington, 1956, para. 974 (d).

(7) Another reason why public announcement of changes in minimum reserve ratios might be insisted upon (*e.g.* by Parliament) is that such changes are (by contrast to calls to special accounts) not apparent from the banks' published returns of assets and liabilities.

(8) *Op. cit.*, p. 281.

(9) For a brief account of war-time central banking operations, see J. S. G. Wilson in R. S. Sayers (ed.), *Banking in the British Commonwealth*, O.U.P., 1952, pp. 65 ff.

to adjust it to the varying levels of profits of different banks (10). The technique of central bank control worked well during the war. To quote Giblin again, « the trading banks recognised broadly the necessity of some such procedure in wartime and seem to have been satisfied that the Bank's administration of the regulations was on the whole careful, fair and reasonable » (11).

The war-time special account procedure, together with all other central banking powers conferred on the Commonwealth Bank by the regulations of 1941, became part of the new peace-time system of central banking for Australia through the Labour Government's banking legislation of 1945. It had become apparent by this time that the major problem for monetary policy, at any rate for some years after the war, would continue to be control of inflation and that, in particular, the large accumulation of frozen funds in special accounts could not be allowed to swell the liquidity of the trading banks. The Government was, in any case, determined not to miss the opportunity of establishing at last an effective system of central bank control. As the Federal Treasurer, Mr. J. B. Chifley, pointed out in his second reading speech on the Banking bill, the Royal Commission had « recognised that the Commonwealth Bank had developed into a central bank. But the commission believed that certain extensions of the powers and functions of the bank were required to enable it to carry out its responsibilities » (12). The new powers undoubtedly went beyond those envisaged by the Royal Commission. But their efficient operation during the war seemed to make their extension the simplest method of reform.

The trading banks did not see things in this light. While they had been prepared to accept the war-time system of control as a matter of patriotic duty, they were quite unreconciled to the need for anything like as drastic central bank powers in peace-time. They conducted a strenous public campaign against the 1945 legislation, not least against the special account procedure which, according to one of them, meant that « the trading banks are to have their business pegged at their pre-war levels » and which « threaten the interests not only of the trading banks, but of the general public as well » (13). Their uncompromising hostility to the 1945 legislation, and especially the reference, in the legal challenge to section 48 of the Banking Act in 1947, to the special account power as one of the features of the legislation whose constitutional validity might be questioned, were major motives for the Chifley Government's ill-fated decision of 1947 to abandon further attempts to conduct monetary policy through a central bank controlling a private trading banking system and to proceed to outright nationalisation of the private trading banks.

The form in which the special account procedure was embodied in the Banking Act of 1945 was unchanged, except that the maximum amount callable was defined as the amount standing to each trading bank's credit in its war-time special account on August 21, 1945, plus the increase (if any) in its assets over their average in the month preceding the commencement of the relevant sections of the Act, i.e. July 1945 — thus cancelling the small uncalled liability that had accumulated during the war years — and that the maximum rate of interest payable on special accounts (7/8%) was now written into the Act.

2. Post-War Transition, 1945-47.

It was one thing for the central bank to be equipped with a new and powerful instrument of peace-time control over trading bank liquidity; it was quite another to develop a technique of using the instrument for the purposes of peace-time monetary policy. The two years of transition from war to peace economy, 1945-47, represented for the Commonwealth Bank a period of cautious experimenting in the peace-time operation of the special account procedure.

Like most other countries, Australia emerged from the war in a condition of severe potential inflation. The great wartime expansion of the money supply had left both the public and the banks in a highly liquid condition, though most of the banks' war-time accumulation of funds was immobilised in special accounts. Business and consumers were anxious to use their funds to make good the war-time depletion of equipment and stocks. Private enterprise and public authorities were eager to embark on extensive new investment programmes. Moreover, world shortages of commodities and manufactures promised rising prices for Australia's exports coupled with difficulty in procuring supplies of imports. The existing inflationary potential, therefore, was likely to be reinforced by pressure from domestic investment demand and a favourable balance of payments. In the first two years after the end of the war, however, the war-time system of direct controls was largely maintained intact and the immediate preoccupation of the Government was to achieve the reconversation of the economy and the expansion of civil production with the least dislocation and unemployment.

The problem for the central bank was to permit adequate bank finance for this reconversion and expansion but to avoid additional inflationary pressure from undue increase in bank credit. The trading banks would be able to finance some revival of advances from their war-time accumulation of government securities and treasury bills, but this source of funds might not be sufficient and would, in any case, run out. Clearly, the simple war-time expedient of calling to special accounts all increases in trading bank assets was no longer feasible. It would henceforth be necessary to judge how much of the maximum amount callable to call (or release).

Between June and August 1945, the first substantial releases from special accounts were made, totalling some £20 million, to compensate the trading banks for a similar withdrawal from deposits. But in the early months of 1946, following the export season, new calls were made. Over the financial year (July 1-June 30) 1945-46, special accounts increased by £18 million, representing approximately two-thirds of the increase in trading bank assets over the year. Rising advances absorbed most of the remainder of the increase in trading bank funds; trading bank holdings of government securities continued to increase until June 1946, financed largely from a reduction in their treasury bill holdings.

In the following year, 1946-47, advances increased rapidly, by £65 million or 24%. But the increase in Australian assets of £18 million was almost wholly offset by a rise of £16.5 million in special accounts. Funds for the expansion of advances came from trading bank sales of government securities, holdings of which fell by £68 million over the year. The policy of the central bank clearly was to syphon off, by calls to special accounts, the additional funds accruing to the trading banks and to compel them to finance the growth of advances from sales of securities. As in the previous year, calls to special accounts were not spread evenly over the year but were adjusted to the seasonal movement in bank liquidity, releases from June to September being more than offset by calls from October to June.

Judged by its immediate objectives, this policy was entirely successful. The demobilisation of the war economy was accomplished with very little disturbance, civilian production rose rapidly and, with the help of continuing direct controls, wage and price stability was well maintained.

3. Post-War Inflation, 1947-51.

During 1947-48, the problems confronting the monetary authorities grew much more difficult. Towards the end of 1947 it became apparent that the economy « showed disquiet-

(10) Cf. Giblin, *op. cit.*, pp. 313f.
(11) *Ibid.*, p. 323.
(12) Quoted J. S. G. Wilson, *op. cit.*, p. 82.

(13) *The Banking Bills*, unsigned and undated leaflet (Bank of New South Wales, 1945), p. 2.

ing signs of inflationary pressure » (14). The export boom was getting under way and overseas capital was beginning to flow in, with the result that overseas funds rose by £59 million or 27% over the year. Domestic private and public investment expanded at an increasing rate partly in response to the developing migration programme. While inflationary pressures were thus increasing, the war-time system of direct controls which had hitherto helped to keep them in rein was fast disappearing. With the defeat of the price control referendum of May 1948, and the consequent transfer of price control from the Commonwealth to the States, its efficacy further declined and wage stability became correspondingly more difficult to maintain. During 1947-48, retail prices rose by 6% as compared with 1.5% in the previous year.

At the same time, while monetary policy was being burdened with increased responsibility for controlling inflation, the policy of the preceding two years, of compelling the trading banks to finance the expansion of advances from sales of securities, ceased to be practicable as the banks' war-time holdings of securities ran out. If advances were henceforth to be allowed to expand at all, it was necessary to allow the banks' credit base to increase by relaxing special account pressure. And to prevent all further rise in advances was clearly impossible. Industry's requirements for working capital (to say nothing of fixed capital, for much of which it also traditionally depended on the banks) were rising not only with an expanding volume of production but also with rising export and import prices. In principle, policy should have aimed at limiting the rate of growth of advances to that needed for these two purposes. In practice, however, every rise in domestic costs and prices, even when it was itself the result of inadequate control of excess demand, further increased the « legitimate » credit requirements of business which could not be refused without risk of hampering production and possibly causing unemployment. Add to this that, at any given time, the monetary authorities had to make the best guess they could about developments over the next six months, and it is clear that to find the appropriate special account policy was no easy task.

The central bank's problem was further complicated by the widely different policies which the several trading banks had pursued in the first two post-war years and the widely divergent positions in which they now found themselves. By the end of 1947, the private trading banks' holdings of treasury bills and government securities had fallen from £164 million in June 1945 to £73 million. But of these £73 millon, nearly two-thirds were held by the two Sydney banks, the Bank of New South Wales and the Commercial Banking Company of Sydney, while most of the major Melbourne banks, and particularly the three London head office banks, had almost completely disposed of their war-time holdings. The reason was that these Melbourne banks had been pursuing much more aggressively competitive advance policies, presumably in part because they were trying to counteract a tendency for their share of banking business to decline (15).

Whatever the reason, several of the Melbourne banks, unable to meet their customers' demands for advances by further sales of securities, now applied to the Commonwealth Bank for releases from special accounts. These requests were refused on the ground that it « would have defeated the purpose for which the Special Account procedure was instituted if the central bank had further relaxed its Special Account policy in order to enable the banks to continue a rapid expansion of advances » (16). The Bank conceded, however, that the special account procedure needed to be administered with reasonable flexibility since « (a) current demands for advances are frequently the result of decisions made many months earlier and (b) a rigid limitation of funds may involve the refusal of legitimate finance for an eminently desirable purpose » (17).

(14) Commonwealth Bank, *Annual Report, 1948*, p. 24.

(15) Between June 1946 and June 1947, the deposits of the *Wales* and *C.B.C.S.* rose by 5% and 4% respectively, their advances by 21% and 13% respectively; the deposits of the *Australasia* and *National* rose by 0.6% and 2.5% respectively and those of the *Union* fell by 0.6%, while the advances of *Australasia* and *National* rose by 0.6% and 2.5% respectively

Between June 1946 and June 1948, the deposits of the *Wales* and *C.B.C.S.* rose by 15%, their advances by 45% and 29% respectively; the deposits of the *Australasia* and *E.S. & A.* rose by 9%, their advances by 61% and 153% respectively.

The central bank, therefore, decided to deal with the situation in two ways: first, by calling to special accounts a smaller proportion than hitherto of further increases in trading bank assets, and secondly, by offering temporary advances to those trading banks which found themselves hard pressed for funds.

The new special account policy was clothed in a working rule which was developed during 1947-48. It involved calling to special accounts such proportion of the increase in trading bank assets from month to month as to keep the ratio to deposits of Special Accounts plus Cash plus Treasury bills (SACT) at a particular figure, initially of about 50%. A special account policy aimed at keeping the SACT ratio at 50%, meant, in effect, that about one-half of any increase in a trading bank's funds was left to it for investment in advances or securities, while whatever part of the other half it did not choose to hold in cash or treasury bills was immobilised in special accounts. If the severity of special account pressure is measured by the ratio of special account balances to the maximum callable at any time, an equal SACT ratio for all banks also implied a higher « severity ratio » for banks without treasury bill holdings than for those which still held significant amounts in treasury bills (18). But this is an instance where the « severity ratio » is a misleading measure; for the banks with treasury bills, and therefore with a lower « severity ratio », were left with no more funds for expansion of advances than the others and, if the policy was strictly applied, could convert their treasury bill holdings only into cash or special accounts. Actually, there is a suggestion in the statistics that the SACT ratio at which the central bank aimed in its special account policy was somewhat lower for the banks with more conservative advance policies, especially the Commercial Banking Company of Sydney, than for those in more need of restraint. Also, the SACT ratio target did not remain at 50%. As the inflationary boom continued and gathered momentum during 1949, 1950 and 1951, the target ratio was gradually raised to over 55%, so as to increase special account pressure on trading bank liquidity.

The evolution of the SACT ratio represented a notable stage in the development of special account technique also in another respect. In addition to serving as a target for the degree of special account pressure on the banking system as a whole, it also served as a criterion for the distribution of special account calls among the individual trading banks. Under its special account power, the Commonwealth Bank was legally free to discriminate at will between the various trading banks. In practice, however, it found it necessary, for political reasons in the strained atmosphere between the private trading banks and itself, if for no others, to make calls on individual banks, generally speaking, on the basis of some criterion of distribution which could be defended as equitable. During the war years when the Bank simply called all that it was legally entitled to call, this represented no problem. But once its policy required an independent judgment of how much to call, its freedom to discriminate between individual banks was broadly confined to a choice between a number of possible criteria of « uniform » or non-discriminatory treatment. No such criterion is discernible in its policy during the first two post-war years when calls seem to have been made from

(16) Commonwealth Bank, *Annual Report, 1949*, p. 31.

(17) *Ibid.*

(18) The first commentator to use « severity ratios » was R. R. Hirst in *Post-War Monetary Policy in Australia*, « Economic Record », May 1953; they have also been calculated by Mr. E. F. Herbert, *op. cit.*, but in his case at least, the maximum amount callable is defined as excluding the base amount as of August 21, 1945.

month to month on the basis of an ad hoc examination of the current and prospective balance sheet position of each trading bank. But from 1948 until 1952, the SACT ratio served this purpose (19).

The decision in 1947 to offer the trading banks short-term loans was a new departure in Australian central banking. There had been isolated occasions in the inter-war period when a trading bank had borrowed from the Commonwealth Bank (20). But the general view, based on strong expressions of opinion by the trading banks themselves, had been that the trading banks would refuse to risk the dependence on the central bank which borrowing from it might entail (21). In the years 1947-51 only the two Sydney banks stuck to this principle. The other banks took advantage of central bank credit far beyond the central bank's intention.

The object of the Commonwealth Bank's offer, as we have seen, was to help out of temporary liquidity difficulties those trading banks which had sold out their security holdings. Central bank loans were intended as a « device which, while giving the trading banks time to bring their lending policies into line, would maintain pressure on them to do so » (22). The pressure was to be applied by charging « a rate of interest (at first 3%, then 3½%) which it was hoped would be sufficiently high to provide an incentive to prompt repayment » (23). As it turned out, the rate did not have this restraining effect. Several of the banks borrowed steadily and extensively from 1947 until January 1952 when central bank loans outstanding reached a peak of £68 million.

It is clear in retrospect that the central bank miscalculated in assuming that a rate of 3% or even 3½% would have a penal effect. With the standard overdraft rate at 4½%, the margin of 1% on borrowed funds invested in advances was probably more than sufficient to cover the marginal cost of advances. The trading banks, moreover, may have been willing, in their frantic competition for advance business, to bear a small loss on marginal business rather than forgo the goodwill of customers, particularly at a time when their booming overseas exchange business was yielding high profits. The Commonwealth Bank, on the other hand, may have been deterred from raising the rate above the relatively easily justifiable level of 3½% (the bond interest forgone by banks selling government securities) by fear of reinforcing the clamour raised on behalf of the trading banks that the Commonwealth Bank was « borrowing » trading bank funds at ¾% (in special accounts) and lending them back to the banks at ½%, a ludicrous argument which, however, impressed politicians, newspaper editors and others ignorant of banking technicalities.

So much for the central bank's special account policy during the years of the post-war boom and inflation. From 1947 onwards, quantitative control of trading bank credit was reinforced by qualitative control through central bank directives on advance policy, designed mainly to discourage reliance on bank credit for long-term investment in fixed capital and to ensure priority for what were regarded as the more essential lines of production (24).

The economic developments of the years of inflation can be summarised in a few statistics. Between 1947-48 and 1950-51, the value of Australian exports rose from £454 million to £1,035 million. Private capital

(19) The ratio was not entirely uniform for all banks in every month. It has been suggested that it was deliberately allowed to vary in favour of banks having « special commitments » (J. S. G. WILSON, *The Operation of Australian Central Bank Controls*, « Quarterly Review », Banca Nazionale del Lavoro, January-March 1952, p. 32). But slight divergences, in the SACT and later ratios, may also be accounted for by the fact that the central bank must determine its calls, on the basis of information relating to each bank's assets (or deposits) in the preceding month, before it knows the bank's figures for the month in which the call is made.

(20) Cf. GIBLIN, *op. cit.*, pp. 25, 168 n., 173, 180, 248.

(21) *Ibid.*, p. 222.

(22) Dr. H. C. COOMBS, *The Development of Monetary Policy in Australia*, E.S. & A. Bank Research Lecture, 1954, Queensland University Press, 1955, p. 14.

(23) *Ibid.*

(24) For accounts of qualitative advance controls, see HIRST, *op. cit.*, pp. 12ff. and Appendix; COOMBS, *op. cit.*, pp. 18f.

inflow amounted to £557 million. Overseas funds increased from £274 million to £843 million. Gross private investment rose from £450 million to £828 million, public investment from about £120 million to £289 million. The Australian assets of the private trading banks rose from £720 million in June 1947 to £1,303 million in June 1951.

The immediate effect of the new special account policy in 1947-48 was a substantial relaxation of pressure on trading bank liquidity (the « severity ratio » dropped from an average of 65% in 1946-47 to an average of 30% in 1947-48), but in the following years pressure was somewhat increased as the SACT target ratio was raised. By May 1951, special account balances reached the huge total of £576 million. They had become the trading banks' largest single asset, equal to 43% of their deposits. Of the increase of £583 million in trading bank assets between June 1947 and May 1951, £301 million (or 51.6%) had been immobilised in special accounts. This is the measure of the direct disinflationary effect of the special account policy over these years. But the £282 million additional funds left at the disposal of the banks, together with some £60 million of central bank loans, enabled the banks to expand advances over the same period by £207 million or by 71%.

Monetary policy had certainly failed to prevent inflation. Between 1946-47 and 1950-1951, the value of money, measured by the C-series index of retail prices, fell by one-third. At its peak, open price inflation reached an annual rate of nearly 30%. It was brought to a halt, not by domestic measures of budget or monetary policy, though these helped, but by a huge swing in Australia's balance of payments, the combined effect of a steep fall in the price of wool and a flood of imports, which converted a surplus of £104 million in 1950-51 into a deficit of £583 million in 1951-52.

The fault, of course, did not lie primarily with monetary policy. No measures of domestic policy would have protected Australia from the impact of inflation overseas and the Korean boom in commodity prices, though an appreciation of the £A might have had a useful insulating effect. Even the domestic boom in private and public investment required more than purely monetary measures of control, particularly a more courageous disinflationary budget policy, greater restraint and co-ordination in public works programmes, and probably the retention through this period of some of the direct controls of the war and immediate post-war years.

But it has also been recognised since then that a more stringent monetary policy would have been desirable (25). Some of the reasons why monetary weapons were not used more effectively have been discussed before, in particular the fear of interfering with the « legitimate » needs of business for bank credit and the central bank's miscalculation in its loans to trading banks. Another obstacle to an effective policy of monetary restraint was the retention through the years of inflation of the war-time policy of cheap money. It is questionable whether higher interest rates, within a practicable range, would in themselves have done much to restrain investment or stimulate saving. But a policy which committed the central bank to support a given level of bond prices, if necessary by pumping large quantities of new money into the economy, was incompatible with any effective control of the money supply. The problem was to arise in more acute form in the second spell of inflation in 1955-56. But even in 1951, the central bank was compelled for some months to support the bond market against heavy selling pressure, to the extent of some £30-40 million, before « the inevitability of the change was accepted and yields were permitted to rise to about 4½% by mid-1952 » (26).

The Governor of the Commonwealth Bank, Dr. Coombs, has mentioned two other lessons from the experience of this period. « Firstly, the effectiveness of any central bank-

(25) Cf. HIRST, *op. cit.*; COOMBS, *op. cit.*; also D. ROWAN, *The Monetary Problems of a Dependent Economy: The Australian Experience 1948-1952*, « Quarterly Review », Banca Nazionale del Lavoro, December, 1954.

(26) COOMBS, *op. cit.*, p. 11.

ing power, however apparently great, depends upon the response which banks, members of the system, make to the exercise of the power. In some countries, the nature and extent of this response is predictable because of established conventions of appropriate relationships between liquid assets and total deposits which are accepted and used as a basis of policy by the member banks themselves. Such conventions have not existed in the past in Australia and, consequently, the central bank cannot anticipate, even within wide limits, how trading banks will respond to its actions ».

« Secondly, the period shows a difficulty, from the central bank's point of view, in the banks' control over their lending operations. The banks' direct control over movements in their advances is reduced to the extent that drawings may be made by customers against limits approved in an earlier period. A tightening of a bank's lending policy will, therefore, not be immediately effective. Even the rate of creation of new advance limits cannot always be changed immediately. This makes it difficult for the banks to adjust their advances promptly to the general needs of the economy, and in a period of rising activity can cause bank lending to add to any inflationary tendencies » (27).

These conclusions are interesting not only as a commentary on the difficulties of the years 1947-51, but also for the light they throw on the central bank's efforts in the following years to remedy these deficiencies by adaptation of its special account policy.

4. Recession, 1951-52.

The year 1951-52 brought a dramatic reversal of economic conditions and in the tasks confronting the central bank. The wool boom came to a sudden end, the value of wool exports falling from £ 633 million in 1950-51 to £ 324 million in 1951-52. At the same time, the value of imports rose by over 40%, the delayed result of boom orders and easing overseas supply conditions. The result was a balance of payments deficit on current account of over £ 500 million. The drain in overseas reserves necessitated the imposition of drastic import restrictions, but not before it had not only eliminated domestic excess demand, but produced a severe liquidity crisis and the threat of a serious recession. The fall in external assets of £ 460 million exerted an equivalent contractionary effect on trading bank cash, while demand for advances increased, particularly from importers unable to sell excess stocks without disastrous losses.

As Professor Rowan has pointed out, « the central bank was required to act as a lender of last resport on an enormous scale if a banking crisis was to be avoided. Moreover, the task facing the central bank was complicated by the *speed* with which the crisis developed, for the year 1950-1951 had ended with the central bank actively attempting to restrain inflation by use of its qualitative and quantitative controls and the crisis itself began with inflationary pressure still the main problem. A disinflationary budget had also been introduced while capital issues control had been reimposed in February 1951. The difficulties occasioned by the lagged response of imports were thus, to some extent, intensified by the lagged response of fiscal policy and government administrative action » (28).

The Commonwealth Bank met this situation by prompt and vigorous measures to maintain the liquidity of the trading banks. Between March 1951 and January 1952, the trading banks were able to sell, no doubt largely to the central bank, £ 35 million worth of government securities and to borrow a further £ 28 million from the central bank. But main support to the trading banks came through releases from special accounts. After the usual seasonal releases in June-August 1951, releases continued month by month until November 1952, as much as £ 183 million being released in just two months, May and June 1952. From their peak of £ 578 million

(27) *Ibid.*, p. 24.

(28) ROWAN, *op. cit.*, pp. 208f.

in May 1951, the special account balances of the major trading banks fell back to £ 157 million in November 1952. It was this which enabled the trading banks to expand advances by £ 175 million, despite a fall of over £ 100 million in their deposits, thus permitting importers to meet their obligations and hold their excess stocks. There can be no doubt that the central bank's skilful handling of the situation averted a serious banking crisis and helped the economy to weather the inventory recession with little disturbance to fixed capital investment and only a modicum of unemployment.

The experience demonstrated that, « whatever doubts may have existed about the effectiveness of Special Account policy in the restraint of inflation, it proved an invaluable support and stimulus to the banking system and the economy generally when faced with the need to counter serious deflationary influences originating in the balance of payments » (29). It is one of the merits of the special account procedure that, once the trading banks' balances have risen to a sufficient level in the boom, it provides the central bank with the most simple and flexible instrument for monetary expansion that could well be imagined.

But too much should not be made of this. The Commonwealth Bank, even before 1939, had not lacked the technical means for monetary expansion. As Giblin pointed out, speaking of the thirties, « there was never any doubt about its power to expand. Governments could be counted on to increase expenditure if finance was easily and cheaply provided. There was no limit to open market operations on the buying side, by which trading bank liquidity could be increased to any extent. Even if the response was slow, the Bank could force the pace by expanding its own advances and the investments of the Savings Bank » (30).

It is true that all the methods mentioned by Giblin served to increase the money supply in the hands of the public rather than to expand trading bank liquidity directly. In circumstances, of which the 1952 episode may well have been an instance, when the central bank wants to concentrate expansion on trading bank credit (e.g. to finance importers), the Special Account procedure is technically superior. But with this minor qualification, the efficacy of central bank action in the 1951-52 recession, as contrasted with the depression of the early thirties must be ascribed, not primarly to its possesion of a new instrument, but to its determination, backed by government and public opinion, to prevent any serious deflation, to the continuing buoyancy of private long-term expectations, and to the fact that readiness to use import restrictions eliminated the balance of payments as an obstacle to monetary expansion.

5. New Special Account Policy and Legislation, 1952-53.

Even cursory examination of the banking statistics for 1952 makes it apparent that the releases from special accounts which were granted by the central bank in that year went far beyond the extent required to support the liquidity of the banking system. Well after the distress borrowing of the first half of the year had reached its peak in July and was beginning to be repaid from the proceeds of the liquidation of excess stocks of imports, and while bank deposits were rapidly recovering, releases from special accounts continued, until the trading banks reached a degree of liquidity probably unprecedented in the twentieth century. By November 1952, the ratio of the banks' liquid assets (cash and treasury bills) plus government securities to their deposits reached 30% and special accounts were down to 15%, as contrasted with corresponding ratios of 12% and 43% a year earlier. The explanation for this extraordinary change is the adoption by the central bank of an entirely new special account policy during 1952-53.

(29) COOMBS, *op. cit.*, p. 16.
(30) GIBLIN, *op. cit.*, p. 218.

The new policy was briefly hinted at in the Commonwealth Bank's Annual Report for 1953 and set out more fully in its Annual Report for 1954. The latter exposition is sufficiently important to warrant quotation in full.

« In its Annual Report last year the Bank stated that Special Accounts were now being administered to regulate the impact on the system of fundamental changes in banking liquidity such as those arising from the balance of payments and from changes in the pattern of government finance. This leaves to the individual bank the responsibility for maintaining, apart from Special Account, a structure of assets sufficiently liquid for all normal requirements, including seasonal and other short-term demands on its cash. If the banks are to bear this responsibility and Special Accounts are to be available to meet major losses of deposits and cash of the kind experienced in 1951-52, it is essential that their policies should be directed to maintaining an adequately liquid structure of assets. The most suitable distribution between the various kinds of liquid assets will vary to some extent from bank and from one time of the year to another, but it is the view of the central bank that a ratio of liquid assets (comprising cash, deposits with the central bank and Treasury bills) and Government securities to total deposits of about one quarter, allowing for seasonal and other short-term variations, would generally be appropriate. If banks adjusted their lending policies from time to time so as to work towards this general objective it would be easier for the central bank to ensure that the banking system had sufficient, but not more than sufficient, funds to meet the needs of a steadily expanding economy » (31).

The new policy meant a radical departure from the special account policies pursued since 1945. Until 1951, the central bank had treated the special account procedure, in effect, as a direct quantitative control of bank credit. Its special account policy had aimed at limiting trading bank liquidity to the minimum they would require to meet the « needs of trade » from month to month. The central bank had assumed complete responsibility for judging the appropriate volume of credit, and for adjusting special accounts correspondingly to seasonal as well as all other changes in the liquidity of the various banks, by implication leaving the trading banks free to do what they liked with the funds left at their disposal.

The new policy was to use the special account procedure, not as an instrument of control of trading bank liquidity, but rather as a signal to the trading banks indicating the credit policy which the central bank wished them to pursue. Its basis was to be co-operation, not coercion. The trading banks were asked to agree to conduct their advance policies so as to maintain an average LGS ratio (Liquid assets plus Government Securities to deposits) over the year of 25%. The central bank would use special accounts so as to reduce the trading banks' LGS ratio somewhat below 25% if it wished them to restrict advances, or raise the LGS ratio somewhat above 25% if it wished them to expand advances. The trading banks were to look after seasonal and other short-term variations in their liquidity; the central bank would aim at offsetting major cyclical changes originating in the balance of payments or government finance.

The new policy was introduced in the first half of 1953 after consultation with the trading banks and presumably, at least in the understanding of the central bank, after the trading banks had accepted the gentlemen's agreement which it implied. The large-scale releases from special accounts in the second half of 1952 paved the way by raising the liquidity of the trading banks, initially even beyond the new target level of 25%, thus enabling the banks to repay central bank loans and increase their holdings of cash as well as of treasury bills and government securities.

What were the reasons for this change in special account policy? Published statements by the Bank and by its Governor, together with circumstantial evidence, suggest that it was motivated by three main considerations.

(31) Commonwealth Bank, *Annual Report, 1954*, p. 24; cf. also Coombs, *op. cit.*, pp. 17f.

The first was « the experience of past administration of Special Account policy ». This experience seems to have suggested to the Bank that the special account procedure could not be made an effective instrument of restraint without the willing co-operation of the trading banks. As Dr. Coombs put it, « since the effectiveness of any Special Account policy depended upon the response of the trading banks it was important to increase their responsibility and their understanding of the purpose the central bank was seeking to achieve ». More particularly, « the effectiveness of Special Account policy, particularly in the restraint of inflationary tendencies, was greatly weakened by the absence of conventional standards in the attitude of Australian banks towards their asset structure »; and while « the Special Account was a useful instrument in offsetting the effects on the banking structure of major factors affecting the volume of deposits and the cash assets of banks, i.e. major changes in the balance of payments and in the sources of governmental finance... it was less useful in dealing with the more irregular and unevenly distributed factors affecting bank liquidity » (32).

These conclusions were reinforced by a distinct change in the trading banks' attitude to their special account balances which occurred as a by-product of the releases from special accounts in 1951-52. Since withdrawals from special accounts were legally subject to the discretionary consent of the central bank, the trading banks strictly had to regard their special account balances as a frozen, completely illiquid asset. Even before 1951-52, this conception was weakened in its foundations by a basic fact of life of modern banking. No Government nowadays can afford to allow the banking system to collapse; in a system like the Australian which consists of a few large banks, it is doubtful whether a Government can afford to allow even one bank to suspend payment. Trading banks will not, in reliance on this fact, expose themselves to unnecessary risk of illiquidity. But it must in some measure weaken their determination to maintain a reserve of liquidity against major cyclical or other losses of deposits. In Australia, the events of 1951-52 brought this fact of life into the open. If the central bank could be relied upon to release special account balances whenever trading bank liquidity was impaired by external deflationary influences, the trading banks could afford to treat them, to that extent, as a liquid reserve and correspondingly to reduce the volume of other liquid assets they might otherwise have thought it necessary to hold for this purpose. The new special account policy was partly designed to meet a situation in which « some trading banks were unwilling to base their lending policies on their asset structure *excluding Special Account* and consequently found their other liquid assets steadily depleted » (33).

The third major consideration was the passage by Parliament in 1953 of amending legislation which significantly curtailed the legal special account powers of the central bank (34). The private trading banks, as we saw before, had accepted the continuation into peace-time of the war-time system of banking controls by the 1945 legislation only under the most vigorous protest. The Chifley Labour Government's attempt at bank nationalisation united them in a fierce campaign against this greater threat and, for the time being, made it seem politic to them to seft-pedal their objections to the existing system of controls (35). But in the following years, and

(32) Coombs, *op. cit.*, pp. 16f.

(33) *Ibid.*, p. 16 (italics supplied).

(34) Commonwealth of Australia, *Banking Act*, No. 13 of 1953.

(35) Cf., *e.g.*, National Bank, *Annual Report, 1949*, pp. 13f: « I state clearly this Bank's attitude towards the Banking Act of 1945. 1. At no time has this Bank directly or indirectly attempted to attack the 1945 Act ... This Bank wholeheartedly accepts the principle of a Government Central Bank. 4. This Bank agrees it is a duty of the Central Bank to give leadership to the financial system and that it is its own duty to accept such leadership and abide by it ».

particularly after the accession to office in 1949 of a sympathetic conservative Federal Government, the banks themselves and the financial press on their behalf, with increasing frequency and energy, expressed their « grave concern at the perpetuation... of this particularly rigid statutory control system designed for use in time of war » and strongly urged « on the appropriate authorities the need for its early revision » (36).

The trading banks' objections to the « unrealistic and vindictive provisions of the 1945 banking legislation » (37) were manifold. The special account system lacked flexibility, caused uncertainty, limited the earning capacity of the banks and had been used unduly restrictively. « Experience has proved that undue freezing in Special Accounts by the Central Bank of Trading Bank funds, deprives the banking system of that flexibility essential to meet the ever-changing demands encountered in Australia » (38). « Trading bank advances have played very little part in contributing to the inflationary situation... Drastic restriction of bank credit is likely to add little to an attempt to check or reverse inflation; there is a limit to which credit can be restricted and yet still keep the wheels of commerce and industry turning at a satisfactory rate » (39). « This special account system as a permanent feature of the banking structure is an unwarranted drag on the banks in the expanding economic horizon of the nation » (40). It was a « legislative strait-jacket » (41) which gave « the central bank power to control the banks rather than to regulate the volume of credit » (42) and failed to give the trading banks responsibility commensurate with their « tradition and accumulated experience. The banks are in close touch with the business community and understand its legitimate needes » (43).

Besides these general demands for curtailment of the central bank's special account powers, the trading banks had two particular grievances. One was the very large « uncalled liability », amounting to about £ 550 million at the end of 1952, that had accumulated since 1945 through the failure of the central bank to call to special accounts the maximum amount it was legally entitled to call. The trading banks saw, or professed to see, in this « liability » a threat to their existence. As one commentator has put it: « if it had been clearly recognised by all concerned that Special Accounts were to be used only to prevent inflation and not to cause deflation and if no party politics had entered the situation, there would have been no cause for alarm... However, the abortive attempt in 1947 to nationalise banking business in Australia... made supporters of private enterprise very anxious about the future of banking. The existence of the large uncalled liability on Special Accounts at the end of 1952 seemed a real danger; a Labour Government in the future, even without an Act to nationalise the banks, could have gradually squeezed the private banks out of business. By using the Special Account powers of the Commonwealth Bank, under the Banking Act of 1945, a government could have forced the private banks first to sell their government securities and then recall their advances. To prevent a depression the Commonwealth Bank would have increased its advances and taken over the private banks' customers » (44).

The private banks' other grievance was the Commonwealth Bank's trading banking activities. Since 1945 the Commonwealth Bank had resumed active competition for ordinary

(36) National Bank, *Annual Report, 1951*, p. 6.

(37) Bank of New South Wales, *Annual Report, 1953*, p. 18.

(38) Commercial Bank of Australia, *Annual Report, 1953* (Chairman's Address).

(39) Bank of New South Wales, *Annual Report, 1950*, p. 20.

(40) Bank of New South Wales, *Annual Report, 1953*, p. 18.

(41) National Bank, *Annual Report, 1952*, p. 6.

(42) Bank of New South Wales, *Annual Report, 1952*, p. 19.

(43) Bank of New South Wales, *Annual Report, 1951*, p. 11.

(44) Gifford, Wood & Reitsma, *Australian Banking*, 2nd edition, Brisbane, 1955, p. 132.

banking business. The private trading banks bitterly resented this competition which they claimed to be unfair on the grounds that the Commonwealth Bank, in its trading bank capacity, enjoyed the advantage of the knowledge it obtained as a central bank and that it was formally exempt from legal central bank controls, including the special account power. They demanded separation of the central and trading bank functions of the Commonwealth Bank and the subjection of the Commonwealth trading bank to the same controls as applied to themselves.

The Menzies-Fadden Government went some way towards granting all these demands in amending legislation to the 1945 Banking Acts which became law at the end of April 1953. A separate Commonwealth Trading Bank was formed, though it remained under the control of the Governor and Board of the Commonwealth Bank; the Commonwealth Trading Bank was made subject to all central bank controls of the trading banks, including special accounts; the accumulated uncalled liability of the trading banks was wiped out, and a new procedure was laid down designed to limit the amount callable to special accounts at any time and prevent the renewed growth of uncalled liabilities from year to year.

Henceforth, special accounts were to vary with trading bank deposits, instead of with assets as hitherto. The maximum callable was to be the initial amount on special account (totalling £ 171 million) on October 10, 1952, plus 75% (in place of the former 100%) of any increase in each trading bank's deposits (or minus 75% of any decrease), with the proviso that any uncalled liability of a trading bank at the end of September of each year was to be cancelled which exceeded 10% of its deposits in the preceding August (45). The Act also eliminated the former statutory limit of 17/6d. per cent. to interest payable on special accounts and required the central bank to inform the trading banks during each financial year, in confidence, of its estimates of movements during that financial year in the total deposits and liquid assets of all banks, and of likely changes in the aggregate Special Accounts of all banks during each half-year (46).

Most of these changes in the special account procedure mattered little . The cancellation of the accumulated uncalled liability was reasonable, but of political rather than central banking significance. The same applied to the extension of the special account power to the Commonwealth Trading Bank which the latter had anticipated since July 1952 by voluntary deposits of the appropriate amount. The change-over from asset to deposit increases as the base for calculating the maximum callable meant that new capital issues by the trading banks, of which virtually none had been made in the post-war years but on which all of them embarked on a large scale from July 1953 onwards, would no longer increase their special account liability; although circumstances were conceivable in which a trading bank could use the proceeds of a capital issue temporarily to escape central bank restraint in its liquidity, this also was unlikely to weaken central bank control significantly.

The one important change was the limitation imposed upon the proportion of any increase in trading bank funds which the central bank could immobilise in special accounts. Before 1953, it had had the power to freeze 100% of any such increase, and once a substantial uncalled liability had accumulated, actually to reduce trading bank liquidity from any given level. The new formula did not restrict the central bank's power to call as much as might appear at first sight. Calls of 100% or more of increases in trading bank deposits would still be possible whenever a significant portion of the amount callable had not been called in the year prior to the preceding September 30 (up to 10% of the trading bank's August deposits) or since the preceding October 1. But if no such uncalled liability

(45) This is merely the gist of the complicated new formula; for further details see *Banking Act*, 1953, and Gifford, Wood & Reitsma, *op. cit.*, pp. 133ff.

(46) Commonwealth Bank, *Annual Report, 1953*, pp. 22f.

had developed, the 75% limit became effective and could become a significant constraint upon central bank control of trading bank liquidity; particularly in the first year, 1953, when, in the nature of the formula, no reserve uncalled liability was available.

It was this feature of the 1953 legislation which probably operated as one contributory motive for the adoption of the new special account policy in 1952-53. Although the new legislation did not become operative until April 29, 1953, its main features were announced by the Prime Minister in November 1952 and must have been known to the Bank even earlier.

Before proceeding to examine how it worked out it practice, one other aspect of the Commonwealth Bank's new special account policy needs to be mentioned. This was the change in the principle of distribution of special accounts between the individual trading banks which was made at that time. It will be recalled that about 1948, the central bank had evolved the SACT ratio as the criterion for allocating calls to special accounts among the trading banks. This ratio still provided the basis for distribution of the releases from special accounts in the first months of 1952. But in the latter half of 1952, the central bank moved towards a new criterion which became established in 1953 and has been used ever since: an equal ratio of special accounts to deposits for each trading bank.

The SACT ratio which, formally at least, discriminated in the severity of special account pressure in favour of banks with holdings of treasury bills clearly lost its point under the new regime, under which all trading banks were committed to a 25% LGS ratio but free to distribute this 25% between cash, treasury bills and government securities as they pleased. The new principle, of an equal ratio of special accounts to deposits, was as liable as the SACT ratio to yield very different « severity ratios » for different banks, and could be regarded as « unfair » if the severity ratio was adopted as the criterion of fairness. For with an equal special account-deposits ratio, a bank which was gaining deposits at the expense of other banks would experience a fall in its severity ratio, relative to those of the other banks. But there was no a priori reason for regarding the severity ratio as the more appropriate criterion of equity than the special account ratio, and the latter had the decided merit that it was much more likely to do rough justice in the longer run. The adoption of an equal severity ratio as the guiding principle would have been unfair to banks which happened to gain business in periods of generally high ratios (strong central bank pressure) as compared with those banks which happened to gain in periods of generally low ratios. It could also be justified on the ground that it was identical with the principle of distribution implicit in the conventional system of minimum reserve ratios for which some of the private trading banks themselves had recently expressed a preference over the special account procedure (47). The point would not be worth discussing at this length had it not become a matter of political controversy in the next two years because of the unfortunate coincidence that it was the Commonwealth Trading Bank which derived the chief benefit from the principle that had been adopted.

6. Renewed Inflation, 1953-55.

The financial year 1952-53 saw a very satisfactory recovery of the Australian economy from the recession, helped by an unexpected surplus of nearly £ 200 million in the balance of payments and by an expansionary budget policy, as well as by the central bank's vigorous injection of money into the system. The inflation had been halted, and during the first half of 1953, something like internal balance was achieved for the first time for very many years. With the elimination of excess demand, the wage-price spiral soon petered out of its own accord, so that wage and price stability had been virtually attained by the time the Arbitration Court suspended automatic cost-of-living adjustments of the basic wage.

(47) Bank of New South Wales, *Annual Report, 1953*, p. 18; Commercial Banking Company of Sydney, *Annual Report, 1953*.

The central bank resumed calls to special accounts in January 1953. In the face of a rapid increase in the trading banks' liquid assets and deposits, which resulted from unexpectedly high export earnings, the substantial calls between January and April, totalling £ 145 million, were no more than sufficient to reduce the banks' LGS ratios from 30% to the new target level of one-quarter. They left the banks with ample funds to meet all current demand for eligible advances. But it is of interest to note that, during these months, the central bank could not have called more even if it had wished. The restrictive effect of the 1953 legislation had made itself felt. « By the end of the financial year the Commonwealth Bank's then existing powers to call to the bank's Special Accounts had been exercised virtually to the full extent. Consequently, practically the whole of the banks' holdings of liquid assets and government securities, representing 24 per cent. of deposits, were not subject to control by Special Account » (48). The experience seemed to justify the decision to rely on voluntary adherence by the trading banks to a 25% liquid asset ratio.

The year 1953-54, taken as a whole, represents an almost ideal picture of rapid economic growth under conditions of internal and external balance. Thanks to a substantial increase in rural as well as industrial productivity, national income rose by 5% with almost stable prices. There was full employment without inflation and external balance with gradual relaxation of import restrictions.

This overall picture, however, conceals the fact that the last months of the year saw the beginnings of a domestic investment boom which, in the following year, assumed the most serious proportions, causing a severe balance of payments crisis and renewal of the post-war inflation. From 1953-54 to 1954-55, gross private investment in fixed capital rose by £ 110 million or 15% and in stocks by £ 85 million, consumption by £ 268 million (9%), company profits by 12% and incomes of unincorporated businesses (other than farmers) by 8½%. There was increasing pressure of demand for labour, reflected in a rise of unfilled vacancies from 23,000 in June 1953 to nearly 60,000 in June 1955. Domestic excess demand spilled over into imports which rose from a monthly average of £ 40 million in 1952-53 to one of £ 75 million in the first half of 1955. The rise in imports, accompanied by sagging export prices, produced a drain on external reserves of £ 142 million, despite unusually high capital inflow of £ 114 million, and necessitated the reimpositions of increasingly severe import restrictions from October 1954 onwards. From the beginning of 1955, wages resumed their upward movement, chiefly through rising above award payments, followed by corresponding increases in retail prices (49).

The task of keeping this boom under control put the new special account policy to a severe test. It failed completely. During the first quarter of 1953-54, the usual seasonal decline in bank deposits reduced the maximum amounts which the central bank could, under the 1953 legislation, hold in special accounts and compelled it to make statutory releases totalling £ 50 million. With the seasonal rise in deposits, the central bank was able to call £ 90 million between January and March 1954. (Contrary to the intentions of the new special account policy, the exigencies of the 1953 legislation, therefore, again led to seasonal variations in the level of special accounts).

Throughout the year, bank advances, which had fallen slightly in the six months to June 1953, rose extremely rapidly, by £ 123 million in all. The calls to special accounts during the last months of the year were, in conformity

(48) Commonwealth Bank, *Annual Report, 1953*, p. 26.

(49) For a general analysis of the 1954-56 boom, see R. I. Downing, *The Australian Economy, March 1956*, « Economic Record », May 1956; also *Australia, 1956: An Economic Survey*, Government Printer, Canberra, 1956.

with the new policy, aimed at reducing the trading banks' LGS ratios below the target ratio of 25% — they were down to 21% at the end of June — and thus compel them, if they were to adhere to the new convention, to restrain the increase in advances. The same policy was continued during the first half of 1954-55. As the balance of payments deficit and consequent decline in international reserves reduced the liquid assets of the trading banks from May 1954 onwards, the central bank, under the old special account policy, would have allowed the banks to feel all or most of this pressure on their liquidity in order to limit the funds available to them for expansion of advances; special accounts would have been held constant or even increased. Under the new policy, the central bank's task was merely to maintain sufficient special account pressure to keep the signal for a restrictive advance policy hoisted by holding the trading banks' LGS ratio below 25%. Accordingly, from May 1954 on, the central bank released funds from special accounts at a rate which kept the special account ratio approximately constant, first at 24% and after November 1954 at about 20%.

The only effect was that bank advances increased by a further £ 100 million between April and December 1954. Under boom pressure of demand for advances, most of the trading banks simply abandoned the new convention and allowed their LGS ratios to fall. Over the year 1954-55 the private trading banks' LGS ratio averaged only 18%, with a seasonal high of 21.5% and a seasonal low of 16%. The only banks which kept their LGS ratios at or above the agreed level were the Commonwealth Trading Bank and the Commercial Banking Company of Sydney, though there were wide variations even among the other banks' figures. As in the first post-war inflation, the Melbourne banks, and particularly the two London head office banks, went furthest in allowing their advances to rise at the expense of their liquidity, the E.S. & A. Bank finding itself in June 1955 with a ratio of liquid assets and government securities to deposits of only 6.4%.

The Commonwealth Bank's attempt to reconstitute central banking in Australia on the basis of voluntary co-operation by the trading banks through adherence to a conventional liquid asset ratio had signally failed.

The immediate reason for the failure was, of course, the refusal of the majority of the private trading banks to follow the central bank's policy. Even if, as some of them have claimed since, they did not regard themselves as having entered into a binding agreement to observe the 25% LGS rule in their earlier discussions with the central bank, they cannot have been in any doubt as to the policy which the central bank wished them to follow. Nor is there much substance in the argument that the central bank could not expect the trading banks to work to a uniform liquid asset ratio as high as 25%. While it is true that this ratio was higher than some of the banks had customarily maintained, and that there had always been a wide divergence of ratios among the banks, there is also some reason to believe that the trading banks could not agree among themselves on, and were not prepared to accept, a procedure by which each bank would have nominated the LGS ratio to which it would work. The brute fact is that most of the trading banks still, at heart, felt about central banking much as, according to Giblin, they had done in the 'thirties: « While consideration for profits and prestige was in part responsible for this resolve [to fight effective control of their credit policy by the central bank], with some banks at least it was almost sanctified by the conviction that their judgments on the appropriate monetary policy in any given circumstances were better than that of the Commonwealth Bank » (50).

(50) GIBLIN, *op. cit.*, p. 228; cf. also the Bank of New South Wales' criticism of the central bank's 25% LGS ratio policy (*Annual Report, 1954*, pp. 18f.): « With the special accounts in September equivalent to about 23% of deposits, the maintenance in addition of such a high ratio of free liquid assets ignores the realities of seasonal movements » — the Bank of N.S.W. seems momentarily to have forgotten that the central bank's request for an average 25% ratio over the year explicitly allowed for seasonal variations around this average — « and the positive part the banks must play in development of the Australian economy through the time-honoured system of flexible advances. It appears only too evident that the central bank bases its theories on an experience which may not be entirely appropriate to dynamic expansion ».

A number of factors aggravated the problem in 1954-55. One was again the inadequacy of the trading banks' own control over their advances under the overdraft system which Dr. Coombs had mentioned as one of the lessons of the years 1948-51 (51). It is said that one of the private trading banks found its advances rising by a further 7% for this reason after its head office had, towards the end of 1954, adopted a strict policy of holding advances at their current level.

Another was the fact that, during this period, the Commonwealth Trading Bank was steadily gaining deposits relatively to the private banks and was therefore able to expand advances more rapidly than some of the latter while being subjected to the same special account policy and yet adhering strictly to the agreed LGS ratio — indeed throughout the period it maintained a substantially higher degree of liquidity than the private trading banks (52). Whatever the reasons for its gains of business — the greater freedom of action which the recent separation from the central bank had given it and its association with the Commonwealth Savings Bank in banches all over the country were probably the most important — its successful competition inevitably made the private banks more reluctant than ever to restrain their own competition for advances. Perhaps it would have been wise in the circumstances for the central bank to discriminate against the Commonwealth Trading Bank, even though such discrimination would have been strongly and rightly attacked had it been directed against a private trading bank in the same conditions; indeed such discrimination was applied in January 1955 when the Board ordered the Commonwealth Trading Bank not to increase its share of total advances further, however much its share of deposits increased. But while such action would have deprived the private trading banks of a debating point, it is doubtful whether it would have made much difference to their policies.

The basic difficulty, which provided a legitimate partial defence for the trading banks (as well as the central Bank), was the enormous pressure of demand for bank credit in an otherwise uncontrolled development and investment boom. A boom stimulated by a large migration intake, tax reduction and every official encouragement to private investment, in the face of falling farm incomes and savings, could not be held back by controls of bank credit alone, certainly not without causing serious distortions in the economy and injustice to forms of business dependent on bank credit. The trading banks not unreasonably camplained that, while they were being asked to restrain advances, hire-purchase finance companies were bidding away funds from the banks' deposits at uncontrolled interest rates and using them to expand credit at the rate of £ 60 million in one year (1954-1955), and that other businesses, unable to obtain bank credit, turned to large scale issues of debentures.

The rise in interest rates in the uncontrolled sectors of the capital market also increased the difficulties arising from another aspect of government policy, insistence on the maintenance of the current level of government bond yield and bank interest rates. During 1954-55, the central bank had been able to

(51) See above, p. 245-46.

(52) The Commonwealth Trading Bank's LGS ratio compared as follows with the average ratio of the private trading banks:

	C. T. B.	Private
January 1954	42.0	26.2
June 1954	37.2	19.6
January 1955	34.4	20.5
June 1955	33.2	16.6
January 1956	29.7	21.1
June 1956	29.8	17.0

The Commonwealth Trading Bank's share in the total deposits of the eight major trading banks rose by 17% from 10.63% in January 1954 to 12.44% in June 1956; its share in total advances rose by only 5.5% from 8.67% in June 1954 to 9.15% in June 1956. (Its share in total advances between January 1954 and June 1956 actually fell, but its share has generally been lower in June than in January, presumably because of its relatively smaller export business).

offset the effects of rising bank advances on the liquidity of the public to some extent by sales of securities in the open market. But in the latter half of 1955, as bank credit became tighter, it was driven into the same dilemma as in 1951: in order to support the bond market, it had to buy an increasing volume of bonds, thus undermining its own policy of credit restraint. It was not until March 1956 that the Government, which earlier had confined itself to a policy of exhortation, was persuaded to permit interest rates to rise and to resort to disinflationary taxation in a supplementary budget (53).

It is fair to say that the ultimate responsibility for the renewal of inflation in 1954-1955 lies neither with the central bank nor with the trading banks, but with the Government's failure to take any disinflationary action in its own sphere, whether through budget policy, direct controls, or an adjustment in the rate of immigration and development, thus throwing an impossible burden on monetary policy.

Despite its evident failure, the central bank — with a patience which was perhaps misplaced in the circumstances — persevered with the 25% LGS ratio policy into the new financial year, making further seasonal releases from special accounts during June-August 1955. In the second half of 1955, it admitted defeat. Those trading banks which had not adhered to the 25% LGS ratio had, by the middle of 1955, reached the limit to which they could allow their liquidity to fall for their own safety, and the rise in advances ceased. The central bank now reverted to the earlier policy of using the special account procedure for direct quantitative control of trading bank liquidity — for the remainder of 1955-56 it aimed at keeping the trading banks' special account ratio at 18% — but with two important differences.

In the first place, it retained equal special account ratios as the principle of distribution of special account calls between the various trading banks. In the second place, it decided to relieve the rigidity of an equal special account ratio for all trading banks by standing ready, as in 1948-51, to make loans to trading banks, but now at a rate of interest, somewhat above bank advance rate, which would have a deterrent effect. The new policy appears to have had the desired effect (54). It has given relief to banks in severe liquidity trouble, but has kept down resort to central bank credit to the minimum and for short periods only (55).

With the latest revision of special account policy, the wheel has come full circle. For all practical purposes, the special account procedure has been adapted to operate, for the time being, exactly like variable minimum reserve ratios coupled with central bank loans at penal rates. The Commonwealth Bank has, in fact, adopted the central banking technique in use in New Zealand.

7. Conclusions.

We have now examined the operation of the special account procedure over a period of fifteen years. What conclusions can we draw about its merits as a central banking instrument?

The first point to emphasise again is that the difficulties and partial failures of Australian central banking in the post-war years were largely beyond the control of the central bank and could not have been avoided by the most perfect central banking technique. Both in 1948-51 and in 1954-56, too much was demanded of monetary policy. Even within the field of monetary policy, the central bank's task would have been easier had its powers extended beyond the trading banks to other rapidly growing sectors of the capital market and had it not been hampered in its policy of monetary restraint at two crucial periods by the obligation to support the existing level of bond prices.

Turning now more specifically to the special account procedure, the most striking impression is the variety of different special account policies with which the central bank experimented over the post-war years. In one sense, the fact that the device could so easily be used in so many different ways is a tribute to its flexibility (56). But this is perhaps taking too complacent a view. The fact is that none of the various uses of special accounts between 1945 and 1955 proved effective in controlling bank credit expansion. During the first post-war inflation, when it was used as a direct control of trading bank liquidity, its efficacy was reduced by reluctance to apply it too drastically and by unrestrained resort by trading banks to central bank credit. During the second post-war inflation, when it was used as a signal to the trading banks, in reliance on their voluntary co-operation, it failed because this co-operation was not forthcoming. It is arguable that the central bank has only now worked its way to what may be the only practicable special account policy for restraint, a policy of uniform strong special account pressure on trading bank liquidity coupled with readiness to lend at penal rates, in other words, the policy which assimilates special accounts to minimum reserve ratios (57).

In another sense, too, the flexibility of the special account procedure has proved to be somewhat illusory. It will be recalled that, in the pre-war discussions, one of the objections to the use of minimum reserve ratios in Australia had been that uniform ratios for all trading banks were inappropriate in view of the widely divergent liquidity policies of the different banks. A minimum ratio which would impose severe pressure on one bank would leave another free, by its own liquidity standards, to expand advances substantially. The special account procedure, it was hoped, would overcome this difficulty by permitting the central bank to discriminate freely between different trading banks. This hope has not been fulfilled. Quite soon after the war, the central bank found the adoption of some principle of « uniform » distribution of special account calls a political necessity. The principle, moreover, to which it has come round, for the present at any rate, is the very principle of minimum reserve ratios — equal ratios of special accounts to deposits. The answer to the original objection has been found to be, neither discriminatory pressure on different banks nor voluntary acceptance by the banks of uniform liquidity ratios, but uniform reserve ratios combined with central bank willingness to act as lender of last resort at penal rates.

Our conclusions, then, are remarkably similar to those reached by the recent New Zealand Royal Commission. « It was unwise to rely on this form of restraint (voluntary co-operation from competitive trading banks) in a situation where competitive trading banks, holding substantial excess cash reserves, were confronted with a very strong demand for advances from credit-worthy borrowers » (58). The appropriate policy for the central bank in such circumstances is a firm policy of « re-

(53) Cf. on the economic policy background, DOWNING, *op. cit.*

(54) In September 1955, quantitative control was reinforced by the re-imposition of qualitative control of advances which had been abandoned in 1952 (though in the form of « requests » in place of the former « directives » to trading banks).

(55) In 1955, only the E.S. & A. and A.N.Z. Banks borrowed small amounts (approx. £1 million) for short periods; from April 1956 for some months, rather larger amounts were borrowed by these two banks, as well as the National Bank, with a peak of about £18.5 million in June.

(56) This is E. F. HERBERT's view, *op. cit.*, p. 91.

(57) It is interesting to note that, according to Giblin, the Royal Commission of 1936 had already canvassed this method of overcoming the objection to minimum reserve ratios, though without very clear appreciation either of the inescapable obligation of the central bank to act as lender of last resort or of the need for really deterrent rates of interest: « Under pressure it was admitted (by the Commonwealth Bank) that a uniform variable percentage could be made to work, if the Commonwealth Bank advanced on nominal rates to all the trading banks which were conforming in policy and let the weight of the minimum deposits obligation fall only on the recalcitrants. In the same way, even fixed minimum reserves could be made effective, if the minimum percentage was fixed at a very high figure but normally the trading banks were provided with funds at nominal rates. The rate could be stiffened or the funds withdrawn if any bank offended against central bank policy » (*op. cit.*, pp. 221f.). At the time, however, the trading banks' stand against borrowing from the central bank was regarded as an immovable obstacle.

(58) Royal Commission, *Report*, para. 386.

ducing the margin of free cash available to the banks to a very low level » (59) and, while ready to act as lender of last resort, imposing « an interest rate for trading bank borrowing from the (Central) Bank that (makes) it unprofitable for the banks to expand their advances unduly » (60).

If the special account procedure is to be used exactly like a system of variable minimum reserve ratios, it may be asked whether Australia might not do well to make the change in law as well as in practice. There is one minor advantage to be gained from such a change. It arises from the fact mentioned before that the trading banks and their political supporters have been able to use, as a debating point against the Commonwealth Bank, the argument that the Commonwealth Bank « borrows » from the banks (on special accounts) at ½% and lends « their money back to them » at 3½% (61). Open use of penal rates on central bank loans — it should perhaps be mentioned here that the Commonwealth Bank has so far refrained from the New Zealand Reserve Bank's practice of publishing changes in its « discount rate » for their psychological effect — would reinforce this silly but politically effective argument which might be less plausible, even to the most gullible, if frozen balances were called « trading bank minimum reserves » rather than « special deposits with the Commonwealth Bank ».

But the balance of advantage seems to be overwhelmingly against a legislative change. In the political climate surrounding banking in Australia, the less legislation about banking the better; the risk of changes which would still further hamper the central bank far outweighs the advantages that might be gained. Moreover, our conclusion in favour of the present special account policy is necessarily a tentative one. It is possible that changing circumstances may make further modification of special account policy desirable. The central bank's legal powers under the special account procedure, though somewhat restricted since 1953, still give more legal scope for adaptations of policy, including when necessary and expedient occasional discrimination between different trading banks, than any legislation providing for variable legal minimum reserve ratios is likely to afford.

H.W. Arndt

(59) *Ibid.*, para. 389.
(60) *Ibid.*, para. 418.
(61) Cf. E.S. & A. Bank, *Annual Report, 1949*: « We continue to pay interest at 3½% per annum on the funds deposited with us, and to receive ½ per cent. per annum on the balance of our Special Account. The effect on our earnings is obvious... ».

POSTSCRIPT

Since this paper was written, the Commonwealth Bank, in its 1956 Annual Report, has announced yet another change in special account policy. « Each bank has assured the Central Bank that its policy will be directed to ensuring that its LGS ratio will not fall below an agreed uniform minimum. Such an assurance provides a firmer and more certain base for Special Account policy and, as a result, smaller changes in Special Accounts are needed than might otherwise be required... It may be necessary from time to time for some banks to borrow from the Central Bank to ensure that their LGS ratios do not fall below the minimum during the lean period of the year. Marginal loans of this kind can be justified as necessary to provide time for a change in policy to become effective. Continued dependence on Central Bank loans for significant periods calls for an adjustment of a bank's general trading policy » (62).

The announcement has been greeted as a « second try at liquidity ratios » (63). It does suggest, at first sight, that the Commonwealth Bank is making another attempt at operating special accounts on the basis of voluntary adherence by the trading banks to a conventional liquid assets ratio, and that on this occasion the trading banks have entered firmly

(62) Commonwealth Bank, *Annual Report, 1956*, pp. 17f.
(63) *Sydney Morning Herald*, September 12, 1956, p. 10.
(64) *Ibid.*

into the agreement, without reservations or misunderstandings. But the new agreement is, in fact, a mere shadow of the 25% average LGS ratio policy of 1954.

The Commonwealth Bank has not announced the new agreed LGS ratio, but it has been suggested that it is something like 14% (64). Not only is this very much lower than the 1954 ratio of 25%, lower in fact than the LGS ratios which all but two or three of the trading banks would, of their own accord, regard as safe, but it is to be treated as a *minimum*, not as in 1954 as an annual *average*. It is this fact which makes all the difference.

Strict adherence to a conventional *average* liquidity ratio compels each trading bank to adjust its advance policy to every change in special accounts which reduces its ratio below or raises it above the conventional level. An agreed *minimum* ratio leaves a trading bank quite free to heed or ignore special account changes in its advance policy unless and until its LGS ratio is at or near the agreed minimum. It is, in fact, irrelevant to banks which, for their own reasons, will not in any case allow their liquidity to fall to or below the agreed minimum.

Its sole effect is to raise to 14% the minimum LGS ratios of the three banks which in the past have at times been willing to allow their LGS ratios to fall below this level. This may help the central bank in a small way. Until now it could never be sure just what each trading bank regarded as its own safe minimum ratio; henceforth it will know that the minimum is not going to be less than 14% for any bank. The 14% minimum should also mean that there will be no need to make calls on all banks merely to impose restraint on two or three banks which, in pursuit of advance business, are allowing their liquidity to fall below 14%. To that extent, the convention somewhat alleviates the central bank's dilemma arising from the widely divergent policies of the several trading banks and its own reluctance to discriminate between them in special account calls. But that, as far as one can tell, is the only immediate advantage which the central bank can hope to gain from the agreement.

The agreement, in fact, is not a second attempt at the 1954 policy of voluntary co-operation on the English textbook model. The Commonwealth Bank's policy remains substantially that recommended in the conclusion of this paper (and by the New Zealand Royal Commission) of using special accounts as a form of direct quantitative control of trading bank liquidity and relieving the rigidity of uniform calls to special accounts by central bank loans at penal rates.

One may speculate that the central bank has this time contented itself with a very modest convention to which it could obtain the agreement of all the banks, in the hope that, once the trading banks accustom themselves to operating this convention, they may in due course be induced to accept and abide by a more substantial one. For anyone who holds the view that central banking cannot, in the long run, operate effectively without the voluntary co-operation of the trading banks, this is undoubtedly the most promising strategy. But it must be recognised that on this occasion only two or three of the trading banks have given anything away. The crucial test of a policy of voluntary co-operation is a convention under which the trading banks effectively surrender to the central bank the right to determine when and by how much aggregate bank credit is to be expanded or curtailed, and that means a convention based on average, not minimum, liquidity ratios.

H.W.A.

STATISTICAL APPENDIX

ITALIAN BUDGET SUMMARY
(billion lire)

Table A

Fiscal year beginning 1st July	Revenue			Expenditure			Deficit			
	Assessed		Collected (a)	Obligated		Paid out (a)	Obligated			Cash
	Current	Movement of capital		Current	Movement of capital		Current	Movement of capital	Total	
1948-49	1,015	45	1,020	1,519	98	1,440	— 504	— 53	— 557	— 402
1949-50	1,419	252	1,618.2	1,716	232	1,703.9	— 297	+ 20	— 277	— 85.7
1950-51	1,720	272	1,658.4	1,894	319	1,820.0	— 174	— 47	— 221	— 161.6
1951-52	1,737	336	1,976.4	2,129	305	2,308.4	— 392	+ 31	— 361	— 332.0
1952-53	1,806	305	2,402.0	2,302	119	2,639.4	— 495	+ 185	— 310	— 237.4
1953-54	2,000	338	2,300.3	2,325	182	2,433.8	— 325	+ 156	— 169	— 133.5
1954-55	2,263	302	2.497,6	2,673	116	2,517.4	— 410	+ 186	— 224	— 19.8
1955-56	2,510	242	2,654.8	2,810	91	2,809.4	— 300	+ 151	— 149	— 154.6
1956-57 (b)	2,648	29.5	...	2,921	78.9	...	— 273	— 49.4	— 322.4	—

(a) Current revenue (or payment) and movement of capital; on year account and arrears.
(b) Estimated at October 31, 1956.
Source: Conto Riassuntivo del Tesoro.

ITALIAN DOMESTIC PUBLIC DEBT
(billion lire - Index Numbers, 1948 = 100)

Table B

End of period	Consolidated debt				Floating debt					Treasury notes	Total of domestic public debt	
	Unredeemable		Redeemable		Treasury bills	Interest bearing current accounts	Advances by the Bank of Italy	Total				
	Amount	I.N.	Amount	I.N.				Amount	I.N.		Amount	I.N.
1948 - June	53	100	419	100	483	295	473	1,251	100	7.1	1,730.1	100
1952 - June	53	100	820	196	920	822	471	2,213	177	15.0	3,110	178
1953 - June	53	100	1,025	245	908	998	449	2,355	188	38.2	3,471	201
1954 - June	53	100	1,212	289	998	1,052	538	2,589	207	46.5	3,811	220
1955 - June	53	100	1,498	357	1,064	1,016	570	2,650	212	56.4	4,257	246
1956 - June	53	100	1,704	407	1,141	1,118	512	2,771	221	46.7	4,575	264
July	53	100	1,704	407	1,140	1,110	478	2,728	218	46.7	4,532	262
August	53	100	1,704	407	1,143	1,142	448	2,733	218	46,7	4,537	262
September	53	100	1,712	409	1,156	1,162	481	2,799	224	46.7	4,610	266
October	53	100	1,712	409	1,155	1,164	448	2,767	221	46.7	4,579	265

Source: Conto riassuntivo del Tesoro.

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

Table C

End of period	Banking System (a)						Postal Savings Banks						
	Deposits		Current Accounts (b)		Total		Deposits		Current Accounts		Total		Percent ratio to deposits and c/a of banking system
	Billion lire	Index numbers	Billion lire	Index numbers	Billion lire	Index numbers	Billion lire	Index numbers	Billion lire	Index numbers	Billion lire	Index numbers	
1953 December	2,021	53	1,893	111	3,915	71	1,147	39	276	250	1,423	47	36.3
1954 December	2,341	61	2,132	125	4,473	81	1,263	43	252	229	1,515	50	33.8
1955 December	2,722	71	2,432	143	5,154	93	1,308	44	277	251	1,585	52	30.7
1956 March	2,805	73	2,407	141	5,212	94	1,383	47	249	226	1,632	54	31.3
June	2,885	75	2,457	144	5,342	97	1,382	47	244	222	1,626	54	30.4
July	2,929	77	2,454	144	5,383	97	1,383	47	278	253	1,661	55	30.8
August	2,969	78	2,470	145	5,439	98	1,387	47	300	273	1,688	56	31.0
September	3,001	79	2,528	149	5,529	100	1,389	48	298	271	1,687	56	30.5
October	3,022	79	2,546	150	5,568	101	...	..	..	...	...	..	...

(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) Inter-bank current accounts are excluded.
Source: Bollettino of the Bank of Italy.

DEPOSITS, CURRENT ACCOUNTS AND MAIN ASSETS OF ITALIAN BANKS (a)

(millions of lire)

Table D

Items	31.3.55	30.6.55	30.9.55	31.12.55	31.3.56	30.6.56	30.9.56
				Amount outstanding			
Deposits and current accounts	4,547,843	4,620,759	4,853,280	5,153,823	5,241,179	5,342,352	5,509,431
Mains assets of the Italian Banks:							
Cash	154,935	179,172	173,267	224,263	163,726	184,877	169,154
Banks' deposits with the Bank of Italy	524,202	498,048	594,848	554,508	589,418	509,442	606,133
Banks' deposits with Treasury and other Institutions	261,631	250,888	288,304	293,566	291,279	291,236	320,493
Government Securities (b)	904,562	911.657	930,145	931,369	1,011,845	1,068,740	1,074,299
Credits to clients (c)	3,651,060	3,805,961	3,971,541	4,278,127	4,288,226	4,474,904	4,615,567
				Index Numbers: 31-12-1948 = 100			
Deposits and current accounts	299.1	303.9	319.2	338.9	344.7	351.4	363.7
Mains assets of the Italian Banks:							
Cash	190.1	220.6	213.3	276.1	201.6	227.6	208.3
Banks' deposits with the Bank of Italy	287.3	272.9	326.0	303.9	323.0	279.0	332.2
Banks' deposits with Treasury and other Institutions	314.8	301.9	346.9	353.2	350.5	350.4	385.6
Government Securities (b)	229.9	231.7	236.4	236.7	257.2	271.6	273.1
Credits to clients (c)	323.3	337.0	351.7	378.8	379.7	396.2	408.7
				% of deposits and current a/cs			
Mains assets of the Italian Banks:							
Cash	3.4	3.9	3.6	4.4	3.1	3.5	3.1
Banks' deposits with the Bank of Italy	11.5	10.8	12.5	10.8	11.2	9.5	11.0
Banks' deposits with Treasury and other Institutions	5.8	5.4	5.9	5.7	5.5	5.4	5.8
Government Securities (b)	19.8	19.7	19.1	18.1	19.3	20.0	19.4
Credits to clients (c)	80.2	81.1	81.8	83.1	82.2	83.7	83.5

(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. Entered at market values.

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

Source: *Bollettino* of the Bank of Italy.

NOTE CIRCULATION, PRICES, WAGES AND SHARE QUOTATIONS IN ITALY

(Index Numbers, 1938 = 100)

Table E

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) (billion lire)	Index	All commodities	Foodstuffs				Price of one gram (lire) (d)	Index
1953 - December	1,487.9	6,612	5,256	5,659	5,678	7,573	2,390.9	720	2,769
1954 - December	1,578.4	7,015	5,350	5,921	5,882	8,012	3,089.7	722	2,776
1955 - December	1,712,2	7,609	5,366	6,029	6,057	8,158	3,749.3	724	2,784
1956 - March	1,598.3	7,103	5,426	6,218	6,254	8,171	3,575.2	725	2,788
June	1,589.3	7,063	5,369	6,155	6,299	8,620	3,327.3	715	2,750
July	1,642.5	7,300	5,331	6,035	6,285	8,620	3,442.4	714	2,746
August	1,636.3	7,272	5,307	5,995	6,288	8,671	3,633.0	717	2,758
September	1,669.7	7,421	5,328	6,037	6,305	8,758	3,579.1	718	2,761
October	1,685.4	7,482	5,343	6,074	6,270	8,758	3.579.8	718	2,763

(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 F

Year or month	Government Securities								Shares	
	Bonds				9-year Treasury Bonds		Average			
	Consolidated		Redeemable							
	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)
1954 - a. av.	99.4	5.43	88.7	6.38	85.0	6.22	87.8	6.21	2,596.4	5.98
1955 - a. av.	97.1	5.56	87.1	6.50	82.7	6.40	85.3	6.39	3,654.1	4.64
1955 - March	97.3	5.55	87.1	6.50	83.2	6.36	85.8	6.35	3,237.5	5.07
June	98.2	5.50	87.6	6.46	83.0	6.37	85.7	6.36	3,562.7	4.75
September	96.3	5.61	88.2	6.42	82.9	6.38	85.7	6.36	4,138.2	4.11
December	95.9	5.63	84.7	6.68	79.8	6.63	82.6	6.60	3,749.3	4.63
1956 - March	95.4	5.66	83.6	6.77	79.1	6.69	81.7	6.67	3,575.2	4.90
June	92.3	5.85	81.7	6.93	76.3	6.93	79.0	6.90	3,327.3	5.44
July	90.9	5.94	82.0	6.90	76.3	6.93	79.0	6.90	3,442.4	5.32
August	89.3	6.05	81.0	6.99	75.4	7.02	78.0	6.99	3,633.0	5.04
September	88.4	6.11	80.6	7.02	73.7	7.18	76.3	7.14	3,579.1	5.12
October	88.5	6.10	81.3	6.96	73.5	7.20	76.2	7.15	3,579.8	5.18

Source: *Bollettino* of the Bank of Italy.

WHOLESALE PRICES BY GROUPS OF COMMODITIES

(Index Numbers, 1938 = 100)

Table G

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									
1952 a. av.	5,270	4,869	6,796	6,343	4,245	6,767	4,440	5,717	8,343	6,246	7,216	4,707
1953 a. av.	5,250	5,331	6,433	5,894	4,066	5,758	4,080	5,255	8,397	5,279	7,209	4,549
1954 a. av.	5,293	5,265	6,959	5,691	3,804	5,414	4,240	5,073	8,510	5,380	7,261	4,329
1955 a. av.	5,320	5,368	7,012	5,509	3,473	5,756	4,357	5,224	9,410	5,664	7,237	4,206
1956 March	5,426	5,892	6,944	5,435	3,445	5,918	4,612	5,461	9.712	5,698	7,097	4,206
June	5,369	5,851	6,827	5,282	3,416	5,850	4,608	5,387	9,762	5,693	7,091	4,206
July	5,331	5,668	6,864	5,275	3,396	5,839	4,604	5,372	9,796	5,521	7,089	4,206
August	5,307	5,566	6,981	5,254	3,397	5,874	4,616	5,369	9,828	5,532	7,083	4,206
Sept.	5,328	5,546	7,182	5,250	3,480	5,903	4,642	5,341	9,828	5,547	7,069	4,171
October	5,343	5,549	7,309	5,275	3,468	5,032	4,712	5,305	9,839	5,553	7,039	4,771

Source: *Bollettino Mensile di Statistica.*

WAGES AND SALARIES IN ITALY

(gross remunerations - inclusive of family allowances)

(Index Numbers, 1938 = 100)

Table H

Categories	1955 A. Av.	1955			1956			
		March	June	Sept.	March	June	Sept.	Oct.
Industry:								
Specialized workers	7,055	7,025	7,027	7,070	7,126	7,513	7,655	7,655
Skilled workers	7,775	7,741	7,746	7,790	7,850	8,291	8,417	2,417
Ordinary workers and semi-skilled labourers	8,289	8,256	8,257	8,304	8,371	8,846	8,995	8,995
Labourers	9,010	8,972	8,981	9,029	9,097	9,571	9,713	9,713
General index of Industry	*8,092*	*8,058*	*8,062*	*8,108*	*8,171*	*8,620*	*8,758*	*8,758*
Agriculture	*8,961*	*8,892*	*8,920*	*9,044*	*9,068*	*9,383*	*9,383*	*9,403*
Government Civil Employees:								
Group A (a)	5,674	4,703	5,611	5,949	6,000	6,000	6,424	6,424
Group B (b)	5,312	4,494	5,259	5,532	5,569	5,569	5,972	5,972
Group C (c)	6,390	5,347	6,320	6,672	6,714	6,714	7,450	7,450
Subordinate staff	7,030	6,057	6,991	7,280	7,319	7,319	7,800	7,800
General Index of Government Civil Employees	*6,047*	*5,090*	*5,988*	*6,307*	*6,349*	*6,349*	*6,893*	*6,893*

(a) Administrative grade; (b) Executive grade; (c) Clerical grade.

Source: *Bollettino Mensile di Statistica.*

NATIONAL INDEX OF LIVING COST

(1938=100)

Table I

Year or month	All Items	Foodstuffs	Clothing	Heating and lighting	Housing	Miscellaneous
1952 - a. av.	5,546	6,541	6,415	4,031	1,565	5,501
1953 - a. av.	5,654	6,680	6,224	4,091	1,720	5,549
1954 - a. av.	5,806	6,875	6,308	4,074	1,826	5,640
1955 - a. av.	5,969	7,059	6,287	4,075	2,088	5,764
1956 - March	6,254	7,375	6,262	4,094	2,644	5,841
June	6,299	7,433	6,258	4,109	2,683	5,849
September	6,305	7,409	6,265	4,157	2,723	5,962
October	6,270	7,347	6,278	4,167	2,723	5,997

Source: *Bollettino Mensile di Statistica.*

PERSONS REGISTERED AT LABOUR EXCHANGE OFFICES (*)

Table J

End of period	Class I (a)	Class II (b)	Class III (c)	Class IV (d)	Class V (e)	Total	
							of which women
1955 - March	1,342,076	619,090	146,738	59,464	50,710	2,218,078	707,093
June	1,223,867	590,157	140,477	58,551	47,915	2,060,967	724,320
September	1,191,364	577,530	133,883	57,963	47,483	2,008,223	692,653
December	1,439,688	612,833	131,938	62,626	51,942	2,299,027	718,789
1956 - March	1,479,335	660,213	124,855	66,250	55,718	2,386,371	723,604
June	1,238,082	599,641	118,179	63,220	50,399	2,069,521	711,811
July	1,216,456	590,602	116,691	61,258	47,771	2,022,778	703,545
August	1,185,274	584,119	113,053	61,716	48,684	1,992,846	681,119
September	1,190,860	585,322	111,414	63,216	49,781	2,000,593	681,481
October	1,209,215	587,733	111,860	63,107	50,145	2,022,059	687,886

(*) On the discrepancies between actual unemployed and persons registered at Labour Exchange Offices, see, *i.a.*, A. MOLINARI, *Unemployment Statistics in Italy with Special Reference to Southern Italy*, this Review, No. 21, 1952.

(a) Unemployed workers who were previously employed. (b) Young persons under 21 years of age, and other persons in search of their first employment, or discharged from the armed forces. (c) Women engaged in house work who are seeking their first employment. (d) Pensioners in search of employment. (e) Employed workers in search of other employment.

Source: Ministry of Labour.

ITALIAN INDUSTRIAL PRODUCTION INDEXES

(unadjusted, 1938=100)

Table K

Year or month	General Index	Mining	Manufactures										Electric Power
			Total	Food	Textiles	Lumber	Paper	Metallurgy	Engineering	Building Material	Chemicals	Rubber	
1952 - a. av.	142	145	136	146	105	62	113	150	142	...	172	142	193
1953 - a. av.	165	179	159	152	115	167	129	149	170	...	225	160	206
1954 - a. av.	181	200	176	158	117	173	134	173	178	174	278	194	219
1955 - a. av.	196	241	190	163	104	176	144	212	203	207	313	202	233
1956 - March	215	312	209	175	115	169	166	221	237	217	346	215	237
June	214	282	208	162	111	176	161	239	240	230	349	162	248
July	225	301	218	157	122	182	168	249	253	238	362	198	262
August	184	289	174	145	78	149	138	211	149	234	346	85	239
September	221	318	214	170	117	185	166	243	237	236	357	182	251
October	229	352	222	186	124	184	184	237	243	238	372	201	259

Source: *Bollettino Mensile di Statistica.*

SELECTED BUSINESS INDICATORS

Index Numbers, 1948 (annual average)=100

Table L

Month	Number of rooms planned	Goods loaded and unloaded in Italian ports	Number of telegrams dispatched	Sales in department stores	Automobil Production		Tourist movement	Railways traffic
					Cars	Lorries		
1955 - March	614.4	229.7	166.2	403.2	460.5	280.8	263.6	133.4
June	578.0	233.2	168.5	576.4	574.9	236.9	827.5	133.9
September	441.4	248.6	185.9	500.3	671.1	254.7	1,146.9	154.9
December	1,081.1	244.4	181.9	1,065.7	489.0	225.9	284.0	140.3
1956 - March	659.3	263.3	182.6	524.9	694.6	249.0	299.5	144.4
June	462.9	259.0	196.7	680.2	734.2	272.8	1,052.2	155.2
July	523.9	258.2	196.2	595.2	804.9	273.2	1,544.6	148.4
August	342.3	252.7	193.5	470.5	269.2	130.0	2,198.1	147.6
September	460.6	270.0	207.2	574.2	761.2	257.4	1,279.3	156.6
October	589.6	286.2	210.5	806.0	...	...	579.8	...

Source: *Previsioni a breve termine.*

ITALY'S IMPORTS AND EXPORTS, 1954, 1955 AND 1956

(million lire)

Table M

Month	1954			1955			1956		
	Imports	Exports	Deficit	Imports	Exports	Deficit	Imports	Exsports	Deficit
January	134,482	80,374	– 54,108	136,833	77,160	– 59,673	164,463	98,987	– 65,476
February	126,946	85,258	– 41,688	133,110	84,085	– 49,025	144,275	96,574	– 47,701
March	144,344	91,475	– 52,869	144,062	93,821	– 50,241	169,797	117,234	– 52,563
April	133,381	81,325	– 52,056	139,937	90,178	– 49,759	152,621	103,244	– 49,377
May	129,675	80,076	– 49,599	148,058	95,101	– 52,957	169,512	106,491	– 63,021
June	122,235	81,356	– 40,879	147,386	95,327	– 52,059	176,744	106,660	– 70,084
July	118,467	87,982	– 30,485	142,635	104,174	– 38,461	169,366	116,866	– 52,500
August	109,197	81,900	– 27,297	127,229	98.211	– 29,018	148,489	108,345	– 40,144
September	112,660	86,126	– 26,534	136,168	108,963	– 27,205	138,937	109,078	– 29,859
Total (January-Sept.)	1,131,387	755,872	– 375,515	1,255,418	847,020	– 408,398	1,434,203	963,478	– 470,725
Annual total	1,500,611	941,780	– 558,822	1,691,164	1,160,688	– 530,496			

Source: *Statistica del Commercio con l'Estero.*

EXCHANGE RATES IN ITALY

(Italian lire for one unit of foreign currencies)

Table N

Annual or monthly averages	U. S. dollar (a)	Pound sterling	Swiss franc	French franc	Belgian franc	Swedish crown	Norwegian crown	Danish crown	Dutch florin	German mark
1954 - a. a.	624.83	1,749.53	—	1.78	12.50	120.78	87.48	90.46	164.44	148.77
1955 - a. a.	624.85	1,750.28	145.77	1.79	12.52	120.92	87.52	90.52	164.68	148.90
1955 - March	624.92	1,749.77	145.76	1.79	12.50	120.80	87.49	90.47	164.45	148.79
June	624.88	1,749,67	145.79	1.79	12.50	120.80	87.49	90.47	164.45	148.79
September	624.82	1,740.16	145.80	1.79	12.51	120.84	87.03	90.02	164.40	148.80
December	624.80	1,758.21	145.80	1.79	12.58	120.08	87.87	90.95	164.46	149.79
1956 - March	624.85	1,754.20	145.81	1.78	12.57	120.73	87.67	90.65	164.83	149.66
June	624.86	1,755.52	145.80	1.78	12.58	120.91	87.55	90.47	164.40	149.83
July	624.82	1,746.70	145.81	1.78	12.56	120.13	87.36	90.34	164.18	149.60
August	624.82	1,745.41	145.80	1.78	12.55	120.21	87.33	90.24	164.08	149.38
September	624.85	1,742.50	145.81	1.78	12.52	120.94	87.22	90.12	163.98	149.03
October	624.85	1,752.44	145.79	1.78	12.55	121.14	87.65	90.62	164.85	149.68

(a) Italcambi buying rate.

Source: *Bollettino* of the Bank of Italy.

Table O

CAPITAL, SHARE PRICES, AND DIVIDENDS OF SOME ITALIAN COMPANIES QUOTED ON STOCK EXCHANGES

Companies	Face Capital (thousands of lire)	Nominal value of shares (lire)	Last Dividend		Price of shares at Dec. 31, 1956 (1) (lire)	Percentage of last dividend on price at Dec. 31, 1956
			Date of payment	Amount (lire)		
Financial and Insurance						
Finmare - Soc. Finanz. Marittima	18,000,000	500	2.11.55	32.50	456.—	7.13
Strade Ferrate Meridionali (Bastogi)	36,000,000	1,000	2. 5.56	80.—	1,573.—	5.09
S.T.E.T. - Soc. Torinese Eserc. Telefonici	65,000,000	2,000	16. 7.56	150.—	2,381.—	6.30
La Centrale	25,000,000	5,000	24. 1.56	400.—	8,635.—	4.63
Pirelli & C.	1,400,000	400	3. 4.56	100.—	2,849.—	3.51
Assicurazioni Generali	12,000,000	6,000	2. 7.56	500.—	21,110.—	2.37
Riunione Adriatica di Sicurtà	4,320,000	2,250	6. 7.56	210.—	6,400.—	3.28
Textiles						
Snia Viscosa	21,000,000	1,200	2. 5.56	100.—	1,450.—	6.90
Chatillon - Soc. Ital. Fibre Tessili Art.	6,000,000	1,000	2. 5.56	100.—	—	—
Linificio e Canapificio Nazionale	3,400,000	500	13. 2.56	35.—	475.—	7.37
Cucirini Cantoni Coats	6,000,000	1,000	9. 4.56	350.—	6,460.—	5.42
Cotonificio Cantoni	3,600,000	1,500	20. 4.56	300.— (a)	9,680.—	3.10
Lanificio Rossi	6,000,000	4,000	12. 4.55	700.—	—	—
Manifattura Lane in Borgosesia	1,500,000	4,000	3. 5.56	500.—	—	—
Minerals, Metals and Engineering						
Monte Amiata	3,280,000	2,000	5. 5.56	350.—	8,940.—	3.91
Stabilimento Minerario del Siele	1,647,360	1,000	2. 5.56	320.— (b)	7,850.—	4.08
Finsider	50,490,000	500	9. 7.56	40.—	614.—	6.51
Ilva Alti Forni e Acciaierie d'Italia	32,000,000	400	16. 4.55	28.—	518.50	5.40
Dalmine	12,000,000	500	16. 4.56	90.—	1,660.—	5.42
Terni	26,250,000	250	26. 4.56	15.—	307.—	4.89
F.I.A.T.	76,000,000	500	2. 5.56	70.—	1,286.—	5.44
Public Utilities						
Soc. Edison	160,000,000	2,000	4. 4.56	130.—	2,997.—	4.34
C.I.E.L.I.	22,500,000	2,250	4. 4.56	135.—	3,648.—	3.70
Soc. Adriatica di Elettricità	54,000,000	1,000	16. 7.56	70.—	1,337.—	5.24
S.I.P. - Soc. Idroelettrica Piemonte	68,948,876	1,200	20. 4.56	84.—	1,502.—	5.59
Vizzola - Soc. Lombarda Distr. Energia Elettrica	25,137,000	2,250	16. 4.56	180.—	3,615.—	4.98
Soc. Meridionale di Elettricità	61,236,000	1,000	28. 6.56	75.—	1,480.—	5.07
Soc. Elettrica Selt-Valdarno	32,000,000	2,000	20. 4.56	160.—	2,825.—	5.66
Soc. Romana di Elettricità	32,000,000	2,000	20. 4.56	160.—	2,750.—	5.82
Soc. Telefonica Tirrena - Serie A	20,250,000	2,250	3. 5.56	140.— (c)	2,342.—	5.98
Soc. Telefonica Tirrena - Serie B		2,250	3. 5.56	140.— (c)	2,350.—	5.96
Italcable	4,900,000	3,500	7. 5.56	250.—	—	—
Foodstuffs						
Eridania - Zuccherifici Nazionali	18,000,000	2,000	7. 5.56	800.—	5,180.—	5.15
Soc. Italiana Industria Zuccheri	7,200,000	4,000	7. 5.56	900.—	19,400.—	4.64
Chemicals						
Montecatini	84,000,000	1,000	3. 4.56	115.—	2,795.—	4.11
A.N.I.C. - Az. Naz. Idrogenazione Combustbili	7,200,000	1,000	2. 5.56	90.—	2,500.—	3.60
Soc. Ital. per il Gas	19,900,000	1,000	5. 7.56	80.—	1,429.—	5.60
Sundry						
Soc. Generale Immobiliare	16,000,000	250	2. 5.56	30.—	574.—	5.23
Ist. Romano dei Beni Stabili	6,557,280	2,000	21. 5.56	240.—	4,730.—	2.54
Pirelli Soc. per Azioni	24,000,000	1,000	3. 4.56	130.—	3,399.—	3.82
Italcementi	12,000,000	2,000	29.10.56	500.—	15,025.—	3.33
Cartiere Burgo	10.000,000	4,000	30. 4.56	500.—	13,910.—	3.59

(1) During the last six months business on the Stock Exchanges has been drastically reduced; this is due to the opposition of the stock-brokers to the new rules for the control of future and contango transactions (Art. 17 of the Act of January 6, 1956, No. 1). Only cash transactions have been transacted, and some securities have not been quoted.

(a) On shares of a nominal value of L. 1,000. (b) On shares of a nominal value of L. 600. (c) On shares of a nominal value of L. 2,000.

MINIMUM AND MAXIMUM QUOTATIONS OF SOME ITALIAN COMPANIES QUOTED ON STOCK EXCHANGES

(Lire)

Table P

Companies	1955				1956					
	III Quarter		IV Quarter		I Quarter		II Quarter		III Quarter	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Financial and Insurance										
Strade Ferrate Meridionali (Bastogi)	1,870	1,573	1,960	1,545	1,745	1,515	1,790	1,230	1,533	1,230
S.T.E.T. - Soc. Torinese Eserc. Telefonici	2,810	2,380	2,830	2,380	2,550	2,325	2,510	2,200	2,300	2,050
La Centrale	10,650	9,200	10,930	9,000	9,700	8,750	9,275	8,525	8,220	7,000
Pirelli & C.	3,479	2,897	3,503	2,605	3,003	2,540	2,730	2,340	2,900	2,600
Assicurazioni Generali	22,090	18,900	22,350	18,300	20,900	18,250	20,450	18,000	20,100	19,000
Riunione Adriatica di Sicurtà	8,330	7,165	8,225	6,790	7,125	6,020	6,860	5,700	6,280	5,675
Textiles										
Snia Viscosa	1,845	1,425	1,945	1,500	1,740	1,442	1,590	1,240	1,490	1,285
Chatillon - Soc. Ital. Fibre Tessili Art.	2,800	2,110	2,640	2,150	2,550	2,350	2,500	2,090	2,600	1,950
Linificio e Canapificio Nazionale	958	639	903	592	695	507	556	492	500	485
Cotonificio Vittorio Olcese	1,500	860	1,290	1,000	1,020	805	825	627	649	636
Cucirini Cantoni Coats	7,220	6,200	6,975	6,310	6,660	6,200	6,530	6,150	6,530	6,300
Cotonificio Cantoni	12,300	10,600	11,510	9,700	10,450	9,720	10,400	9,700	10,050	9,700
Lanificio Rossi	11,130	7,550	7,800	6,050	7,000	5,200	5,235	3,850	4,050	3,950
Minerals, Metals and Engineering										
Monte Amiata	8,650	7,380	9,450	7,500	8,100	6,600	8,550	6,700	8,450	7,000
Ilva Alti Forni e Acciaierie d'Italia	658	440	668	540	636	558	619	395	510	400
Dalmine	1,762	1,523	1,750	1,400	1,693	1,446	1,580	1,388	1,690	1,495
Terni	415	270	428	298	326	279	293	232	291	242
F.I.AT.	1,821	1,497	1,841	1,400	1,645	1,339	1,460	1,000	1,350	1,100
Ansaldo	1,450	950	1,260	750	940	690	802	500	—	—
Bianchi Edoardo	763	574	721	523	596	512	560	477	556	510
Public Utilities										
Società Edison	3,045	2,723	3,142	2,680	2,910	2,585	2,903	2,450	2,840	2,500
C.I.E.L.I.	3,340	2,850	3,575	3,080	3,475	3,110	3,460	3,020	3,350	3,130
Soc. Adriatica di Elettricità	1,396	1,248	1,447	1,270	1,363	1,252	1,340	1,210	1,380	1,235
S.I.P. - Soc. Idroelettrica Piemonte	1,545	1,310	1,605	1,400	1,500	1,330	1,447	1,235	1,403	1,250
Soc. Meridionale di Elettricità	1,525	1,295	1,615	1,400	1,462	1,320	1,412	1,210	1,390	1,215
Soc. Elettrica Selt - Valdarno	3,230	2,600	3,350	2,830	3,240	2,990	3,180	2,340	2,885	2,425
Soc. Romana di Elettricità	3,210	2,565	3,250	2,780	3,130	2,805	3,022	2,300	2,800	2,420
Soc. Telefonica Tirrena - Serie B	2,910	2,410	2,990	2,610	2,700	2,495	2,540	2,200	2,400	2,220
Italcable	5,890	5,190	6,370	4,900	5,640	5,260	5,400	4,450	5,070	4,260
Foodstuffs										
Eridania - Zuccherifici Nazionali	26,375	24,400	26,675	20,250	22,700	19,200	23,125	19,000	21,600	19,025
Soc. Italiana Industria Zuccheri	23,450	21,800	22,525	17,400	20,250	15,975	20,525	16,975	19,300	17,400
Chemicals										
Montecatini	3,450	2,794	3,515	2,705	3,010	2,600	2,880	2,095	3,105	2,150
A.N.I.C. - Azienda Naz. Idr. Combustibili	3,227	2,615	3,300	2,500	2,750	2,375	2,685	2,225	2,620	2,250
Società Italiana per il Gas	1,827	1,594	1,832	1,430	1,534	1,380	1,450	1,280	1,380	1,220
Sundry										
Soc. Gen. Immobiliare	852	650	878	670	760	690	730	620	610	450
Istituto Romano dei Beni Stabili	9,690	8,600	10,320	8,800	9,550	8,490	9,025	3,700	4,750	4,020
Pirelli Soc. per Azioni	3,600	3,040	3,630	2,840	3,300	2,846	2,990	2,375	3,080	2,601
Italcementi	14,770	12,290	15,500	13,200	14,420	12,995	13,150	11,890	13,650	11,940
Cartiere Burgo	14,460	12,775	14,625	13,050	13,495	12,500	12,575	11,425	13,000	11,750

Source: *Bollettino Mensile di Statistica*.